

Liberia



**Demographic and
Health Survey**

2019-20



Liberia

Demographic and Health Survey 2019-20

**Liberia Institute of Statistics and
Geo-Information Services (LISGIS)**
Monrovia, Liberia

Ministry of Health
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FOREWORD

The 2019-20 Liberia Demographic and Health Survey (LDHS) was authorized by the Ministry of Health (MOH) and implemented by the Liberia Institute of Statistics and Geo-Information Services (LISGIS). The study is the fifth in a series of Demographic and Health Surveys conducted in Liberia. Previous surveys were conducted in 1986, 1999/2000, 2007, and 2013.

The LDHS provides an opportunity to inform policy and provide data for planning, implementation, and monitoring and evaluation of national health programs. It is designed to provide up-to-date information on health indicators including fertility levels, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of children, early childhood and maternal mortality, maternal and child health, and awareness and behaviors regarding HIV/AIDS and other sexually transmitted infections. The study also incorporated measurements of HIV, hepatitis B, and hepatitis C prevalence along with seroprevalence of Ebola virus disease antibodies, the results of which will be included in future addendums. In addition to presenting national estimates, the report provides estimates of key indicators for both rural and urban areas, the country's 15 counties, and the capital, Monrovia.

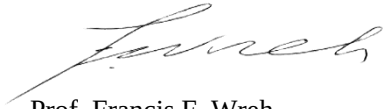
LISGIS wishes to express its appreciation to those involved in the implementation of the 2019-20 LDHS through financial and technical support and the preparation of this report. Particular thanks go to the following:

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- The Liberia Institute of Biomedical Research (LIBR) and the National AIDS Control Program (NACP), for providing technical support in the implementation of biomarker collection
- The MOH, for providing technical input during the questionnaire review process and guidance throughout the conduct of the survey
- The National Malaria Control Program (NMCP), Family Health Division, and other health programs, for their invaluable technical expertise
- The LDHS Steering Committee, for its commitment and dedication to the survey's successful implementation
- ICF, for providing technical support, training of fieldwork staff, consultations, recommendations, and analyses of the data collected

We offer our sincere appreciation to the honorable Minister of Health, Dr. Wilhemina Jallah, for her commitment to the success of the survey and the Assistant Minister for Vital and Health Statistics at the Ministry of Health, Chea Sanford Wesseh, for serving as chairman of the Survey Steering Committee.

The survey would not have been possible without the good work and dedication of the project staff at various levels. We wish to express our appreciation to Mr. Germue Gbawoquiye, coordinator of the LDHS, as well as the field supervisors, interviewers, biomarker technicians, and drivers for their active participation in and contribution to this work.

Above all, we appreciate the assistance of all of the survey respondents nationwide who have made the 2019-20 LDHS a success.

A handwritten signature in cursive script, appearing to read 'F. Wreh', written in dark ink.

Prof. Francis F. Wreh

DIRECTOR-GENERAL

Liberia Institute of Statistics and Geo-Information Services (LISGIS)

ACRONYMS AND ABBREVIATIONS

ACT	Artemisinin-based combination therapy
AIDS	Acquired immunodeficiency syndrome
AL	Artemether/lumefantrine
ARI	Acute respiratory infection
ART	Antiretroviral therapy
ASAQ	Artesunate/amodiaquine
BCG	Bacille Calmette-Guérin
BMI	Body mass index
CAPI	Computer-assisted personal interviewing
CDC	Centers for Disease Control and Prevention
CI	Confidence interval
CPR	Contraceptive prevalence rate
CSPPro	Census and Survey Processing
DBS	Dried blood spot
DHS	Demographic and Health Survey
DPT	Diphtheria, pertussis, and tetanus vaccine
EAs	Enumeration areas
EVD	Ebola virus disease
FGC	Female genital cutting
FGM	Female genital mutilation
GAR	Gross attendance ratio
GAVI	Global Alliance for Vaccine and Immunization
GFR	Gross fertility rate
GPI	Gender parity index
HepB	Hepatitis B
HepC	Hepatitis C
Hib	<i>Haemophilus influenzae</i> type B
HIV	Human immunodeficiency syndrome
ICF	ICF (originally, Inner City Fund)
ID	Identification document
IFSS	Internet File Streaming System
IPTp	Intermittent preventive treatment during pregnancy
IPV	Inactivated polio vaccine
IRB	Institutional review board
IT	Information technology

ITN	Insecticide-treated net
IUD	Intrauterine device
IYCF	Infant and young child feeding
LAM	Lactational amenorrhea
LDHS	Liberia Demographic and Health Survey
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LLINs	Long-lasting insecticidal nets
LMIS	Liberia Malaria Indicator Survey
MAM	Moderate acute malnutrition
MICS	Multiple Indicator Cluster Survey
MMR	Maternal mortality ratio
MOH	Ministry of Health
MTCT	Mother-to-child transmission
NAR	Net attendance ratio
NHSP	National Health Strategic Plan
NN	Neonatal mortality
NPHC	National Population and Housing Census
NRL	Liberia National Reference Laboratory
OPV	Oral polio vaccine
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
PNN	Postneonatal mortality
PRMR	Pregnancy-related mortality ratio
RDT	Rapid diagnostic testing
RHF	Government-recommended homemade fluids
RMNCAH	Reproductive, maternal, newborn, child, and adolescent health
SAM	Severe acute malnutrition
SD	Standard deviation
SDGs	Sustainable Development Goals
SDM	Standard days method
SE	Standard error
SP	Sulfadoxine-pyrimethamine
STIs	Sexually transmitted infections
TB	Tuberculosis
TFR	Total fertility rate

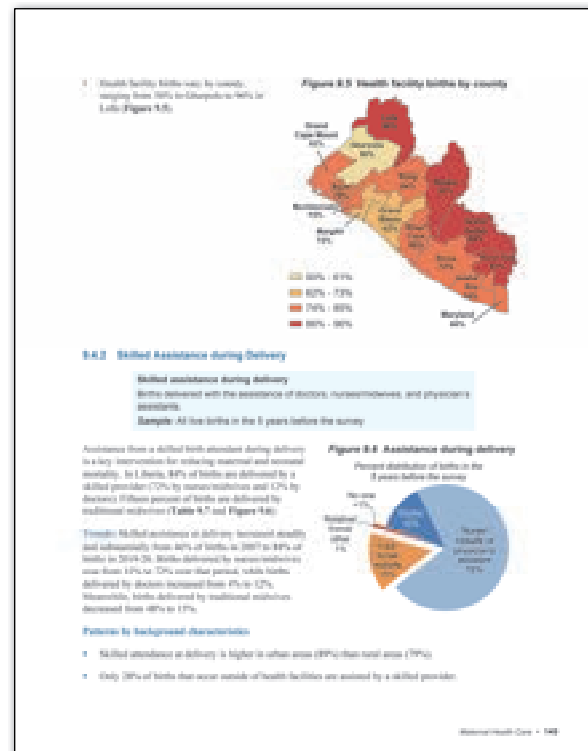
UL-PIRE	University of Liberia Pacific Institute for Research and Evaluation
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
VAD	Vitamin A deficiency
VIP	Ventilated improved pit latrine
WHO	World Health Organization

READING AND UNDERSTANDING TABLES FROM THE 2019-20 LIBERIA DEMOGRAPHIC AND HEALTH SURVEY (LDHS)

The 2019-20 Liberia DHS final report is based on approximately 200 tables of data. For quick reference, they are located at the end of each chapter and can be accessed through links in the pertinent text (electronic version). Additionally, this more reader-friendly version features about 90 figures that clearly highlight trends, subnational patterns, and background characteristics. Large colorful maps display breakdowns for regions and counties in Liberia. The text has been simplified to highlight key points in bullets and to clearly identify indicator definitions in boxes.

While the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, LDHS data users should be comfortable reading and interpreting tables.

The following pages provide an introduction to the organization of LDHS tables, the presentation of background characteristics, and a brief summary of sampling and understanding denominators. In addition, this section provides some exercises for users as they practice their new skills in interpreting LDHS tables.



Example 1: Exposure to Mass Media: Women A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women						
Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Liberia DHS 2019-20						
Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	1.9	14.6	20.1	0.4	72.0	1,657
20-24	2.1	18.7	26.8	0.5	65.2	1,506
25-29	1.5	20.6	30.8	0.7	62.0	1,375
30-34	2.5	17.0	25.9	1.6	66.8	1,112
35-39	1.7	18.4	30.2	1.0	65.5	1,020
40-44	1.7	12.3	30.4	1.4	66.3	769
45-49	3.6	11.3	23.4	3.0	71.8	626
Residence						
Urban	2.9	24.7	32.0	1.5	58.4	5,023
Greater Monrovia	3.8	33.7	36.5	2.3	50.7	2,866
Other urban	1.7	12.7	25.9	0.5	68.7	2,157
Rural	0.6	3.6	17.4	0.2	81.0	3,042
Region						
North Western	0.8	6.3	19.3	0.3	77.1	621
South Central	3.1	27.0	31.2	1.7	58.2	4,105
South Eastern A	1.8	11.3	24.7	0.6	71.2	458
South Eastern B	1.7	8.6	20.4	0.4	76.2	441
North Central	0.8	4.6	21.9	0.2	76.6	2,439
County						
Bomi	0.4	4.2	15.0	0.2	82.6	249
Bong	1.0	3.9	21.4	0.4	76.9	796
Gbarpolu	0.2	4.4	36.1	0.0	63.2	112
Grand Bassa	0.4	8.9	20.6	0.1	74.6	467
Grand Cape Mount	1.3	9.1	16.1	0.5	77.7	260
Grand Gedeh	0.8	9.0	27.4	0.3	68.6	172
Grand Kru	0.0	0.7	1.2	0.0	98.5	136
Lofa	0.7	3.3	14.3	0.0	84.0	658
Margibi	3.1	18.4	23.3	0.7	67.9	441
Maryland	2.2	16.3	33.9	0.5	59.7	215
Montserrado	3.4	30.8	33.8	2.0	54.4	3,197
Nimba	0.7	6.1	27.3	0.2	71.3	985
River Cess	0.2	1.5	12.2	0.0	87.4	104
River Gee	2.8	2.5	16.9	0.8	82.1	91
Sinoe	3.6	19.1	29.3	1.3	64.5	182
Education						
No education	0.0	6.5	18.6	0.0	78.6	2,474
Elementary	0.7	8.9	20.1	0.3	76.0	1,911
Junior high	2.3	15.9	23.5	0.6	69.1	1,445
Senior high	3.6	30.6	37.1	1.5	49.6	1,761
Higher	12.0	52.5	63.0	8.3	26.9	474
Wealth quintile						
Lowest	0.3	2.0	14.2	0.2	85.0	1,379
Second	0.7	2.6	19.8	0.0	79.0	1,431
Middle	1.8	7.5	23.0	0.7	73.7	1,517
Fourth	2.1	19.7	29.1	0.7	62.1	1,829
Highest	4.5	42.5	40.7	2.9	44.0	1,910
Total	2.1	16.7	26.5	1.0	66.9	8,065

Step 1: Read the title and subtitle, highlighted in orange in the table above. They tell you the topic and the specific population group being described. In this case, the table is about women age 15-49 and their exposure to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in Example 1. They describe how the information is categorized. In this table, the first three columns of data show different types of media that women access at

least once a week. The fourth column shows women who access all three types of media, while the fifth column shows women who do not access any of the three types of media on a weekly basis. The last column lists the number of women age 15-49 interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women’s exposure to media by age, urban-rural residence, region, county, level of education, and wealth quintile. Most of the tables in the LDHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in pink. These percentages represent the totals of all women age 15-49 and their weekly access to different types of media. In this case, 2.1%* of women age 15-49 read a newspaper at least once a week, 16.7% watch television at least weekly, and 26.5% listen to the radio on a weekly basis.

Step 5: To find out what percentage of women with no education listen to the radio at least once a week, draw two imaginary lines, as shown on the table. This shows that 18.6% of women age 15-49 with no education listen to the radio at least once a week.

By looking at patterns by background characteristics, we can see how exposure to mass media varies across Liberia. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help program planners and policymakers determine how to most effectively reach their target populations.

*For the purpose of this document, data are presented exactly as they appear in the table, including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:

- What percentage of women in Liberia do not access any of the three media at least once a week?
- Which age group of women is most likely to watch television at least once a week?
- Compare women in urban areas to women in rural areas—which group is more likely to listen to the radio on a weekly basis?
- What are the lowest and the highest percentages (range) of women who do not access any media at least once a week by county?
- Is there a clear pattern in exposure to radio at least once a week by wealth quintile?

Answers:
a) 66.9%.
b) Women age 25-29: 20.6% of women in this age group watch television weekly.
c) Women in urban areas: 32.0% of women in urban areas listen to the radio at least once a week, as compared with 17.4% of women in rural areas.
d) The percentage of women with no exposure to any of these three media at least once a week ranges from a low of 54.4% in Montserrat to a high of 98.5% in Grand Kru.
e) Yes. Weekly exposure to the radio increases as household wealth increases: 14.2% of women from the lowest wealth quintile listen to the radio at least once a week, compared with 40.7% of women from the highest wealth quintile.

Example 2: Prevalence and Treatment of ARI

A Question Asked of a Subgroup of Survey Respondents

Table 10.5 Prevalence and treatment of symptoms of ARI					
Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Liberia DHS 2019-20					
Background characteristic	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
	Percentage with symptoms of ARI ¹	Number of children	Percentage for whom advice or treatment was sought ²	Percentage for whom advice or treatment was sought same or next day ²	Number of children
Age in months					
<6	5.2	569	(81.8)	(28.6)	30
6-11	8.8	529	(64.9)	(20.9)	46
12-23	5.7	937	78.3	36.4	53
24-35	4.0	873	(84.4)	(39.0)	35
36-47	3.5	978	(85.5)	(51.2)	35
48-59	1.7	980	(83.1)	(14.4)	16
Sex					
Male	4.1	2,431	81.4	39.2	100
Female	4.7	2,434	75.8	27.8	115
Cooking fuel					
Electricity or gas	(0.4)	61	*	*	0
Kerosene	*	5	*	nc	0
Fire coal/charcoal	4.7	2,132	80.1	38.5	100
Wood/straw ³	4.3	2,668	76.9	28.5	115
Residence					
Urban	3.8	2,615	76.3	35.0	101
Greater Monrovia	4.7	1,326	*	*	63
Other urban	2.9	1,289	(87.7)	(41.1)	38
Rural	5.1	2,251	80.3	31.5	115
Region					
North Western	3.7	419	(71.9)	(37.6)	16
South Central	4.8	2,123	75.8	25.2	102
South Eastern A	4.7	302	(89.2)	(48.1)	14
South Eastern B	6.9	268	82.9	47.1	18
North Central	3.7	1,755	80.3	37.0	66
County					
Bomi	1.4	143	*	*	2
Bong	6.1	540	(83.6)	(45.0)	33
Gbarpolu	8.8	86	*	*	8
Grand Bassa	4.2	341	*	*	14
Grand Cape Mount	3.2	190	*	*	6
Grand Gedeh	5.3	111	*	*	6
Grand Kru	7.3	96	*	*	7
Lofa	4.3	375	*	*	16
Margibi	1.9	256	*	*	5
Maryland	5.5	123	*	*	7
Montserrado	5.4	1,526	(72.2)	(27.5)	82
Nimba	1.9	839	*	*	16
River Cess	7.4	74	*	*	5
River Gee	9.4	48	*	*	5
Sinoe	2.5	117	*	*	3
Mother's education					
No education	4.2	1,723	70.6	27.8	73
Elementary	4.3	1,236	87.5	33.8	53
Junior high	3.5	852	(66.0)	(21.6)	30
Senior high	4.9	866	(80.6)	(36.2)	42
Higher	8.9	189	*	*	17
Wealth quintile					
Lowest	5.3	1,169	70.7	23.1	62
Second	3.8	1,061	84.3	34.6	40
Middle	3.7	912	71.6	33.9	33
Fourth	4.3	913	(74.6)	(33.7)	39
Highest	5.0	811	*	*	40
Total	4.4	4,866	78.4	33.1	216

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No unweighted cases
¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.
² Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, or black baggers/drug peddlers. Excludes advice or treatment from a traditional practitioner.
³ Includes grass, shrubs, and crop residues

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age 5 (a) and children under age 5 with symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to children under age 5 with symptoms of ARI in the 2 weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 4.4%. Now look at the second panel. How many children under age 5 are there who had symptoms of ARI in the 2 weeks before the survey? It's 216 children, or 4.4% of the 4,866 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 4.4% of children under age 5 had symptoms of ARI in the 2 weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children under age 5 with symptoms of ARI in the 2 weeks before the survey in the North Western region had advice or treatment sought? It's 71.9%. This percentage is in parentheses because there are between 25 and 49 children (unweighted) in this category. Readers should use this number with caution—it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)
- What percentage of children under age 5 with symptoms of ARI in the 2 weeks before the survey in Bomi county had advice or treatment sought? There is no number in this cell—only an asterisk. This is because there are fewer than 25 children. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

Example 3: Understanding Sampling Weights in LDHS Tables

A sample is a group of people who have been selected for a survey. In the LDHS, the sample is designed to represent the national population age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a large enough sample size in each area. For the 2019-20 LDHS, the survey sample is representative at the national level, for urban and rural areas, for each of the 5 regions, and, for most indicators, for each of the 15 counties.

To generate statistics that are representative of the country as a whole and the 15 counties, the number of women surveyed in each county should contribute to the size of the total (national) sample in proportion to size of the county. However, if some counties have small populations, then a sample allocated in proportion to each county's population may not include sufficient women from each county for analysis. To solve this problem, counties with small populations are oversampled. For example, let's say that you have enough money to interview 8,065 women and want to produce results that are representative of Liberia as a whole and its counties (as in Table 3.1). However, the total population of Liberia is not evenly distributed among the counties: some counties, such as Montserrado, are heavily populated while others, such as River Gee, are not. Thus, River Gee must be oversampled.

A sampling statistician determines how many women should be interviewed in each county in order to get reliable statistics. The **blue column (1)** in the table at right shows the actual number of women interviewed in each county. The number of women interviewed by county ranges from 337 in Gbarpolu to 1,219 in Montserrado. The number of interviews is sufficient to get reliable results in each region and county.

With this distribution of interviews, some counties are overrepresented and some counties are underrepresented. For example, the population in Montserrado is about 39.6% of the population in Liberia, while Gbarpolu's population contributes only 1.4% of the population in Liberia. But as the blue column shows, the number of women interviewed in Montserrado accounts for only about 15.1% of the total sample of women interviewed (1,219/8,065) and the number of women interviewed in Gbarpolu accounts for about 4.2% of the total sample of women interviewed (337/8,065). This unweighted distribution of women does not accurately represent the population.

In order to get statistics that are representative of Liberia, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Women from a small county, like Gbarpolu, should contribute only a small amount to the national total. Women from a large county, like Montserrado, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" that is used to adjust the number of women from each county so that each county's contribution to the total is proportional to the actual population of the county. The numbers in the **purple column (2)** represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at the county level. The total national sample size of 8,065 women has not changed after weighting, but

Table 3.1 Background characteristics of respondents			
Percent distribution of women and men age 15-49 by selected background characteristics, Liberia DHS 2019-20			
Background characteristic	Women		
	Weighted percent	Weighted number	Unweighted number
Region			
North Western	7.7	621	1,158
South Central	50.9	4,105	2,301
South Eastern A	5.7	458	1,195
South Eastern B	5.5	441	1,486
North Central	30.2	2,439	1,925
County			
Bomi	3.1	249	401
Bong	9.9	796	671
Gbarpolu	1.4	112	337
Grand Bassa	5.8	467	543
Grand Cape Mount	3.2	260	420
Grand Gedeh	2.1	172	384
Grand Kru	1.7	136	449
Lofa	8.2	658	581
Margibi	5.5	441	539
Maryland	2.7	215	574
Montserrado	39.6	3,197	1,219
Nimba	12.2	985	673
River Cess	1.3	104	365
River Gee	1.1	91	463
Sinoe	2.3	182	446
Total 15-49	100.0	8,065	8,065

the distribution of the women in the counties has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the **green column (3)** to the actual population distribution of Liberia, you would see that women in each county are contributing to the total sample with the same weight that they contribute to the population of the country. The weighted number of women in the survey now accurately represents the proportion of women who live in Montserrado and the proportion of women who live in Gbarpolu.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national, regional, and, in most cases, county levels. In general, only the weighted numbers are shown in each of the LDHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

Sustainable Development Goals Indicators

Liberia DHS 2019-20

Indicator	Sex		Total	DHS table number
	Male	Female		
2. Zero hunger				
2.2.1 Prevalence of stunting among children under 5 years of age	31.8	27.9	29.8	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	8.2	7.4	7.8 ^a	na
a) Prevalence of wasting among children under 5 years of age	3.6	3.2	3.4 ^a	11.1
b) Prevalence of overweight among children under 5 years of age	4.5	4.2	4.4 ^a	11.1
3. Good health and well-being				
3.1.1 Maternal mortality ratio ¹	na	na	742	14.04
3.1.2 Proportion of births attended by skilled health personnel	na	na	84.4	9.7
3.2.1 Under-5 mortality rate ²	96	91	93	8.2
3.2.2 Neonatal mortality rate ²	45	30	37	8.2
3.7.1 Proportion of women of reproductive age (age 15-49 years) who have their need for family planning satisfied with modern methods	na	47.8	na	7.13.2
3.7.2 Adolescent birth rates per 1,000 women				
a) Girls age 10-14 years ³	na	4	na	5.1
b) Women age 15-19 years ⁴	na	128	na	5.1
3.a.1 Age-standardized prevalence of current tobacco use among persons age 15 years and older ⁵	7.3	1.0	4.2 ^a	3.10.1, 3.10.2
3.b.1 Proportion of the target population covered by all vaccines included in their national program				
a) Coverage of DPT containing vaccine (3 rd dose) ⁶	70.5	68.0	69.2	10.4
c) Coverage of pneumococcal conjugate vaccine (last dose in schedule) ⁷	70.9	66.2	68.5	10.4
5. Gender equality				
5.2.1 Proportion of ever-partnered women and girls age 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months ^{8,9}	na	45.6	na	16.12
a) Physical violence	na	34.0	na	16.12
b) Sexual violence	na	6.9	na	16.12
c) Psychological violence	na	35.0	na	16.12
5.3.1 Proportion of women age 20-24 years who were married or in a union before age 15 and before age 18				
a) before age 15	na	5.8	na	4.3
b) before age 18	na	24.9	na	4.3
5.3.2 Proportion of girls and women age 15-49 years who have undergone female genital mutilation/cutting	na	38.2	na	15.19
5.6.1 Proportion of women age 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care ¹⁰	na	58.8	na	na
5.b.1 Proportion of individuals who own a mobile telephone ¹¹	60.6	46.7	53.7 ^a	15.7.1, 15.7.2
Indicator	Residence		Total	DHS table number
	Urban	Rural		
7. Affordable clean energy				
7.1.1 Proportion of population with access to electricity	37.0	4.3	23.1	2.4
7.1.2 Proportion of population with primary reliance on clean fuels and technology ¹²	1.5	0.3	1.0	2.4
Indicator	Sex		Total	DHS table number
	Male	Female		
8. Decent work and economic growth				
8.7.1 Proportion and number of children age 5-17 years engaged in child labor	26.3	29.2	27.7	17.6
8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider ¹³	21.3	12.0	16.7 ^a	15.7.1, 15.7.2
16. Peace, justice, and strong institutions				
16.2.1 Percentage of children age 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month ¹⁴	85.2	85.1	85.2	17.1
16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority	67.1	65.4	66.3	2.11
17. Partnerships for the goals				
17.8.1 Proportion of individuals using the Internet ¹⁵	36.4	22.0	29.2 ^a	3.5.1, 3.5.2

na = Not applicable

¹ Expressed in terms of maternal deaths per 100,000 live births in the 7-year period preceding the survey

² Expressed in terms of deaths per 1,000 live births for the 5-year period preceding the survey

³ Equivalent to the age-specific fertility rate for girls age 10-14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10-14

⁴ Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19

⁵ Data are not age-standardized and are available for women and men age 15-49 only.

⁶ The percentage of children age 12-23 months who received three doses of DPT containing vaccine

⁷ The percentage of children age 12-23 months who received three doses of pneumococcal conjugate vaccine

⁸ Data are available for women age 15-49 who have ever been in union only.

⁹ In the DHS, psychological violence is termed emotional violence.

¹⁰ Data are available for currently married women who are not pregnant only.

¹¹ Data are available for women and men age 15-49 only.

¹² Measured as the percentage of the population using clean fuel for cooking.

¹³ Data are available for women and men age 15-49 who have and use an account at bank or other financial institution; information on use of a mobile-money-service provider is not available

¹⁴ Data are available for children age 1-14 only.

¹⁵ Data are available for women and men age 15-49 who have used the internet in the past 12 months.

^a The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

LIBERIA



The 2019-20 Liberia Demographic and Health Survey (LDHS) is the fifth Demographic and Health Survey to be conducted in Liberia. It was implemented by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) in partnership with the Ministry of Health (MOH). Data collection took place from October 16, 2019, to February 12, 2020. Funding was provided by the United States Agency for International Development (USAID). The United States Centers for Disease Control and Prevention (CDC), the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), the Embassy of Ireland (Irish Aid), the United Nations Development Programme (UNDP), the World Health Organization (WHO), UN Women, and the Global Alliance for Vaccine and Immunization (GAVI) provided additional funds for the survey. ICF provided technical assistance through The DHS Program, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide.

1.1 SURVEY OBJECTIVES

The primary objective of the 2019-20 LDHS is to provide up-to-date estimates of key demographic and health indicators necessary for program managers, policymakers, and implementers to monitor and evaluate the impact of existing policies and programs and to design new initiatives for health policies in Liberia. This survey is considered a key resource for the new sixth National Health Strategic Plan (NHSP) 2017-2021.

Specifically, the main objectives of the survey are:

- To collect high-quality data on fertility levels and preferences; contraceptive use; maternal and child health; neonatal, infant, and child mortality levels; maternal mortality; and other health issues relevant to the achievement of the Sustainable Development Goals (SDGs) (e.g., gender, nutrition, awareness regarding HIV/AIDS)
- To provide information on availability of, access to, and use of mosquito nets as part of national malaria control programs
- To assess protection of children from violence and exploitation
- To provide information on other health issues, such as tobacco use, tuberculosis, and health insurance
- To obtain data on women's empowerment, domestic violence, and female genital cutting
- To test household salt for the presence of iodine
- To obtain data on child feeding practices, including breastfeeding, and collect anthropometric measures to assess the nutritional status of children under age 5 and women age 15-49
- To conduct anemia testing of women age 15-49 and children age 6-59 months
- To measure HIV prevalence levels among men age 15-59 and women age 15-49
- To measure hepatitis B and C prevalence levels among men age 15-59 and women age 15-49

- To measure the seroprevalence of Ebola virus disease (EVD) antibodies among men age 15-59 and women age 15-49 and collect data on risk factors related to Ebola

It should be noted that although the 2019-20 LDHS is considered the fifth Demographic and Health Survey to be conducted in Liberia, the results of the 1999-2000 LDHS, the second survey conducted in the country, are withheld from the trends in this report because that survey was undertaken outside the purview of The DHS Program and with no external technical assistance. Additionally, a subset of the indicators included in the 2019-20 LDHS overlap with indicators produced as part of the 2016, 2011, and 2009 Liberia Malaria Indicator Surveys (LMIS).

1.2 SAMPLE DESIGN

The sampling frame used for the 2019-20 LDHS is based on the 2008 National Population and Housing Census (NPHC), conducted by the LISGIS. Liberia is divided into 15 counties grouped to form five geographical regions, with each region consisting of three counties. Each county is divided into districts and each district into clans. In the 2008 NPHC, each clan was subdivided into enumeration areas (EAs). An enumeration area is a geographical area assigned to an enumerator for the purpose of conducting a census count; according to the Liberian census frame, each EA consists of an average of 100 households.

The 2019-20 LDHS followed a stratified two-stage cluster design. The first stage involved selecting sample points (clusters) consisting of EAs. EAs were drawn with a probability proportional to their size within each sampling stratum. A total of 325 clusters were selected.

The second stage involved systematic sampling of households. A household listing operation was undertaken in all of the selected clusters. During the listing, an average of 129 households were found in each cluster, from which a fixed number of 30 households were selected with an equal probability systematic selection process; the total sample size was 9,745 households. Results from this sample will be representative at the national, urban (Greater Monrovia and all other urban areas), and rural levels, including each of the five regions. The survey will also produce separate representative results for most key indicators of the 15 counties.

All women age 15-49 and men age 15-59 who were either permanent residents of the selected households or visitors who stayed in the households the night before the survey were eligible to be interviewed. However, male interviews were conducted only in a subsample consisting of half of the households in each cluster. Biomarker collection also occurred only in this subsample. In these households, all adult women age 18-49 and men age 18-59, as well as young women and men age 15-17 who either were emancipated minors or received parental or guardian consent, were eligible for HIV testing. HIV testing was conducted in two ways: rapid diagnostic testing (RDT) and dried blood spot preparation (DBS). RDT immediately provided respondents with their HIV status, while DBS samples were sent for laboratory testing to produce a national HIV prevalence estimate. Hemoglobin testing for anemia was performed in each household among eligible women age 18-49 and young emancipated women age 15-17 who consented to being tested. With consent from parents or guardians, children age 6-59 months and young non-emancipated women age 15-17 were also tested for anemia in each household. In addition, height and weight measurements were collected from women age 15-49 and children age 0-59 months in all households selected for biomarker collection.

All women age 18-49, men age 18-59, and young women and men age 15-17 who either were emancipated or received parental or guardian consent were also eligible for hepatitis B and C and EVD antibody testing by a CDC follow-up survey team. The follow-up team collected venous blood samples from eligible respondents who consented to hepatitis B and C and/or EVD antibody testing.

Finally, one eligible woman from each household in the subsample of households participating in the male interviews and biomarker collection was randomly selected to be asked additional questions about domestic violence.

1.3 QUESTIONNAIRES

Seven questionnaires were used for the 2019-20 LDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, the Biomarker Questionnaire Part A, the Biomarker Questionnaire Part B, the Biomarker Revisit Questionnaire, and the Fieldworker Questionnaire. These questionnaires, based on The DHS Program's standard questionnaires, were adapted to reflect the population and health issues relevant to Liberia. Suggestions were solicited from various stakeholders representing government ministries and agencies, nongovernmental organizations, and international donors. After all questionnaires were finalized in English, they were translated into a form of simple English commonly understood in Liberia.

The Household Questionnaire listed all members of and visitors to the selected households. Basic demographic information was collected on each person listed, including age, sex, marital status, education, and relationship to the head of the household. For children under age 18, survival status of parents was determined. Information on child labor and discipline was collected for one randomly selected child age 1-17 in the household. Data on age and sex of household members were used to identify women and men eligible for individual interviews. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of water; type of toilet facilities; materials used for flooring, external walls, and roofing; ownership of various household goods; and access to and use of mosquito nets. In addition, household salt was tested for iodine content.

The Woman's Questionnaire was used to collect information from all eligible women age 15-49. These women were asked questions on the following topics:

- Background characteristics (including age, education, and media exposure)
- Reproduction and child mortality
- Contraception
- Prenatal, delivery, and postnatal care
- Vaccinations and childhood illnesses
- Maternal and child health and nutrition
- Marriage and sexual activity
- Fertility preferences
- Women's work and husbands' background characteristics
- Knowledge, awareness, and behavior regarding HIV/AIDS and other sexually transmitted infections (STIs)
- Knowledge, attitudes, and behavior related to other health issues (e.g., injections, smoking, tuberculosis, childhood illnesses, and pregnancy and childbirth)
- Female genital cutting/mutilation
- Experiences during the Ebola outbreak in Liberia
- Adult and maternal mortality
- Domestic violence

The Man's Questionnaire was used to collect information from all eligible men age 15-59 in half of the selected households. These men were asked questions on the following topics:

- Background characteristics
- Reproduction

- Contraception
- Marriage and sexual activity
- Fertility preferences
- Employment and gender roles
- HIV/AIDS
- Experiences during the Ebola outbreak in Liberia
- Other health issues (e.g., injections, smoking, tuberculosis, and health insurance)

The 2019-20 LDHS biomarker collection, which occurred in the same subsample as the male interviews, involved a two-part field operation. As a result, biomarkers were collected using two questionnaires: Part A and Part B. Part A was the traditional DHS Biomarker Questionnaire, in which respondent characteristics, consent, and results from anthropometry, anemia, and RDT HIV testing were recorded. This questionnaire was administered exclusively by DHS biomarker technicians in conjunction with DHS interviews. DHS biomarker technicians then used Part B to administer the consent to the follow-up visit by Team B. If the respondent agreed to a follow-up visit, Part B was used by the CDC follow-up field team, which consisted of phlebotomists, counselors, and supervisors, to administer the consent for the venous blood testing before proceeding with the collection.

As part of DHS anthropometry data quality assurance procedures, the 2019-20 LDHS included random and flagged measurement revisits. Random revisits were used to assess the biomarker technicians' precision, while flagged revisits were used to identify suspicious initial measurements and improve data quality. The results of these remeasurements were recorded in the separate Biomarker Revisit Questionnaire.

The Household, Woman's, and Man's Questionnaires were programmed into tablet computers to facilitate computer-assisted personal interviewing (CAPI) for data collection purposes. The Biomarker Questionnaire Part A and the Biomarker Revisit Questionnaire were completed on paper during data collection and then entered into the CAPI system in the field before the data collection teams completed each cluster. In contrast, the Biomarker Questionnaire Part B was completed exclusively on paper.

The Fieldworker Questionnaire, which collected data on fieldworkers' general background characteristics, served as a tool for conducting analyses of data quality. Fieldworkers filled out the two-page self-administered questionnaire after the main training and before they entered the field. No personal identifiers were attached to the Liberia DHS fieldworkers' data file.

The protocols for survey methodology, biomarker measurements, and all instruments used were approved by institutional review boards (IRBs) at ICF and the University of Liberia Pacific Institute for Research and Evaluation (UL-PIRE) in Liberia. Both IRBs approved protocols before the commencement of data collection activities.

1.4 ANTHROPOMETRY, ANEMIA, HIV, HEPATITIS, AND EVD TESTING

The 2019-20 LDHS incorporated the following biomarkers: anthropometry, hemoglobin, rapid and laboratory testing for HIV, and collection of venous blood samples for laboratory testing of hepatitis B and C and EVD antibodies.

As noted, data on HIV were collected through two methods: RDT, which provided respondents with immediate results regarding their HIV status, and collection of DBS samples. The DBS samples, along with the venous blood samples collected by the follow-up CDC survey team, were sent for laboratory testing. The venous blood samples will be used to produce national hepatitis B and C prevalence estimates and to estimate the EVD survivor population in Liberia. The results of DBS, hepatitis B and C, and EVD testing were not

available at the time of publication of this report and therefore have not been included. Once the testing is completed, the results will be published in separate annexes to this report.

1.4.1 Anthropometric Measurements

In households selected for biomarker collection, height and weight measurements were recorded for children age 0-59 months and women age 15-49. Weight measurements were obtained using lightweight, electronic SECA 878 scales with a digital screen and a mother and child function. Height measurements were carried out with ShorrBoards® made by Weigh and Measure, LLC. Children younger than age 24 months were measured while lying down on the board, while standing height was measured for children age 2-5 and for women.

As mentioned, the 2019-20 LDHS included a remeasurement process to ensure anthropometry data quality. To that end, during data collection, two children in each cluster and all children with anthropometry data outside of a pre-specified range were flagged for remeasurement. The remeasurement occurred on the day after the original measurement. Fieldworkers were blinded to the reason for the remeasurement.

1.4.2 Anemia Testing

Blood specimens for anemia testing were collected from all children age 6-59 months and women age 15-49 for whom consent had been obtained. For non-emancipated young women age 15-17 who had never been married, the consent of a parent or guardian was sought first, followed by the minor's assent. For children age 6-59 months, consent was provided by a parent or guardian. The consent statement explained the purpose of the test and how the test would be performed, informed the respondent that the results would be kept confidential, and requested permission for the test to be carried out.

Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick for young children age 6-11 months or very thin children with small fingers) and collected in a microcuvette. Hemoglobin analysis was carried out on-site using a battery-operated portable HemoCue 201+ analyzer, which produces a result in less than 1 minute. Results were given verbally and in writing. Parents of children with a hemoglobin level below 7 g/dl were advised to take the child to a health facility for follow-up care. Likewise, nonpregnant women and pregnant women were referred for follow-up care if their hemoglobin levels were below 7 g/dl and 9 g/dl, respectively.

Lancets and other supplies and equipment used during collection of samples were disposed of safely, usually by taking the materials to a nearby health facility that uses proper protocols for the disposal of biohazardous waste.

1.4.3 HIV Testing

The survey featured two forms of HIV testing. RDT was performed according to a national HIV testing algorithm for respondents who wished to be informed of their status, while DBS specimens were collected and transported to a central lab for anonymized testing. HIV prevalence for the survey will be based on the laboratory test results.

The national RDT algorithm in Liberia consists of a screening RDT (Determine® HIV 1/2) followed by confirmatory testing of all reactive samples with a second RDT (SD Bioline HIV 1/2 3.0). If a respondent tested positive on the screening test and negative on the confirmatory test, a third tie-breaker test was performed (Uni-Gold™ HIV). To test respondents via RDT, a blood sample was collected directly from a finger prick using a sample collection device supplied with the test kit.

Dedicated nurse counselors who provided pre- and post-test counseling conducted HIV rapid testing. Pretest counseling included an explanation of HIV infection and transmission, the meaning of test results, risks associated with sexual behaviors, and how to prevent and treat HIV and other sexually transmitted infections. Post-test counseling messages were tailored to respondents' HIV results and risk profiles.

The testing and delivery of results at home were done after creating conditions that would guarantee the confidentiality of the respondents. All respondents with HIV-seropositive results were referred to the nearest health facility for further care and treatment.

For HIV testing using DBS samples, at the time of collection of the blood sample, a unique and random barcoded identification number was assigned to each respondent who consented to testing. Sheets of peel-off labels with unique barcodes were pre-printed for use in the field. Matching barcode labels were affixed to the Biomarker Questionnaire, a fresh filter paper card, and a DBS transmittal sheet.

Approximately every 2 weeks, or more frequently, all DBS samples and transmittal sheets were picked up from teams in the field by central office coordinators and transported to the Liberia National Reference Laboratory (NRL) for processing and registration. Each specimen was then assigned a unique serial laboratory number during the registration process at the lab before being stored in a freezer for preservation. The DBS laboratory testing is scheduled to be conducted at NRL; these results were not available at the time of publication of this report. When testing is completed, results will be published in an annex to this report.

1.5 PRETEST

Fifteen participants (nine women and six men) took part in training to pretest the LDHS survey questionnaires over a 4-week period from June 17 to July 13, 2019.

The pretest training utilized a blended approach to train participants concurrently on the paper questionnaires and on CAPI, an electronic data capture system programmed on tablet computers that the participants used to implement the survey. LISGIS personnel and staff from The DHS Program led the classroom portion of the training together in standard English and Liberian English from June 17 to July 8. In addition, specialists from the MOH, UNFPA, and UNICEF were invited to make short presentations on programs in Liberia that provide services in the areas of family planning, reproductive health, HIV/AIDS and other STIs, childhood immunization, and domestic violence. Speakers from the CDC were also invited to deliver a lecture on Ebola in Liberia.

Six participants attended the LDHS biomarker training from July 1-8. The training utilized a variety of different learning tools such as formal lectures on the technical aspects of biomarker collection, descriptions of the target population and eligibility, videos to demonstrate the process of anthropometry and blood collection, and hands-on demonstrations. In addition to the above-mentioned training, biomarker technicians participated in an anthropometry standardization exercise, a health clinic visit, and 4 days of field practice. Staff from The DHS Program supported follow-up survey training for nine participants that ran concurrently with the LDHS biomarker technician training.

On July 9, to improve team coordination, all LDHS pretest training participants (supervisors, interviewers, and biomarker technicians for both the standard and follow-up surveys) were divided into three teams that mirrored the team composition proposed for the actual fieldwork and simulated all components of the 2019-20 LDHS data collection in the LISGIS training hall. The team supervisors also simulated the interaction and handoff of survey materials to the follow-up team supervisors.

From July 10-13, interviewers and biomarker technicians conducted practice fieldwork to solidify skills learned during pretest training and to provide a simulated fieldwork experience to test survey materials. The participants worked in the same three teams as in the simulation. The standard LDHS teams were composed of one male or female supervisor, three female interviewers, one male interviewer, and two biomarker technicians. The follow-up survey teams joined the fieldwork practice on days 3 and 4. The practice occurred in three communities (one urban and two rural) that were not far from the training venue.

Each team visited one community, which served as a practice mini-cluster of 15 households. To complete the fieldwork, each interviewer had to complete at least one household interview per day. While the interviewers recorded responses on tablet computers using CAPI, the Biomarker Questionnaires were first filled out on paper and later entered into the CAPI system by the interviewers. Most interviews were conducted in Liberian English. Over the course of field practice, 40 households and 57 individual women and men were interviewed. At the end of each day, both during and after the pretest fieldwork, debriefing sessions were held and questionnaires were modified based on lessons drawn from the exercise.

1.6 TRAINING OF FIELD STAFF

Ninety-five people (37 men and 58 women) attended the training on the questionnaire content, which consisted of lectures, demonstrations, and practice interviews. Thirty-eight LDHS biomarker technicians (11 male and 27 female) attended a parallel training course on conducting biomarker tests. A follow-up survey training course was also held in parallel.

The main fieldwork training, conducted from September 2-28, 2019, was led by eight LISGIS coordinators with assistance from six training assistants selected from the pretest exercise. The training was backstopped by staff from The DHS Program. The interviewer training was conducted in standard English, with portions in Liberian English, and sessions discussed concepts, procedures, and methodologies related to conducting the survey. As in the pretest training, the main fieldwork training utilized a blended approach to train participants on the paper questionnaires and CAPI concurrently. Again, senior subject specialists from the MOH, UNFPA, and UNICEF were invited to make short presentations on programs in Liberia that provide services in the areas of family planning and reproductive health, HIV/AIDS and other STIs, childhood immunization, and domestic violence, and representatives from the CDC delivered a lecture on Ebola in Liberia.

The training included presentations, lectures, hands-on exercises, mock interviews, roleplays, group work, and quizzes. In-class exercises included probing for age, checking age consistencies, copying information from vaccination cards, completing the reproductive calendar, and practicing interviews. All participants also received training on how to test household salt for iodine. Data processing staff from The DHS Program and information technology (IT) personnel from LISGIS led all sessions on CAPI. Participants learned about features of the data collection system, different scenarios and technical issues typically encountered during fieldwork, and ways to resolve issues.

The biomarker portion of the main fieldwork training ran from September 9-28. This training was led by staff from The DHS Program with assistance from LISGIS coordinators and training assistants. Staff members from the Liberia National AIDS Control Program supported the HIV portion of the training. Biomarker training included classroom instruction that focused on anthropometry measurements, anemia and HIV testing, appropriate procedures for obtaining informed consent, recording of biomarker information in the Biomarker Questionnaire, reporting test results back to respondents with referrals as needed, and pre- and post-test counseling for HIV. The facilitators used learning tools similar to those used during the pretest, including two anthropometry standardization exercises, a health clinic visit, and 4 days of field practice.

The training of follow-up survey staff was held in concurrence with the biomarker training and was led by the CDC and WHO, with occasional assistance from The DHS Program.

On the last 2 days of the classroom portion of the training, supervisors, interviewers, and biomarker technicians were divided into 19 fieldwork teams. The teams then simulated all components of the 2019-20 LDHS data collection on September 20 and 21. The team supervisors also simulated the handoff of materials to the follow-up team supervisors.

A joint classroom session of the biomarker technicians with the interviewers was also organized. All participants were given an overview of biomarker collection in the 2019-20 LDHS. This described eligibility for biomarker collection, use of the Household and Biomarker Questionnaires to record data, appropriate procedures for obtaining informed consent, supply packing and transportation logistics, and how to facilitate intra-team coordination and cooperation.

A 1-day training session for supervisors was held to cover topics including preparation for the practice fieldwork, team and workflow management, monitoring of data collection and biomarker procedures, and conducting quality control checks on the survey questionnaires. The CDC presented background on the follow-up team objectives and work and provided guidance on how the two teams should communicate and cooperate.

Throughout the training, participants were evaluated through in-class exercises, quizzes, and observations made during field practice. At the end of the training, teams were formed by selecting supervisors, interviewers, and biomarker technicians.

From September 24-28, interviewers and biomarker technicians conducted practice fieldwork to solidify skills learned during the training and to provide a simulated fieldwork experience to test survey materials. The practice occurred in five communities in Margibi County, two of which were urban and three of which were rural. The five communities were divided into 19 mini-clusters of 10 households each. Each team was assigned a mini-cluster. To complete the fieldwork, each interviewer had to complete at least one household per day. All of the interviewers/supervisors had the opportunity to practice household and individual interviews, while the biomarker technicians practiced testing and measuring eligible household members. On average, each interviewer interviewed 2.5 households, female interviewers completed 4.4 interviews with women, and male interviewers completed 6.5 interviews with men. Feedback was provided during the exercise and debriefs. All teams successfully closed their clusters and sent the data to the central office.

The follow-up teams also visited the same five communities after practicing the survey questionnaire handoff. As part of the practice fieldwork, the follow-up teams administered consent for collection of venous blood from consenting eligible respondents.

On September 28, the teams came together for a final debriefing session to provide feedback about the questionnaires, the CAPI system, interviewer/biomarker technician interchanges, language issues, field procedures, and any other issues encountered during the field exercise. The DHS Program and LISGIS addressed all issues and remaining questions before fieldwork launched.

1.7 FIELDWORK

Data collection, which ran from October 16, 2019, to February 12, 2020, was carried out by 17 teams, with each team consisting of six members typically featuring the following composition: one supervisor, three female interviewers, one male interviewer, and two biomarker technicians.

All 17 teams were scheduled to deploy to the field on October 2; after an unanticipated delay, fieldwork began on October 16. The nine follow-up survey teams began fieldwork 2 weeks later. To ensure that all aspects of the survey were still well understood among fieldworkers, a series of refresher training sessions were held on October 7, 13, and 14.

Fieldwork monitoring was an integral part of the LDHS. Coordinators from LISGIS, monitoring assistants (previously training assistants) hired by LISGIS, and USAID Liberia senior staff visited teams regularly to review their work and monitor data quality. LISGIS organized coordinators and two biomarker monitoring assistants to visit teams, resolve any issues that arose in teams accessing clusters, monitor data and biomarker collection and quality, distribute supplies, and collect DBS cards from teams and drop them off at the NRL. Fieldwork monitoring assistants, on the other hand, moved from team to team in the field and closely monitored data collection and data quality, as well as supporting technological and technical aspects of fieldwork. LISGIS IT staff were deployed to teams on an as-needed basis to resolve complex CAPI-related issues, and two biomarker monitors observed biomarker collection over the course of the fieldwork. The DHS Program resident advisor monitored data collection and biomarker collection for the first half of data collection.

Two additional fieldwork monitoring visits by staff from The DHS Program were made from December 11-21 and January 16-31. During field visits, monitors provided the teams they visited with critical feedback to improve their performance. All monitors used the LDHS field-check tables as well as data quality and fieldwork status reports, based on data from completed clusters, to illustrate problems specific to each team visited.

1.8 DATA PROCESSING

Data processing for the 2019-20 LDHS began a few days after fieldwork started. As data collection was completed for each cluster, team supervisors transferred all electronic data files to the LISGIS central office in Monrovia via the Internet File Streaming System (IFSS), where they were stored on a password-protected computer. IFSS automatically encrypts the data and sends the data to a server, which in turn downloads the data to the data processing supervisor's password-protected computer in the central office. These data files were registered and checked for inconsistencies, incompleteness, and outliers. Field supervisors were alerted of and resolved any errors any issues found.

The LISGIS data processing operation also included secondary editing, which required resolution of computer-identified inconsistencies and coding of open-ended questions. The data were processed by the LISGIS data processing manager and two secondary editors who took part in the pretest and main fieldwork training; they were supervised remotely by staff from The DHS Program. Data editing was accomplished using Censuses and Survey Processing (CSPPro) software.

Biomarker paper questionnaires were compared with electronic data files to check for any inconsistencies in data entry. Daily generation of check reports in addition to weekly generation of field-check tables allowed for effective monitoring. Specific feedback was given to the teams to improve their performance. Secondary editing and data processing were initiated in October 2019 and completed in March 2020.

1.9 RESPONSE RATES

Table 1.1 shows response rates for the 2019-20 LDHS. All 9,745 households in the selected housing units were eligible for the survey, and 9,207 of these households were occupied. Of the occupied households, 9,068 were successfully interviewed, yielding a response rate of 99%. Of the successful household interviews, 5,192 were completed in 2019 and 3,876 in 2020.

In the interviewed households, 8,364 women age 15-49 were identified for individual interviews; 8,065 women were interviewed, yielding a response rate of 96%. A total of 4,527 men were eligible for individual interviews; 4,249 of these men were interviewed, producing a response rate of 94%.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Liberia DHS 2019-20

Result	Residence				Total
	Total Urban	Greater Monrovia	Other Urban	Rural	
Household interviews					
Households selected	3,605	991	2,614	6,140	9,745
Households occupied	3,401	929	2,472	5,806	9,207
Households interviewed	3,321	887	2,434	5,747	9,068
Household response rate ¹	97.6	95.5	98.5	99.0	98.5
Interviews with women age 15-49					
Number of eligible women	3,463	970	2,493	4,901	8,364
Number of eligible women interviewed	3,338	917	2,421	4,727	8,065
Eligible women response rate ²	96.4	94.5	97.1	96.4	96.4
Household interviews in subsample					
Households selected	1,803	495	1,308	3,072	4,875
Households occupied	1,692	461	1,231	2,901	4,593
Households interviewed	1,650	436	1,214	2,868	4,518
Household response rate in subsample ¹	97.5	94.6	98.6	98.9	98.4
Interviews with men age 15-59					
Number of eligible men	1,683	478	1,205	2,844	4,527
Number of eligible men interviewed	1,563	415	1,148	2,686	4,249
Eligible men response rate ²	92.9	86.8	95.3	94.4	93.9

¹ Households interviewed/households occupied

² Respondents interviewed/eligible respondents

Key Findings

- **Drinking water:** 84% of households have access to an improved source of drinking water.
- **Sanitation:** 47% of households in Liberia use improved toilet facilities.
- **Electricity:** 24% of households have access to electricity (39% of urban households and 4% of rural households).
- **Birth registration:** 66% of children under age 5 have their births registered with the civil authorities.
- **Education:** 41% of females and 30% of males age 6 and older have no formal education.

Information on the socioeconomic characteristics of the household population in the 2019-20 LDHS provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on sources of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population and composition, educational attainment, school attendance, birth registration, and family living arrangements.

2.1 DRINKING WATER SOURCES AND TREATMENT

Improved sources of drinking water

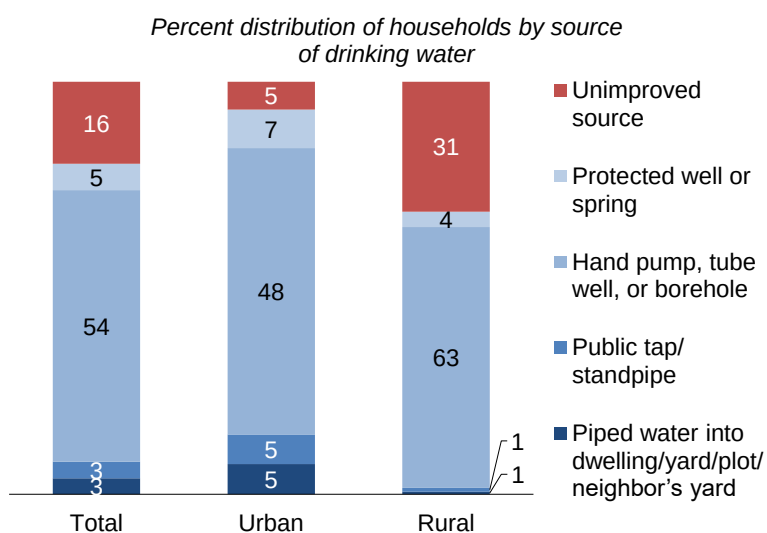
Include piped water, public taps, standpipes, tube wells, boreholes, hand pumps, protected dug wells and springs, rainwater, water delivered via a tanker truck or a cart with a small tank, and bottled water.

Sample: Households

Universal access to clean water and sanitation is one of the 17 global goals that make up the 2030 Agenda for Sustainable Development. To achieve progress towards this goal, an integrated approach across various sectors is crucial.

Table 2.1.1 includes a number of indicators regarding household and population access to improved drinking water. In Liberia, 84% of households have access to an improved water source (95% in urban areas and 69% in rural areas). The most common sources of drinking water in urban households are hand pumps, tube wells, or boreholes (48%); bottled water or mineral water in sachets (30%); and protected dug well (6%). Rural households obtain their drinking water mainly from hand pumps, tube wells, or boreholes (63%) and protected dug wells (2%). **Figure 2.1** shows that 31% of rural households obtain their drinking water from an unimproved source, as compared with 5% of urban households. Across counties, access to an improved source of drinking water is lowest in River Cess (52%) and highest in Grand Gedeh and Montserrado (96% each). The percentage of households with an unimproved source of drinking water decreases with increasing wealth (**Table 2.1.2**).

Figure 2.1 Household drinking water by residence



Trends: The percentage of households with an improved source of drinking water has increased over time, from 68% in 2007 to 84% in 2019-20.

Basic drinking water service

Drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less.

Sample: De jure population

Limited drinking water service

Drinking water from an improved source, and round-trip collection time is more than 30 minutes.

Sample: De jure population

In Liberia, 74% of the de jure population has basic drinking water service, and 10% has limited drinking service (**Table 2.1.1**). Access to basic drinking water service ranges from 50% in River Cess to 91% in Grand Gedeh and increases with increasing wealth (**Table 2.1.2**).

Most Liberian households (73%) do not treat their water prior to drinking. A quarter of households (25%) use an appropriate treatment method (28% in urban areas and 21% in rural areas). Appropriate treatment methods include boiling, bleaching, PUR™, WaterGuard™, filtering, and solar disinfecting (**Table 2.1.3**).

Table 2.2 presents information on the percentage of households using piped water or water from a tube well or borehole that reported availability of water in the last 2 weeks. Seventy-six percent of households in Liberia reported having water with no interruption of at least 1 day in the 2 weeks before the survey. Eighty-one percent of rural households had availability with no interruption of at least 1 day, as compared with 72% of

urban households. Urban households were more likely than rural households to report not having water available for at least 1 day (27% and 18%, respectively).

2.2 SANITATION

Improved toilet facility

Includes flush/pour flush toilets that flush water and waste to a piped sewer system, septic tank, pit latrine, or unknown destination; ventilated improved pit (VIP) latrines; pit latrines with slabs; or composting toilets.

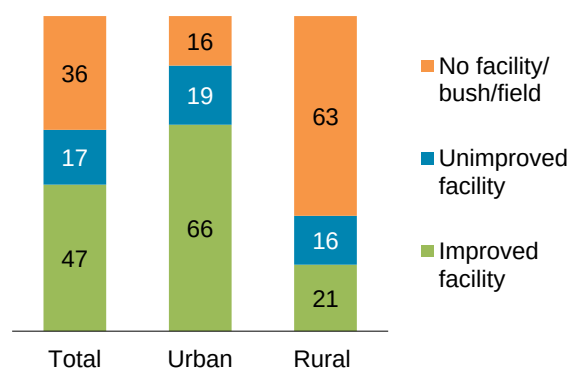
Sample: Households

Forty-seven percent of households in Liberia use improved toilet facilities (66% in urban areas and 21% in rural areas) (**Figure 2.2**). Flush or pour flush toilets that flush to a septic tank are the most common type of improved sanitation facility (**Table 2.3.1**). About 2 in 10 households (17%) use unimproved toilet facilities. Overall, 63% of rural households have no toilet facility, as compared with 16% of urban households.

Trends: The percentage of households with access to improved sanitation increased from 28% in 2007 to 47% in 2019-20.

Figure 2.2 Household toilet facilities by residence

Percent distribution of households by type of toilet facilities



Basic sanitation service

Use of improved facilities that are not shared with other households.

Sample: De jure population

Limited sanitation service

Use of improved facilities shared by two or more households.

Sample: De jure population

Seventy-two percent of households in Liberia have their toilet facility in their own dwelling, yard, or plot. One in five (20%) households have basic sanitation service (29% of urban households and 8% of rural households), while 27% have limited sanitation (**Table 2.3.1**). The percentage of the population with basic and limited sanitation service is highest in Montserrado (38% and 33%, respectively) and lowest in Grand Kru (3% and 6%, respectively) (**Table 2.3.2**). Access to basic sanitation service rises with increasing wealth.

2.3 EXPOSURE TO SMOKE INSIDE THE HOME

Exposure to smoke inside the home, from either cooking with solid fuels or smoking tobacco, has potentially harmful health effects. In Liberia, 16% of households cook inside the home and 96% use solid fuel for cooking, with wood and fire coal/charcoal being predominant (49% and 47%, respectively). Only 1% of households use clean fuel for cooking. In 7% of households, someone smokes inside the house daily (**Table 2.4**).

Other Housing Characteristics

The 2019-20 LDHS also collected data on access to electricity, flooring materials, and the number of rooms used for sleeping. Twenty-four percent of households in Liberia have access to electricity (39% of urban households and 4% of rural households). The flooring materials most commonly used are concrete or cement (49%) and earth, sand, or mud (41%). Flooring materials vary widely by residence, with 70% of rural households using earth, sand, or mud and 66% of urban households using concrete or cement (**Table 2.4**).

2.4 HOUSEHOLD WEALTH

2.4.1 Household Durable Goods

Possession of durable consumer goods is an indicator of a household's wealth. The survey collected information on household effects, ownership of means of transport, and ownership of agricultural land and farm animals (**Table 2.5**). Urban households generally are more likely to own various household effects; for example, 84% of urban households own a mobile phone, as compared with 50% of rural households. Rural households are more likely to own agricultural land (45%) and farm animals (53%) than urban households (20% and 24%, respectively).

2.4.2 Wealth Index

Wealth index

Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by her or his score, and then dividing the distribution into five equal categories, each comprising 20% of the population.

Sample: Households

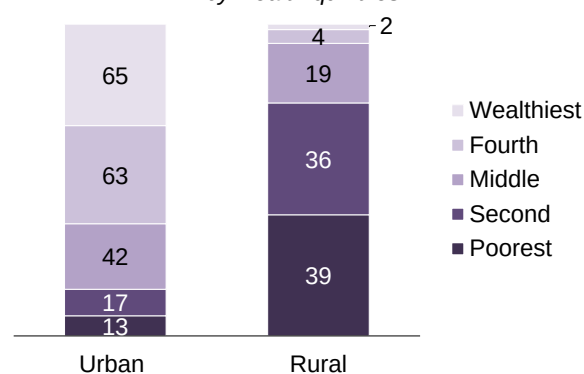
Table 2.6 presents wealth quintiles according to urban-rural residence and region. The table also includes the Gini coefficient, a measure of disparity in wealth. The Gini coefficient ranges from 0-1, with 0 implying an equal distribution of wealth and 1 implying an unequal distribution.

About two-thirds of the de jure population (65%) in urban areas are in the highest wealth quintile, in sharp contrast to 2% in rural areas. Seventy-five percent of households in rural areas are in the lowest or second lowest wealth quintile (39% and 36%, respectively) (**Figure 2.3**).

Among the counties, Montserrado has the highest percentage of households in the highest wealth quintile (49%), while Gbarpolu, Grand Kru, and Lofa have the lowest (2% each).

Figure 2.3 Household wealth by residence

Percent distribution of de jure population by wealth quintiles



2.5 HANDWASHING

Interviewers asked to see the place used for handwashing in each household. Overall, interviewers observed such a place for 20% of the de jure population. Among the de jure population for whom the place for handwashing was observed, 29% had water available and 23% had soap (**Table 2.7**).

2.6 HOUSEHOLD POPULATION AND COMPOSITION

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

How data are calculated

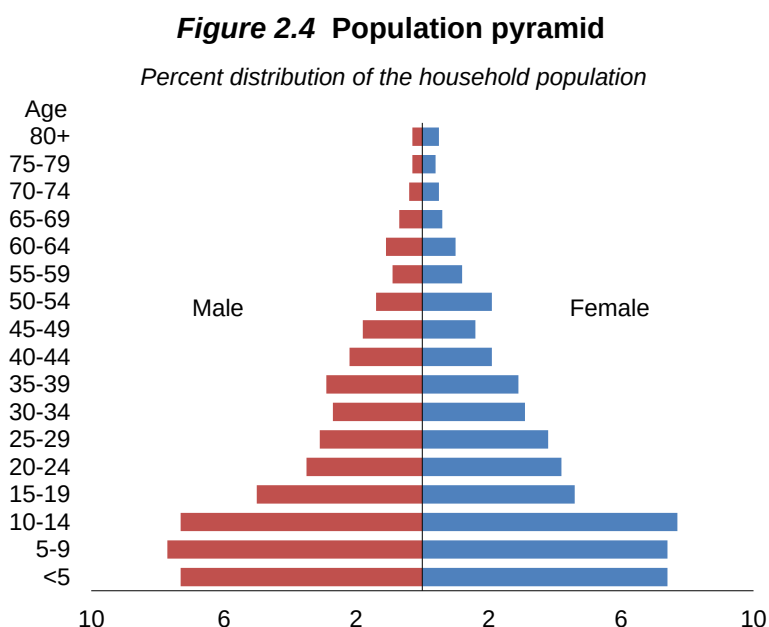
All tables are based on the de facto population unless otherwise specified.

Household composition and population data provide information on the socioeconomic characteristics of the households and respondents surveyed in terms of age, sex, and place of residence.

A total of 40,202 individuals stayed overnight in the 9,068 interviewed households; 19,618 of these individuals were male and 20,584 were female. Forty-five percent of household members are age 0-14 and 51% are age 15-64; only 4% of household members are age 65 and above (**Table 2.8**).

The population pyramid in **Figure 2.4** shows the de facto household population by 5-year age groups and sex. The broad base of the pyramid shows that a large proportion of Liberia's population is relatively young.

Table 2.9 shows that women head about one in every three households (34%). The average household size is 4.6 persons. Thirty-six percent of Liberian households are caring for foster and/or orphaned children.



2.7 CHILDREN'S LIVING ARRANGEMENTS AND PARENTAL SURVIVAL

Orphan

A child with one or both parents who are dead.

Sample: Children under age 18

Twenty-seven percent of children under age 18 do not live with a biological parent, while 9% are orphans (i.e., one or both parents are dead).

Among children less than age 2, 5% were not living with their parents at the time of the interview, and 2% had lost one or both parents. The percentage of children who are orphans rises with age, from 4% among those age 2-4 to 17% among those age 15-17. By county, the percentage of children who are orphans is highest in Bomi (14%) and lowest in Sinoe (4%) (**Table 2.10**).

Trends: The percentage of children under age 18 living with both parents has decreased over time, from 47% in 2007 to 41% in 2019-20.

2.8 BIRTH REGISTRATION

Birth registration, the documentation of the facts of each birth into an official logbook kept at the registrar's office, is fundamental to providing children with a legal identity. Not only does it help to uphold their access to fundamental rights, including education and health care, but it also protects them from abuse, such as child marriage or child labor.

Registered birth

Child has a birth certificate or child does not have a birth certificate, but his/her birth is registered with the civil authorities.

Sample: De jure children under age 5

Table 2.11 presents information on birth registration of children under age 5. Sixty-six percent of children under age 5 have their births registered with the civil authorities. About one in three (30%) of these children have birth certificates. Children in urban areas are more likely than rural children to have their births registered (69% versus 63%).

Figure 2.5 shows large variations by county in the percentage of children whose births are registered with the civil authorities. Lofa (85%) has the highest percentage of registered births, while River Gee (33%) has the lowest.

Trends: The proportion of de jure children whose births are registered has increased substantially from 4% in 2007 to 66% in 2019-20.

2.9 EDUCATION

2.9.1 Educational Attainment

Median educational attainment

Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.

Sample: De facto household population age 6 and older

Many Liberians have either no formal education or only some elementary education (**Tables 2.12.1** and **2.12.2**). Forty-one percent of females and 30% of males age 6 and older have never had any formal education. Twenty-nine percent of females and 27% of males have not completed elementary schooling. Three percent of females and males have completed elementary school. Only 5% of women and 8% of men have completed senior high school. Women have completed a median of 1 year of school, while men have completed a median of 3.5 years.

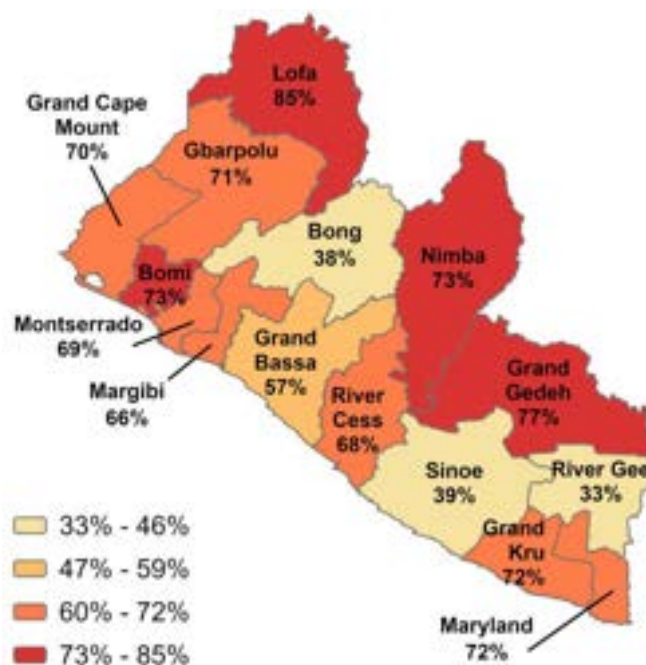
Trends: The percentage of males age 6 and older with no education declined from 39% in 2007 to 30% in 2019-20. Among females, the percentage decreased from 56% to 41%.

Patterns by background characteristics

- Urban residents are more educated than rural residents. Thirty-one percent of females age 6 and older in urban areas have no education, as compared with 57% in rural areas. Among males, the corresponding percentages are 21% and 41% (**Tables 2.12.1** and **2.12.2**).
- The median number of years of education is highest in Montserrado (4.6 years among women and 6.4 among men).

Figure 2.5 Birth registration by county

Percentage of de jure children under age 5 whose births are registered with the civil authorities



- Twelve percent of women in the highest wealth quintile have attained a higher education, while 18% have no education. On the contrary, 65% of women in the lowest quintile have no education and less than 1% have attained a higher education.

2.9.2 School Attendance

Net attendance ratio (NAR)

Percentage of the school-age population that attends primary or secondary school.

Sample: Children age 6-11 for primary school NAR and children age 12-17 for secondary school NAR

Gross attendance ratio (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.

Sample: Children age 6-11 for primary school GAR and children age 12-17 for secondary school GAR

In Liberia, the primary school net attendance ratio (NAR) for the population age 6-11 is 43% (41% for girls and 45% for boys). The high school NAR drops to 26% (25% for boys and 26% for girls) (**Table 2.13**).

The gross attendance ratio (GAR) is also presented in **Table 2.13**. A GAR value of more than 100% means that a significant number of students fall outside the official age range for that level of education. Overall, in Liberia, the GAR is 91% at the primary level, and there is no difference based on gender (91% for both boys and girls). The GAR drops to 52% at the secondary level; however, there is still little difference between boys and girls (52% and 51%, respectively).

Gender parity index (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. The index reflects the magnitude of the gender gap.

Sample: Primary school students and secondary school students

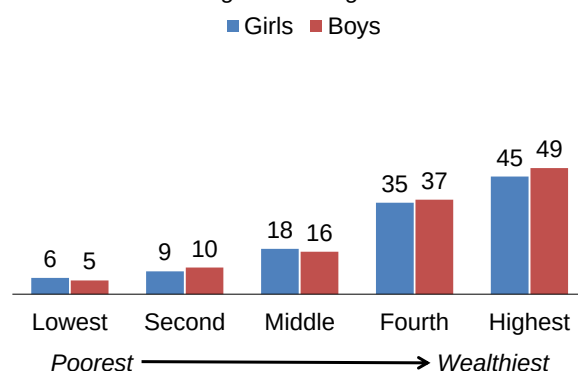
A GPI of 1 indicates parity or equality between male and female school participation ratios. A GPI of less than 1 indicates a higher proportion of males than females attending the specified level of schooling, while a GPI greater than 1 indicates that more females attend the specific level of schooling. In Liberia, the GPI based on the GAR is 0.99 at both the primary school and secondary school levels.

Patterns by background characteristics

- By county, the primary school net attendance ratio (NAR) ranges from 26% in River Cess to 57% in Montserrado.
- The variation in secondary school NARs by residence is large, with a difference of 22 percentage points between urban (34%) and rural (12%) areas.
- Forty-five percent of girls in the highest wealth quintile attend secondary school, as compared with 6% of those in the lowest wealth quintile. Boys follow a similar pattern, with 49% in the highest quintile and 5% in the lowest quintile attending secondary school (**Figure 2.6**).

Figure 2.6 Secondary school attendance by household wealth

Net attendance ratio for secondary school among children age 12-17



LIST OF TABLES

For more information on household population and housing characteristics, see the following tables:

- Table 2.1.1 Household drinking water
- Table 2.1.2 Drinking water according to region and wealth
- Table 2.1.3 Treatment of household drinking water
- Table 2.2 Availability of water
- Table 2.3.1 Household sanitation facilities
- Table 2.3.2 Sanitation facility type according to region and wealth
- Table 2.4 Household characteristics
- Table 2.5 Household possessions
- Table 2.6 Wealth quintiles
- Table 2.7 Handwashing
- Table 2.8 Household population by age, sex, and residence
- Table 2.9 Household composition
- Table 2.10 Children's living arrangements and orphanhood
- Table 2.11 Birth registration of children under age 5
- Table 2.12.1 Educational attainment of the female household population
- Table 2.12.2 Educational attainment of the male household population
- Table 2.13 School attendance ratios

Table 2.1.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, percentage of households and de jure population with basic drinking water service, and percentage with limited drinking water service, according to residence, Liberia DHS 2019-20

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	95.3	68.9	84.0	95.0	70.7	84.6
Piped into dwelling/yard/plot	0.9	0.3	0.7	1.4	0.4	1.0
Piped to neighbor	4.2	0.3	2.5	3.7	0.3	2.2
Public tap/standpipe	5.0	0.9	3.3	4.9	0.9	3.2
Tube well/borehole/hand pump	48.4	62.5	54.4	53.4	64.6	58.1
Protected dug well	6.0	2.4	4.5	6.5	2.3	4.7
Protected spring	0.5	1.3	0.8	0.6	1.3	0.9
Rainwater	0.1	0.3	0.2	0.1	0.2	0.2
Tanker truck/cart with small tank	0.7	0.1	0.4	0.7	0.1	0.4
Bottled water/mineral water in sachet	29.5	0.8	17.2	23.8	0.6	13.9
Unimproved source	4.7	31.1	16.0	5.0	29.3	15.4
Unprotected dug well	3.0	7.7	5.0	3.2	7.1	4.8
Unprotected spring	1.0	6.1	3.2	1.3	6.5	3.5
Surface water	0.7	17.3	7.8	0.5	15.8	7.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises ¹	28.0	7.6	19.3	26.7	7.6	18.6
30 minutes or less	60.2	82.4	69.7	60.1	81.6	69.2
More than 30 minutes	10.3	8.7	9.6	11.4	9.6	10.6
Don't know	1.4	1.3	1.4	1.8	1.1	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage with basic drinking water service ²	84.3	61.8	74.7	82.7	63.0	74.3
Percentage with limited drinking water service ³	11.0	7.1	9.3	12.3	7.7	10.3
Number of households/population	5,195	3,873	9,068	23,855	17,651	41,506

¹ Includes water piped to a neighbor and those reporting a round-trip collection time of zero minutes

² Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.

³ Drinking water from an improved source, and round-trip collection time is more than 30 minutes or is unknown

Table 2.1.2 Drinking water according to region and wealth

Percent distribution of de jure population by drinking water source, percentage of de jure population with basic drinking water service, and percentage with limited drinking water service, according to region, county, and wealth quintile, Liberia DHS 2019-20

Background characteristic	Improved source of drinking water ¹	Unimproved source of drinking water ²	Total	Percentage with basic drinking water service ³	Percentage with limited drinking water service ⁴	Number of persons
Region						
North Western	82.6	17.4	100.0	73.1	9.5	3,496
South Central	89.7	10.3	100.0	78.1	11.6	18,776
South Eastern A	73.1	26.9	100.0	69.9	3.2	2,597
South Eastern B	83.1	16.9	100.0	70.9	12.2	2,420
North Central	80.8	19.2	100.0	71.0	9.8	14,217
County						
Bomi	92.1	7.9	100.0	85.1	7.0	1,344
Bong	78.1	21.9	100.0	62.8	15.3	4,061
Gbarpolu	64.9	35.1	100.0	56.8	8.1	677
Grand Bassa	56.0	44.0	100.0	54.1	1.9	2,356
Grand Cape Mount	82.0	18.0	100.0	69.6	12.4	1,474
Grand Gedeh	96.0	4.0	100.0	90.9	5.1	923
Grand Kru	66.7	33.3	100.0	54.7	12.0	755
Lofa	79.0	21.0	100.0	70.2	8.8	3,538
Margibi	86.4	13.6	100.0	76.6	9.8	2,301
Maryland	90.5	9.5	100.0	78.0	12.5	1,160
Montserrat	95.9	4.1	100.0	82.3	13.6	14,119
Nimba	83.4	16.6	100.0	76.5	6.9	6,617
River Cess	52.1	47.9	100.0	50.3	1.7	648
River Gee	90.8	9.2	100.0	79.0	11.7	504
Sinoe	65.8	34.2	100.0	63.2	2.5	1,026
Wealth quintile						
Lowest	54.1	45.9	100.0	48.6	5.5	8,285
Second	82.5	17.5	100.0	75.0	7.5	8,305
Middle	91.5	8.5	100.0	79.9	11.7	8,307
Fourth	96.9	3.1	100.0	80.7	16.3	8,298
Highest	98.0	2.0	100.0	87.2	10.8	8,311
Total	84.6	15.4	100.0	74.3	10.3	41,506

¹ See Table 2.1.1 for definition of an improved source.

² See Table 2.1.1 for definition of an unimproved source.

³ Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.

⁴ Drinking water from an improved source, and round-trip collection time is more than 30 minutes or is unknown

Table 2.1.3 Treatment of household drinking water

Percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, Liberia DHS 2019-20

Water treatment method	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Boil	0.5	0.3	0.4	0.4	0.3	0.4
Bleach/chlorine added	22.3	15.4	19.3	22.6	15.2	19.5
PUR™	0.0	0.0	0.0	0.0	0.0	0.0
WaterGuard™	6.1	2.9	4.8	6.9	2.9	5.2
Strain through a cloth	0.1	0.3	0.2	0.1	0.3	0.2
Ceramic, sand, or other filter	1.0	3.0	1.9	1.3	3.0	2.0
Solar disinfection	0.1	0.1	0.1	0.0	0.1	0.1
Let stand and settle	0.9	2.2	1.5	1.0	2.1	1.5
Other	0.0	0.2	0.1	0.0	0.2	0.1
No treatment	70.4	76.4	72.9	69.3	76.5	72.4
Don't know	0.0	0.2	0.1	0.0	0.2	0.1
Percentage using an appropriate treatment method ¹	28.0	20.8	24.9	29.0	20.7	25.4
Number of households/population	5,195	3,873	9,068	23,855	17,651	41,506

Note: Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%.

¹ Appropriate water treatment methods are boiling, bleaching, PUR™, WaterGuard™, filtering, and solar disinfecting.

Table 2.2 Availability of water

Percent distribution of households and de jure population using piped water or water from a tube well or borehole by availability of water in the last 2 weeks, according to residence, Liberia DHS 2019-20

Availability of water in last 2 weeks	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Not available for at least 1 day	27.3	18.3	23.7	25.3	19.4	22.9
Available with no interruption of at least 1 day	72.1	81.3	75.9	74.2	80.3	76.6
Don't know	0.6	0.3	0.5	0.6	0.3	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population using piped water or water from a tube well ¹	3,617	2,491	6,108	17,309	11,725	29,035

¹ Includes households/population reporting piped water or water from a tube well or borehole as their main source of drinking water and households/population reporting bottled water or mineral water from sachets as their main source of drinking water if their main source of water for cooking and handwashing is piped water or water from a tube well or borehole

Table 2.3.1 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, percentage of households and de jure population with basic sanitation service, and percentage with limited sanitation service, according to residence, Liberia DHS 2019-20

Type and location of toilet/latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Improved sanitation facility	65.5	21.1	46.5	66.6	22.0	47.6
Flush/pour flush to piped sewer system	1.7	0.2	1.1	1.4	0.2	0.9
Flush/pour flush to septic tank	43.0	5.7	27.1	43.5	6.3	27.7
Flush/pour flush to pit latrine	9.5	4.1	7.2	10.3	4.6	7.9
Flush/pour flush, don't know where	0.2	0.1	0.1	0.2	0.1	0.2
Ventilated improved pit (VIP) latrine	3.0	1.6	2.4	2.9	1.5	2.3
Pit latrine with slab	7.8	8.7	8.2	8.1	8.6	8.3
Composting toilet	0.3	0.7	0.4	0.3	0.6	0.4
Unimproved sanitation facility	18.8	15.5	17.4	17.8	17.4	17.6
Flush/pour flush not to sewer/septic tank/pit latrine	1.7	0.6	1.2	1.5	0.6	1.1
Pit latrine without slab/open pit	9.3	12.9	10.9	9.4	14.3	11.5
Bucket	0.6	0.1	0.4	0.6	0.2	0.4
Hanging toilet/hanging latrine	7.0	1.8	4.8	6.0	2.1	4.3
Other	0.3	0.1	0.2	0.2	0.1	0.2
Open defecation (no facility/bush/field)	15.7	63.4	36.1	15.7	60.7	34.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,195	3,873	9,068	23,855	17,651	41,506
Location of toilet facility						
In own dwelling	34.4	9.9	28.5	36.6	9.4	29.7
In own yard/plot	42.7	46.6	43.7	42.6	49.8	44.5
Elsewhere	22.8	43.4	27.9	20.7	40.7	25.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with a toilet/latrine facility	4,380	1,418	5,797	20,121	6,939	27,061
Percentage with basic sanitation service ¹	28.9	7.5	19.8	35.0	8.7	23.8
Percentage with limited sanitation service ²	36.6	13.5	26.7	31.6	13.3	23.8
Number of households/population	5,195	3,873	9,068	23,855	17,651	41,506

¹ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

² Defined as use of improved facilities shared by 2 or more households

Table 2.3.2 Sanitation facility type according to region and wealth

Percent distribution of de jure population by type of sanitation, percentage of de jure population with basic sanitation service, and percentage with limited sanitation service, according to region, county, and wealth quintile, Liberia DHS 2019-20

Background characteristic	Type of sanitation			Total	Percentage with basic sanitation service ³	Percentage with limited sanitation service ⁴	Number of persons
	Improved sanitation facility ¹	Unimproved sanitation facility ²	Open defecation				
Region							
North Western	26.7	11.5	61.8	100.0	9.3	17.4	3,496
South Central	64.7	14.3	21.0	100.0	35.2	29.5	18,776
South Eastern A	31.0	18.1	50.9	100.0	15.9	15.1	2,597
South Eastern B	26.3	40.7	33.0	100.0	9.8	16.6	2,420
North Central	36.8	19.4	43.8	100.0	16.1	20.6	14,217
County							
Bomi	23.9	12.0	64.1	100.0	12.0	11.9	1,344
Bong	36.9	13.6	49.5	100.0	19.0	17.9	4,061
Gbarpolu	19.4	10.4	70.2	100.0	6.0	13.4	677
Grand Bassa	34.9	11.8	53.2	100.0	17.1	17.8	2,356
Grand Cape Mount	32.6	11.5	55.9	100.0	8.3	24.3	1,474
Grand Gedeh	45.7	20.6	33.7	100.0	18.9	26.8	923
Grand Kru	8.0	35.6	56.4	100.0	2.5	5.5	755
Lofa	27.2	23.5	49.3	100.0	10.3	16.9	3,538
Margibi	52.6	12.4	35.0	100.0	34.9	17.7	2,301
Maryland	35.7	39.9	24.3	100.0	12.1	23.7	1,160
Montserrado	71.7	15.0	13.3	100.0	38.3	33.4	14,119
Nimba	41.8	20.8	37.4	100.0	17.5	24.3	6,617
River Cess	22.6	21.7	55.7	100.0	13.4	9.2	648
River Gee	32.2	50.2	17.7	100.0	15.3	16.9	504
Sinoe	23.0	13.7	63.3	100.0	14.8	8.2	1,026
Wealth quintile							
Lowest	8.7	12.8	78.4	100.0	1.9	6.9	8,285
Second	23.8	22.1	54.1	100.0	6.5	17.3	8,305
Middle	46.3	25.3	28.4	100.0	17.5	28.8	8,307
Fourth	69.9	19.2	10.9	100.0	28.8	41.1	8,298
Highest	89.2	8.5	2.3	100.0	64.2	24.9	8,311
Total	47.6	17.6	34.8	100.0	23.8	23.8	41,506

¹ See Table 2.3.1 for definition of an improved facility.

² See Table 2.3.1 for definition of an unimproved facility.

³ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

⁴ Defined as use of improved facilities shared by 2 or more households

Table 2.4 Household characteristics

Percent distribution of households and de jure population by housing characteristics, percentage using solid fuel for cooking, percentage using clean fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Liberia DHS 2019-20

Housing characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Electricity						
Yes	38.7	4.1	23.9	37.0	4.3	23.1
No	61.3	95.9	76.1	63.0	95.7	76.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth/sand/mud	19.1	69.7	40.7	19.8	67.2	40.0
Dung	0.8	1.6	1.1	1.0	1.8	1.3
Wood planks	0.0	0.1	0.1	0.0	0.1	0.0
Palm/bamboo	0.0	0.0	0.0	0.0	0.0	0.0
Parquet or polished wood	0.0	0.0	0.0	0.0	0.0	0.0
Floormat/linoleum/vinyl	5.1	0.8	3.2	3.5	0.6	2.3
Ceramic tiles/terrazzo	9.3	1.2	5.9	11.1	1.3	6.9
Concrete/cement	65.7	26.6	49.0	64.5	29.0	49.4
Carpet	0.1	0.0	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	41.6	28.9	36.2	28.6	18.7	24.4
Two	19.3	28.1	23.1	21.4	28.1	24.2
Three or more	39.1	43.0	40.8	50.1	53.2	51.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Place for cooking						
In the house	23.4	7.1	16.4	23.5	6.7	16.3
In a separate building	17.6	52.0	32.3	19.9	53.5	34.2
On a porch	33.9	11.6	24.4	33.8	10.4	23.8
Outdoors	21.3	28.0	24.2	21.6	29.0	24.7
No food cooked in household	3.7	1.0	2.5	1.2	0.2	0.8
Other	0.2	0.3	0.2	0.1	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Electricity	1.0	0.0	0.6	0.8	0.1	0.5
Gas cylinder	0.8	0.3	0.5	0.7	0.2	0.5
Kerosene stove	0.4	0.0	0.3	0.4	0.0	0.2
Fire coal/charcoal	73.6	11.9	47.2	73.5	10.9	46.9
Wood	20.5	86.8	48.8	23.5	88.5	51.1
Straw/shrubs/grass	0.0	0.0	0.0	0.0	0.0	0.0
No food cooked in household	3.7	1.0	2.5	1.2	0.2	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking ¹	94.1	98.7	96.1	96.9	99.5	98.0
Percentage using clean fuel for cooking ²	1.8	0.3	1.2	1.5	0.3	1.0
Frequency of smoking in the home						
Daily	4.1	10.6	6.9	4.0	9.9	6.5
Weekly	2.3	4.3	3.2	2.1	3.9	2.9
Monthly	0.5	0.4	0.5	0.4	0.3	0.4
Less than once a month	0.8	0.5	0.6	0.7	0.4	0.6
Never	92.3	84.2	88.9	92.8	85.4	89.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population	5,195	3,873	9,068	23,855	17,651	41,506

¹ Includes fire coal/charcoal, wood, and straw/shrubs/grass

² Includes electricity and gas cylinder

Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Liberia DHS 2019-20

Possession	Residence		Total
	Urban	Rural	
Household effects			
Generator	9.8	4.3	7.5
Solar panel	3.4	6.9	4.9
Radio	54.3	39.5	48.0
Television	32.5	3.3	20.0
Mobile phone	84.4	50.0	69.7
Non-mobile phone	1.7	0.9	1.4
Computer	10.9	0.8	6.6
Refrigerator (ice box)	15.3	1.7	9.5
Table	86.0	69.6	79.0
Chairs	83.7	64.5	75.5
Cupboard	40.4	7.8	26.5
Mattress	94.3	75.8	86.4
Sewing machine	2.4	1.3	2.0
Watch	42.9	23.4	34.6
Means of transport			
Bicycle	4.3	1.0	2.9
Motorcycle/tricycle	9.7	7.9	9.0
Car/truck	6.9	0.5	4.1
Boat/canoe	0.6	1.6	1.0
Ownership of agricultural land	19.8	44.9	30.5
Ownership of farm animals¹	23.7	53.2	36.3
Number of households	5,195	3,873	9,068

¹ Cows/bulls, pigs, goats, sheep, or chickens/ducks/guinea fowl

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence, region, and county, Liberia DHS 2019-20

Residence/ region/county	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	12.5	17.2	42.4	62.6	65.3	100.0	23,855	0.13
Greater Monrovia	0.0	0.4	9.9	36.3	53.4	100.0	12,483	0.10
Other urban	12.4	16.8	32.6	26.2	11.9	100.0	11,372	0.16
Rural	38.9	35.9	19.1	4.4	1.7	100.0	17,651	0.29
Region								
North Western	29.9	30.8	26.6	9.8	2.9	100.0	3,496	0.23
South Central	7.7	6.8	14.1	31.9	39.5	100.0	18,776	0.18
South Eastern A	35.7	30.2	20.5	7.9	5.7	100.0	2,597	0.30
South Eastern B	29.5	30.0	24.7	11.1	4.7	100.0	2,420	0.37
North Central	29.2	31.2	25.3	10.5	3.8	100.0	14,217	0.14
County								
Bomi	24.5	33.9	27.9	10.0	3.8	100.0	1,344	0.33
Bong	35.5	19.4	18.7	19.0	7.5	100.0	4,061	0.27
Gbarpolu	47.3	35.2	12.6	3.3	1.5	100.0	677	0.35
Grand Bassa	36.5	19.5	15.0	17.7	11.3	100.0	2,356	0.34
Grand Cape Mount	27.0	25.9	31.9	12.6	2.7	100.0	1,474	0.17
Grand Gedeh	26.8	30.0	26.3	9.2	7.7	100.0	923	0.26
Grand Kru	46.3	30.6	17.2	3.8	2.1	100.0	755	0.33
Lofa	27.9	36.2	28.3	5.6	2.0	100.0	3,538	0.13
Margibi	14.2	16.8	27.0	30.3	11.7	100.0	2,301	0.21
Maryland	20.8	29.1	27.0	17.3	5.8	100.0	1,160	0.31
Montserrado	1.8	3.1	11.9	34.5	48.7	100.0	14,119	0.04
Nimba	26.0	35.9	27.7	7.9	2.5	100.0	6,617	0.19
River Cess	53.7	28.6	11.1	3.9	2.7	100.0	648	0.38
River Gee	24.5	30.9	30.4	8.0	6.1	100.0	504	0.33
Sinoe	32.4	31.4	21.1	9.2	5.9	100.0	1,026	0.36
Total	20.0	20.0	20.0	20.0	20.0	100.0	41,506	0.21

Table 2.7 Handwashing

Percentage of the de jure population for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile; total percentage of the de jure population for whom the place for handwashing was observed; among the de jure population for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of the de jure population with a basic handwashing facility; and percentage with a limited handwashing facility, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of de jure population for whom place for washing hands was observed:			Number of persons	Place for handwashing observed and:			Number of persons for whom place for handwashing was observed	Percentage of the de jure population with a basic handwashing facility ³	Percentage of the de jure population with a limited handwashing facility ⁴	Number of persons for whom a place for handwashing was observed or with no place for handwashing in the dwelling, yard, or plot
	Place for handwashing was a fixed place	Place for handwashing was mobile	Total		Water available	Soap available ¹	Cleansing agent other than soap available ²				
Residence											
Urban	5.3	21.2	26.5	23,855	32.0	24.4	0.7	6,318	5.7	28.5	18,481
Greater Monrovia	7.9	30.5	38.4	12,483	36.8	27.0	0.8	4,793	8.5	36.2	10,731
Other urban	2.5	10.9	13.4	11,372	16.9	16.5	0.2	1,525	1.8	17.9	7,750
Rural	2.8	9.4	12.2	17,651	20.4	16.8	1.8	2,158	1.1	15.9	12,714
Region											
North Western	5.8	11.5	17.3	3,496	28.5	12.5	2.2	605	2.9	22.2	2,414
South Central	6.2	26.2	32.3	18,776	31.3	26.2	0.7	6,070	6.5	33.7	15,091
South Eastern A	2.5	16.3	18.8	2,597	11.7	3.4	1.0	487	0.9	27.0	1,747
South Eastern B	1.4	10.8	12.2	2,420	22.5	5.6	0.4	295	0.6	13.7	2,073
North Central	2.2	5.0	7.2	14,217	25.8	20.5	2.1	1,018	1.1	9.2	9,870
County											
Bomi	1.5	4.7	6.2	1,344	32.5	24.2	0.0	83	2.5	7.7	822
Bong	2.6	4.1	6.7	4,061	28.3	43.4	7.9	272	1.3	9.5	2,535
Gbarpolu	10.3	18.7	29.0	677	32.0	7.2	0.0	196	3.1	39.9	457
Grand Bassa	2.3	3.0	5.3	2,356	34.6	19.8	0.0	125	1.0	7.8	1,428
Grand Cape Mount	7.6	14.4	22.1	1,474	25.4	12.8	4.0	325	3.1	25.5	1,135
Grand Gedeh	3.0	9.5	12.5	923	36.7	3.2	3.2	116	0.7	20.3	552
Grand Kru	0.2	15.1	15.3	755	25.8	1.8	0.0	116	0.3	15.7	725
Lofa	3.6	10.7	14.2	3,538	23.3	8.9	0.0	504	1.1	17.2	2,754
Margibi	3.1	32.1	35.3	2,301	7.4	4.6	0.3	812	2.4	50.0	1,548
Maryland	1.3	11.8	13.1	1,160	14.5	3.0	0.5	152	0.5	14.6	1,011
Montserrado	7.3	29.1	36.4	14,119	35.0	29.7	0.7	5,133	7.7	34.6	12,115
Nimba	1.2	2.5	3.7	6,617	28.5	18.9	0.0	242	1.0	4.3	4,581
River Cess	4.1	10.7	14.8	648	8.8	5.6	1.1	96	1.0	17.0	532
River Gee	3.2	2.3	5.5	504	53.0	35.8	1.9	28	1.4	6.8	337
Sinoe	1.0	25.9	26.8	1,026	2.1	2.8	0.0	276	0.9	40.7	662
Wealth quintile											
Lowest	1.7	8.7	10.4	8,285	12.8	8.3	1.3	862	0.6	14.1	5,889
Second	2.0	8.0	9.9	8,305	15.1	12.4	2.2	823	0.9	13.2	5,844
Middle	3.1	13.5	16.6	8,307	24.9	12.2	1.0	1,378	1.3	21.6	6,032
Fourth	3.2	23.4	26.6	8,298	26.9	17.1	0.4	2,208	3.0	31.8	6,344
Highest	11.3	27.3	38.6	8,311	40.1	37.0	0.9	3,204	11.8	33.4	7,085
Total	4.3	16.2	20.4	41,506	29.0	22.5	0.9	8,476	3.8	23.3	31,195

¹ Soap includes soap or detergent in bar, liquid, powder, or paste form.

² Cleansing agents other than soap include locally available materials such as ash, mud, or sand.

³ The availability of a handwashing facility on premises with soap and water

⁴ The availability of a handwashing facility on premises without soap and/or water

Table 2.8 Household population by age, sex, and residence

Percent distribution of the de facto household population by various age groups and percentage of the de facto household population age 10-19, according to sex and residence, Liberia DHS 2019-20

Age	Urban			Rural			Male	Female	Total
	Male	Female	Total	Male	Female	Total			
<5	14.1	13.1	13.6	16.0	16.2	16.1	15.0	14.4	14.7
5-9	14.4	13.9	14.1	17.6	15.3	16.4	15.8	14.4	15.1
10-14	14.8	16.6	15.7	14.9	13.0	14.0	14.9	15.1	15.0
15-19	11.2	9.8	10.5	9.0	7.7	8.3	10.2	8.9	9.5
20-24	8.5	9.4	9.0	5.6	6.6	6.1	7.3	8.2	7.7
25-29	7.2	8.6	7.9	5.5	5.9	5.7	6.5	7.5	7.0
30-34	6.2	6.6	6.4	4.8	5.4	5.1	5.6	6.1	5.8
35-39	6.3	5.6	5.9	5.5	5.8	5.6	5.9	5.7	5.8
40-44	4.3	3.8	4.0	5.0	4.4	4.7	4.6	4.0	4.3
45-49	3.3	2.4	2.9	4.2	3.9	4.1	3.7	3.1	3.4
50-54	2.8	3.1	3.0	3.0	5.3	4.2	2.9	4.0	3.5
55-59	1.4	2.2	1.9	2.5	2.6	2.5	1.9	2.4	2.1
60-64	2.2	1.9	2.0	2.4	2.3	2.3	2.2	2.0	2.1
65-69	1.5	0.8	1.1	1.4	1.9	1.6	1.4	1.3	1.3
70-74	0.7	0.9	0.8	1.0	1.4	1.2	0.8	1.1	1.0
75-79	0.5	0.7	0.6	0.9	1.0	0.9	0.7	0.8	0.7
80+	0.6	0.7	0.6	0.8	1.4	1.1	0.7	1.0	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	43.4	43.5	43.4	48.5	44.5	46.5	45.6	43.9	44.8
15-64	53.4	53.4	53.4	47.4	49.8	48.6	50.8	51.9	51.4
65+	3.2	3.1	3.1	4.1	5.6	4.9	3.6	4.2	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	50.5	48.8	49.7	54.4	49.3	51.9	52.2	49.0	50.6
18+	49.5	51.2	50.3	45.6	50.7	48.1	47.8	51.0	49.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	26.1	26.3	26.2	23.9	20.7	22.3	25.1	24.0	24.5
Number of persons	11,015	12,075	23,089	8,603	8,510	17,113	19,618	20,584	40,202

Table 2.9 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of households, and percentage of households with children under age 18 who are orphans or not living with a biological parent, according to residence, Liberia DHS 2019-20

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	64.0	69.5	66.3
Female	36.0	30.5	33.7
Total	100.0	100.0	100.0
Number of usual members			
1	12.6	11.2	12.0
2	12.5	11.6	12.1
3	13.8	14.9	14.2
4	15.0	15.9	15.3
5	13.7	15.0	14.3
6	11.3	11.6	11.4
7	7.9	7.7	7.8
8	5.5	4.7	5.1
9+	7.8	7.3	7.5
Total	100.0	100.0	100.0
Mean size of households	4.6	4.6	4.6
Percentage of households with children under age 18 who are orphans or not living with a biological parent			
Double orphans	2.0	1.3	1.7
Single orphans ¹	12.4	11.4	12.0
Children not living with a biological parent ²	34.7	28.3	32.0
Orphans and/or children not living with a biological parent	38.2	32.3	35.7
Number of households	5,195	3,873	9,068

Note: Table is based on de jure household members, i.e., usual residents.

¹ Includes children with one dead parent and an unknown survival status of the other parent

² Children not living with a biological parent are those under age 18 living in households with neither their mother nor their father present.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Missing information on father/mother	Total	Percent-age not living with a bio-logical parent	Percent-age with one or both parents dead ¹	Number of children
	Living with both parents	Father alive	Father dead	Mother alive	Mother dead	Both alive	Only mother alive	Only father alive	Both dead					
Age														
0-4	51.8	27.9	1.9	4.2	0.1	12.5	0.7	0.4	0.4	0.1	100.0	14.0	3.5	6,017
<2	56.6	35.4	1.5	1.5	0.1	4.2	0.3	0.3	0.1	0.1	100.0	4.8	2.3	2,302
2-4	48.8	23.2	2.1	5.9	0.1	17.6	1.0	0.5	0.6	0.2	100.0	19.6	4.2	3,715
5-9	42.1	17.5	2.9	8.3	0.6	24.0	1.6	1.5	1.0	0.5	100.0	28.2	7.8	6,197
10-14	33.9	16.0	4.9	10.2	1.0	27.1	3.3	1.8	1.5	0.3	100.0	33.7	12.6	6,128
15-17	28.5	15.6	6.6	8.4	1.2	30.1	3.9	3.1	2.3	0.3	100.0	39.4	17.1	2,404
Sex														
Male	42.3	19.1	3.4	8.2	0.8	21.3	2.1	1.5	1.0	0.4	100.0	25.9	8.8	10,465
Female	39.5	20.6	3.9	7.2	0.5	23.2	2.2	1.4	1.3	0.3	100.0	28.1	9.3	10,281
Residence														
Urban	36.0	21.2	3.7	8.2	0.5	24.8	2.3	1.5	1.5	0.4	100.0	30.0	9.5	11,708
Greater Monrovia	32.6	22.3	5.0	8.8	0.6	23.9	2.6	1.5	2.4	0.3	100.0	30.4	12.0	5,748
Other urban	39.2	20.1	2.4	7.7	0.5	25.6	2.0	1.5	0.5	0.5	100.0	29.6	7.1	5,960
Rural	47.3	18.1	3.5	7.0	0.7	19.0	1.9	1.5	0.8	0.2	100.0	23.1	8.4	9,038
Region														
North Western	43.3	16.6	4.8	5.8	0.6	22.1	2.5	2.5	1.3	0.5	100.0	28.5	11.7	1,803
South Central	35.3	21.8	4.2	9.0	0.7	22.8	2.5	1.6	1.8	0.3	100.0	28.6	10.8	8,886
South Eastern A	43.7	20.2	2.1	7.4	0.8	22.9	1.2	0.9	0.5	0.4	100.0	25.5	5.4	1,313
South Eastern B	46.1	17.5	3.6	6.4	1.2	21.0	1.3	1.5	1.0	0.5	100.0	24.7	8.7	1,257
North Central	45.6	18.6	2.9	6.8	0.4	21.8	1.8	1.2	0.5	0.3	100.0	25.4	7.0	7,487
County														
Bomi	44.0	17.2	5.8	5.4	0.4	19.4	3.0	3.0	1.5	0.3	100.0	26.9	13.8	693
Bong	41.3	22.4	3.4	6.3	0.4	22.9	1.4	1.3	0.4	0.1	100.0	26.1	7.0	2,033
Gbarpolu	45.4	16.2	3.3	6.1	1.0	23.0	1.4	1.6	0.7	1.2	100.0	26.8	8.0	337
Grand Bassa	46.1	19.3	2.9	8.8	0.8	19.2	1.9	0.9	0.2	0.1	100.0	22.1	6.7	1,183
Grand Cape Mount	41.7	16.3	4.4	6.1	0.6	24.2	2.6	2.5	1.3	0.4	100.0	30.6	11.4	773
Grand Gedeh	46.6	20.8	2.8	5.9	1.0	20.5	0.4	0.7	0.6	0.7	100.0	22.2	5.5	456
Grand Kru	46.1	19.6	4.2	5.1	1.2	20.1	1.7	1.0	0.6	0.4	100.0	23.4	8.7	411
Lofa	40.5	19.9	4.0	7.2	0.5	22.7	3.3	0.7	1.0	0.0	100.0	27.8	9.7	1,837
Margibi	38.6	19.9	3.2	10.1	1.1	20.6	2.7	2.7	0.6	0.4	100.0	26.6	10.3	1,140
Maryland	46.0	17.4	3.3	7.1	1.4	19.9	1.2	1.6	1.6	0.6	100.0	24.2	9.1	595
Montserrado	32.8	22.6	4.7	8.9	0.6	23.8	2.6	1.5	2.2	0.3	100.0	30.2	11.7	6,563
Nimba	50.7	15.7	2.0	6.8	0.4	20.7	1.2	1.4	0.4	0.6	100.0	23.7	5.7	3,617
River Cess	44.7	17.4	2.4	7.4	0.9	22.6	2.5	1.0	0.8	0.3	100.0	26.9	7.6	339
River Gee	46.2	14.4	3.2	6.7	1.1	25.0	1.0	2.0	0.3	0.1	100.0	28.2	7.7	251
Sinoe	40.6	21.5	1.2	8.7	0.5	25.2	1.1	0.9	0.2	0.0	100.0	27.5	3.9	518
Wealth quintile														
Lowest	50.6	18.6	3.3	5.8	0.4	17.3	1.7	1.2	0.7	0.2	100.0	21.0	7.4	4,196
Second	48.4	18.2	3.6	6.6	0.9	18.6	1.4	1.4	0.7	0.3	100.0	22.1	7.9	4,258
Middle	35.4	20.1	4.4	7.4	0.5	26.1	2.6	2.2	0.7	0.5	100.0	31.7	10.8	4,372
Fourth	35.2	23.3	4.5	7.7	0.7	23.2	1.8	1.2	2.1	0.2	100.0	28.4	10.4	4,050
Highest	34.3	19.1	2.1	11.2	0.7	26.2	3.1	1.2	1.6	0.4	100.0	32.1	8.7	3,869
Total <15	42.5	20.4	3.2	7.6	0.6	21.2	1.9	1.3	1.0	0.3	100.0	25.4	8.0	18,342
Total <18	40.9	19.8	3.6	7.7	0.6	22.3	2.1	1.5	1.2	0.3	100.0	27.0	9.1	20,746

Note: Table is based on de jure members, i.e., usual residents.

¹ Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.11 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of children whose births are registered and who:			Number of children
	Had a birth certificate	Did not have a birth certificate	Total percentage of children whose births are registered	
Age				
<2	27.9	39.4	67.3	2,302
2-4	31.7	33.9	65.6	3,715
Sex				
Male	30.4	36.7	67.1	3,018
Female	30.1	35.3	65.4	3,000
Residence				
Urban	32.0	37.2	69.3	3,218
Greater Monrovia	32.8	39.9	72.7	1,568
Other urban	31.3	34.7	66.0	1,650
Rural	28.2	34.5	62.8	2,799
Region				
North Western	36.3	35.1	71.4	508
South Central	31.2	35.3	66.5	2,481
South Eastern A	24.5	35.7	60.3	368
South Eastern B	24.6	40.1	64.7	338
North Central	29.7	36.3	66.0	2,322
County				
Bomi	35.4	37.9	73.3	176
Bong	25.7	12.0	37.7	633
Gbarpolu	29.5	41.4	70.9	102
Grand Bassa	28.5	28.4	56.9	372
Grand Cape Mount	40.1	30.2	70.3	230
Grand Gedeh	21.3	55.5	76.9	132
Grand Kru	15.9	56.3	72.2	115
Lofa	59.7	25.1	84.9	511
Margibi	27.6	37.9	65.5	306
Maryland	33.1	38.8	71.9	160
Montserrado	32.4	36.3	68.7	1,803
Nimba	18.8	54.3	73.1	1,179
River Cess	23.2	44.8	68.0	96
River Gee	18.9	13.8	32.8	63
Sinoe	28.5	10.7	39.2	139
Wealth quintile				
Lowest	23.0	38.6	61.5	1,444
Second	28.3	34.9	63.3	1,364
Middle	32.6	33.1	65.7	1,156
Fourth	33.3	35.4	68.8	1,060
Highest	37.6	37.6	75.2	994
Total	30.3	36.0	66.3	6,017

Table 2.12.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	No education	Some elementary	Completed elementary ¹	Some junior high	Completed junior high ²	Some senior high	Completed senior high ³	Higher	Don't know/missing	Total	Number of women	Median years completed
Age												
6-9	72.2	27.4	0.1	0.0	0.1	0.0	0.1	0.0	0.0	100.0	2,411	0.0
10-14	22.8	67.5	2.1	0.2	6.7	0.0	0.6	0.0	0.0	100.0	3,108	1.3
15-19	8.8	37.1	5.9	3.8	28.3	3.0	12.5	0.6	0.0	100.0	1,830	5.2
20-24	15.6	18.4	4.1	4.8	17.5	15.4	18.2	5.5	0.6	100.0	1,689	6.3
25-29	23.0	16.5	3.7	3.7	13.1	20.8	10.2	8.7	0.4	100.0	1,543	6.2
30-34	35.1	13.9	2.3	2.6	11.1	16.9	7.3	10.6	0.3	100.0	1,260	5.1
35-39	47.2	19.4	3.7	2.4	6.8	10.5	2.5	6.8	0.6	100.0	1,169	0.8
40-44	52.9	17.1	2.2	1.9	7.9	9.7	2.3	5.3	0.8	100.0	831	0.0
45-49	60.4	16.4	2.9	0.2	5.9	5.4	3.5	4.5	0.7	100.0	629	0.0
50-54	70.8	9.9	2.0	1.7	6.4	5.1	1.3	3.0	0.0	100.0	833	0.0
55-59	71.3	9.5	1.4	1.8	3.6	6.5	2.4	3.1	0.6	100.0	488	0.0
60-64	77.0	8.2	1.5	2.3	2.0	3.9	0.9	3.8	0.4	100.0	420	0.0
65+	89.8	5.2	1.1	0.0	0.8	0.6	0.4	1.6	0.4	100.0	855	0.0
Residence												
Urban	30.9	28.7	2.7	2.7	11.4	10.3	7.5	5.5	0.3	100.0	10,203	2.7
Greater Monrovia	24.4	26.0	2.6	3.9	11.5	14.9	8.6	8.0	0.2	100.0	5,504	4.9
Other urban	38.5	31.8	2.8	1.4	11.4	5.1	6.2	2.6	0.3	100.0	4,699	1.4
Rural	57.1	28.2	2.6	0.7	6.8	1.8	2.1	0.4	0.3	100.0	6,863	0.0
Region												
North Western	54.5	27.0	4.4	0.6	7.4	2.3	2.6	0.8	0.4	100.0	1,397	0.0
South Central	31.4	27.3	2.3	2.9	11.2	11.3	7.4	6.0	0.3	100.0	8,130	3.3
South Eastern A	49.4	32.9	2.7	0.9	8.0	2.1	3.2	0.7	0.2	100.0	1,011	0.0
South Eastern B	42.3	36.5	2.6	1.1	9.0	3.4	3.7	1.2	0.2	100.0	948	0.6
North Central	51.1	28.4	2.7	1.1	8.1	3.2	3.6	1.4	0.3	100.0	5,580	0.0
County												
Bomi	47.9	29.5	5.1	0.4	7.6	2.9	4.5	1.5	0.6	100.0	565	0.0
Bong	52.7	26.4	3.6	1.7	5.9	3.6	3.5	2.5	0.2	100.0	1,705	0.0
Gbarpolu	61.8	27.4	4.1	0.8	3.5	1.3	0.6	0.4	0.2	100.0	265	0.0
Grand Bassa	53.8	29.4	1.6	0.8	8.3	1.5	2.7	1.4	0.5	100.0	964	0.0
Grand Cape Mount	57.7	24.4	3.8	0.9	9.1	2.0	1.6	0.4	0.2	100.0	568	0.0
Grand Gedeh	42.5	35.2	3.7	0.9	9.0	3.3	3.9	1.2	0.3	100.0	362	0.3
Grand Kru	43.1	41.1	2.5	0.8	8.1	1.9	1.7	0.2	0.6	100.0	289	0.3
Lofa	60.3	24.4	1.6	0.8	6.8	2.7	2.7	0.5	0.2	100.0	1,480	0.0
Margibi	44.4	30.5	1.9	0.7	9.6	5.0	5.8	1.8	0.2	100.0	980	0.4
Maryland	40.9	35.0	1.6	1.0	9.3	4.7	5.2	2.1	0.1	100.0	460	0.7
Montserrado	25.9	26.4	2.4	3.6	11.9	13.8	8.4	7.3	0.2	100.0	6,186	4.6
Nimba	44.4	32.4	2.8	0.8	10.5	3.3	4.2	1.1	0.5	100.0	2,395	0.2
River Cess	59.3	30.0	2.3	0.7	5.4	1.0	0.8	0.3	0.2	100.0	248	0.0
River Gee	44.3	33.4	5.2	1.7	9.7	2.3	3.1	0.3	0.0	100.0	198	0.7
Sinoe	49.6	32.7	2.0	1.0	8.6	1.7	4.0	0.6	0.0	100.0	400	0.0
Wealth quintile												
Lowest	64.9	26.0	2.1	0.5	4.6	0.6	0.9	0.1	0.4	100.0	3,143	0.0
Second	55.7	29.3	2.3	0.8	8.1	1.5	2.0	0.1	0.2	100.0	3,186	0.0
Middle	43.6	31.2	3.1	1.3	10.3	4.4	5.2	0.7	0.3	100.0	3,378	0.5
Fourth	30.2	29.1	2.6	3.9	13.1	9.1	8.8	3.2	0.1	100.0	3,678	3.2
Highest	18.4	26.8	3.0	2.6	10.9	17.1	8.5	12.1	0.4	100.0	3,681	5.7
Total	41.4	28.5	2.6	1.9	9.6	6.9	5.3	3.5	0.3	100.0	17,066	1.0

¹ Completed grade 6 at the elementary level

² Completed grade 9 at the junior high level

³ Completed grade 12 at the senior high level

Table 2.12.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	No education	Some elementary	Completed elementary ¹	Some junior high	Completed junior high ²	Some senior high	Completed senior high ³	Higher	Don't know/missing	Total	Number of men	Median years completed
Age												
6-9	75.6	24.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	100.0	2,449	0.0
10-14	28.5	63.3	1.8	0.3	5.3	0.1	0.3	0.2	0.1	100.0	2,917	0.9
15-19	9.8	41.8	4.5	2.5	26.6	2.0	12.1	0.6	0.2	100.0	2,009	4.8
20-24	8.8	15.4	3.4	4.0	17.3	18.7	24.1	8.0	0.3	100.0	1,424	7.1
25-29	13.3	10.9	2.6	2.7	14.7	28.1	15.5	11.3	0.8	100.0	1,266	7.4
30-34	13.5	12.0	1.6	2.3	9.8	28.1	13.6	17.4	1.5	100.0	1,090	7.9
35-39	19.0	12.4	3.8	1.7	12.7	23.6	10.9	15.2	0.7	100.0	1,167	7.2
40-44	25.4	13.1	4.6	2.5	9.4	22.0	7.7	13.2	2.1	100.0	902	6.4
45-49	29.8	13.3	2.7	2.1	12.3	15.3	8.3	13.9	2.3	100.0	723	6.0
50-54	22.2	12.8	2.8	5.6	9.3	21.0	8.3	17.0	0.9	100.0	562	7.3
55-59	31.8	13.2	3.1	2.1	9.0	18.6	8.8	11.8	1.6	100.0	373	5.8
60-64	38.2	10.4	2.9	2.8	7.0	17.3	6.1	14.8	0.5	100.0	440	5.2
65+	48.1	15.3	2.1	1.3	5.4	12.3	3.9	10.1	1.6	100.0	707	0.2
Residence												
Urban	20.9	26.0	2.3	2.1	11.3	15.7	10.0	11.1	0.5	100.0	9,121	4.4
Greater Monrovia	15.4	20.9	2.6	2.7	11.3	20.2	11.7	14.9	0.3	100.0	4,813	6.7
Other urban	27.1	31.8	2.0	1.3	11.4	10.7	8.2	6.8	0.8	100.0	4,308	3.3
Rural	41.0	29.3	2.8	1.5	9.7	6.8	6.0	1.8	0.9	100.0	6,909	0.9
Region												
North Western	42.1	28.1	3.0	1.9	8.9	7.2	5.1	2.8	1.0	100.0	1,386	0.9
South Central	20.8	24.0	2.3	2.3	11.2	17.0	10.2	11.8	0.5	100.0	7,268	5.7
South Eastern A	29.9	31.9	3.3	1.9	13.2	7.9	7.4	3.1	1.5	100.0	1,087	2.9
South Eastern B	27.9	32.7	4.5	2.1	12.6	8.8	6.6	4.2	0.6	100.0	979	3.1
North Central	38.5	30.1	2.2	1.1	9.5	7.5	7.1	3.2	0.7	100.0	5,311	1.3
County												
Bomi	34.7	29.0	3.8	2.1	9.4	9.7	5.7	4.8	0.8	100.0	540	2.0
Bong	40.6	28.1	4.1	1.7	7.9	7.5	5.0	4.2	0.9	100.0	1,533	1.0
Gbarpolu	45.0	29.1	3.3	2.2	7.9	6.1	3.8	1.2	1.4	100.0	262	0.3
Grand Bassa	39.2	30.8	1.4	1.6	10.8	6.3	5.9	3.6	0.5	100.0	919	0.8
Grand Cape Mount	47.5	26.9	2.1	1.6	8.9	5.4	5.1	1.7	0.9	100.0	584	0.1
Grand Gedeh	25.4	33.4	4.2	2.1	12.7	8.5	7.9	4.4	1.4	100.0	367	3.7
Grand Kru	26.1	36.1	2.7	1.7	14.0	9.2	5.4	3.6	1.2	100.0	301	2.9
Lofa	43.3	28.4	1.8	1.3	7.7	8.0	6.7	2.2	0.5	100.0	1,345	0.4
Margibi	26.9	31.1	2.3	1.8	11.7	13.0	6.5	6.2	0.4	100.0	884	3.3
Maryland	28.7	31.1	5.2	1.8	12.0	8.0	7.4	5.7	0.3	100.0	468	3.1
Montserrado	16.8	21.7	2.4	2.5	11.2	19.4	11.5	14.0	0.5	100.0	5,465	6.4
Nimba	34.6	32.4	1.3	0.6	11.4	7.3	8.6	3.2	0.6	100.0	2,433	1.9
River Cess	39.2	30.7	4.3	2.0	12.0	5.4	4.3	1.7	0.5	100.0	274	1.6
River Gee	28.9	31.6	5.5	3.1	11.8	10.2	6.7	1.7	0.5	100.0	209	3.2
Sinoe	27.9	31.5	1.9	1.6	14.3	8.9	9.0	2.9	2.1	100.0	447	3.0
Wealth quintile												
Lowest	48.6	29.2	2.6	1.6	8.5	3.9	4.4	0.5	0.8	100.0	3,152	0.0
Second	38.7	30.1	2.8	1.6	10.9	6.9	6.8	1.4	0.9	100.0	3,203	1.4
Middle	29.9	33.3	2.8	1.5	10.0	9.8	8.9	3.1	0.7	100.0	3,247	2.7
Fourth	19.4	24.9	2.3	2.3	13.1	18.1	11.1	8.1	0.7	100.0	3,153	5.7
Highest	11.8	19.9	2.1	2.2	10.8	20.6	10.2	22.1	0.3	100.0	3,275	7.4
Total	29.6	27.4	2.5	1.8	10.6	11.9	8.3	7.1	0.7	100.0	16,030	3.5

¹ Completed grade 6 at the elementary level

² Completed grade 9 at the junior high level

³ Completed grade 12 at the senior high level

Table 2.13 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, Liberia DHS 2019-20

Background characteristic	Net attendance ratio ¹				Gross attendance ratio ²			
	Male	Female	Total	Gender parity index ³	Male	Female	Total	Gender parity index ³
PRIMARY SCHOOL								
Residence								
Urban	51.7	52.9	52.3	1.02	103.7	100.2	101.8	0.97
Greater Monrovia	57.9	58.8	58.4	1.02	107.4	104.0	105.4	0.97
Other urban	46.9	46.9	46.9	1.00	100.9	96.4	98.6	0.95
Rural	30.0	34.5	32.1	1.15	77.9	77.0	77.5	0.99
Region								
North Western	36.3	40.7	38.3	1.12	82.8	95.0	88.3	1.15
South Central	49.7	53.2	51.6	1.07	99.5	99.4	99.5	1.00
South Eastern A	35.8	36.2	36.0	1.01	100.1	80.9	90.9	0.81
South Eastern B	46.2	48.9	47.5	1.06	105.9	101.2	103.6	0.96
North Central	34.4	37.2	35.7	1.08	81.5	78.1	79.9	0.96
County								
Bomi	43.0	48.8	45.7	1.14	99.6	125.1	111.4	1.26
Bong	36.3	39.1	37.6	1.08	83.5	87.7	85.4	1.05
Gbarpolu	22.2	31.7	26.6	1.43	54.3	61.7	57.8	1.13
Grand Bassa	25.5	32.6	28.9	1.28	80.3	76.9	78.7	0.96
Grand Cape Mount	37.2	37.8	37.5	1.02	81.7	84.3	82.8	1.03
Grand Gedeh	43.6	46.9	45.3	1.08	114.3	85.3	99.4	0.75
Grand Kru	46.2	49.6	47.9	1.07	112.2	104.5	108.5	0.93
Lofa	34.3	35.7	35.0	1.04	77.8	75.9	76.9	0.98
Margibi	45.6	45.2	45.4	0.99	86.8	101.6	94.2	1.17
Maryland	47.5	51.0	49.3	1.07	99.7	94.0	96.8	0.94
Montserrado	56.2	57.8	57.1	1.03	106.9	102.6	104.5	0.96
Nimba	33.4	37.0	35.1	1.11	82.2	74.1	78.4	0.90
River Cess	26.0	25.2	25.6	0.97	80.8	68.7	75.3	0.85
River Gee	43.2	41.1	42.3	0.95	110.5	117.5	113.6	1.06
Sinoe	36.5	33.3	35.0	0.91	102.5	85.0	94.3	0.83
Wealth quintile								
Lowest	23.1	26.1	24.5	1.13	65.1	59.0	62.4	0.91
Second	31.8	34.5	33.0	1.09	79.6	78.5	79.1	0.99
Middle	44.7	43.0	43.9	0.96	96.2	93.0	94.7	0.97
Fourth	55.5	57.1	56.4	1.03	112.1	109.3	110.5	0.98
Highest	62.0	62.4	62.3	1.01	118.0	108.2	112.3	0.92
Total	41.2	45.3	43.3	1.10	91.2	90.7	90.9	0.99

Continued...

Table 2.13—Continued

Background characteristic	Net attendance ratio ¹				Gross attendance ratio ²			
	Male	Female	Total	Gender parity index ³	Male	Female	Total	Gender parity index ³
SECONDARY SCHOOL								
Residence								
Urban	34.4	33.5	33.9	0.97	67.3	66.1	66.7	0.98
Greater Monrovia	47.0	40.1	43.3	0.85	82.9	72.2	77.2	0.87
Other urban	21.3	25.4	23.3	1.19	51.2	58.5	54.8	1.14
Rural	10.8	13.0	11.8	1.20	28.9	24.9	27.0	0.86
Region								
North Western	15.1	18.7	16.9	1.24	34.1	36.1	35.1	1.06
South Central	38.5	34.6	36.5	0.90	71.2	65.0	68.0	0.91
South Eastern A	12.8	13.2	12.9	1.03	36.6	29.0	33.3	0.79
South Eastern B	16.8	16.2	16.5	0.97	44.4	40.3	42.4	0.91
North Central	12.3	17.9	14.9	1.45	33.6	38.3	35.8	1.14
County								
Bomi	19.0	23.1	21.2	1.22	38.4	41.9	40.3	1.09
Bong	16.7	20.1	18.4	1.21	41.7	46.7	44.1	1.12
Gbarpolu	6.0	8.7	7.4	1.46	23.0	16.7	19.8	0.73
Grand Bassa	17.3	15.6	16.6	0.90	35.6	36.5	36.0	1.03
Grand Cape Mount	14.5	16.8	15.6	1.16	33.9	36.2	34.9	1.07
Grand Gedeh	15.9	13.6	14.9	0.86	37.0	31.0	34.4	0.84
Grand Kru	12.8	9.1	11.1	0.70	30.1	25.0	27.7	0.83
Lofa	8.6	13.6	10.9	1.58	27.5	31.7	29.5	1.15
Margibi	24.4	16.2	20.1	0.66	56.5	46.7	51.4	0.83
Maryland	19.8	19.7	19.7	1.00	56.5	53.6	55.1	0.95
Montserratado	44.4	39.7	41.9	0.89	79.8	71.2	75.2	0.89
Nimba	11.5	18.8	14.7	1.64	31.8	35.8	33.6	1.12
River Cess	11.4	9.1	10.4	0.80	31.9	24.5	28.8	0.77
River Gee	16.8	19.4	18.1	1.15	42.5	35.6	39.2	0.84
Sinoe	11.1	15.0	12.8	1.36	39.2	29.8	35.1	0.76
Wealth quintile								
Lowest	5.3	6.3	5.7	1.19	20.4	15.4	18.3	0.76
Second	10.3	8.8	9.6	0.85	31.1	28.7	30.0	0.92
Middle	16.4	17.5	16.9	1.07	41.4	37.6	39.6	0.91
Fourth	36.5	35.3	35.9	0.97	72.9	71.6	72.2	0.98
Highest	48.7	45.4	46.9	0.93	82.3	75.5	78.7	0.92
Total	24.9	26.2	25.5	1.05	51.8	51.4	51.6	0.99

¹ The NAR for primary school is the percentage of the primary school-age (6-11 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (12-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100.0.

² The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.

³ The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

CHARACTERISTICS OF RESPONDENTS

Key Findings

- **Education:** 16% of women and 27% of men age 15-49 have completed senior high or a higher level of education.
- **Literacy:** 52% of women and 75% of men age 15-49 are literate.
- **Exposure to mass media:** Only 1% of women and 4% of men have access to three specified types of mass media (newspaper, television, and radio) on a weekly basis.
- **Employment:** 61% of women and 81% of men are currently employed.
- **Health insurance:** Health insurance coverage is low, with only 4% of women and 7% of men age 15-49 having any type of health insurance.
- **Knowledge of tuberculosis:** Knowledge of tuberculosis is high; 91% of women and 92% of men age 15-49 have heard of tuberculosis.

This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, religion, marital status, residence, region, education, and wealth status. The chapter also explores access to media and the internet, health insurance coverage, use of tobacco, employment status, occupation, and earnings. This information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviors.

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

The 2019-20 LDHS interviewed 8,065 women age 15-49 and 4,249 men age 15-59. **Table 3.1** shows the percent distribution of women and men age 15-49 by background characteristics. More than half of Liberian women and men are under age 30 (56% of women and 55% of men).

Eighty-four percent of women and 83% of men are Christian. Fourteen percent of Liberian women and men are Muslim, and 1% practice no religion.

Nearly 4 in 10 women (39%) and more than 4 in 10 men (44%) have never been married. Twenty-six percent of women and 22% of men are currently married, while 27% of women and 28% of men are living with someone as if married. Female respondents are more likely than male respondents to be divorced or separated (7% versus 6%) or widowed (2% versus 1%).

More than half of women and men live in urban areas (62% and 61%, respectively). South Central is the most populous region in Liberia. By county, the largest percentage of Liberians live in Montserrado (40%), while the smallest percentages live in Gbarpolu, River Cess, and River Gee (1% each).

3.2 EDUCATION AND LITERACY

Literacy

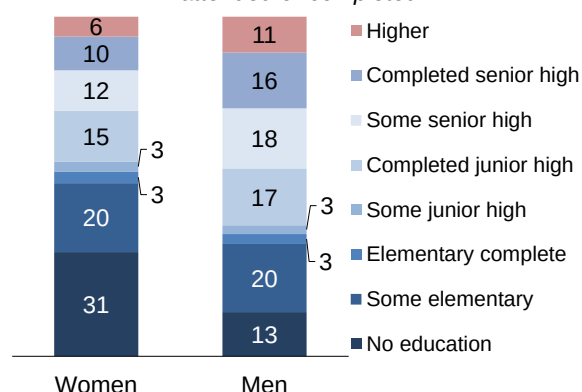
Respondents who had attended higher than senior high school were assumed to be literate. All other respondents, shown a typed sentence to read aloud, were considered literate if they could read all or part of the sentence.

Sample: Women and men age 15-49

Tables 3.2.1 and 3.2.2 show that men have greater educational attainment than women; the median number of years of schooling completed among men is 6.6, as compared with 4.8 among women. In addition, 31% of women have no formal education, compared with 13% of men. A tenth of women (10%) and one-sixth (16%) of men age 15-49 have completed senior high school. Advanced education is relatively uncommon; only 6% of women and 11% of men have completed education beyond the senior high school level (Figure 3.1). Overall, 16% of women and 27% of men age 15-49 have completed senior high or a higher level of education. About half of Liberian women (52%) and three quarters of Liberian men (75%) are literate (Tables 3.3.1 and 3.3.2).

Figure 3.1 Education of survey respondents

Percent distribution of women and men age 15-49 by highest level of schooling attended or completed



Trends: The percentage of women age 15-49 with no education has decreased since 2007, from 42% to 31%. Over the same period, the median number of years of schooling completed has increased from 1.7 to 4.8 years. Among men age 15-49, the percentage with no education has decreased from 18% to 13%, while the median number of years of education completed has increased from 5.8 to 6.6 years.

Patterns by background characteristics

- Twenty-one percent of urban women have no education, as compared with 47% of rural women. Overall, 9% of urban women have completed education beyond senior high school, compared with 1% of rural women (Table 3.2.1).

- Montserrado County has the largest percentage of women and men (26% and 40%, respectively) with a completed senior high or higher level of education. River Cess and Gbarpolu have the lowest percentage of women (2% each) who have completed senior high or higher, while River Cess has the lowest percentage of men who have reached this level of education (9%) (**Figure 3.2**, **Table 3.2.1**, and **Table 3.2.2**).

- Educational attainment increases with increasing household wealth. A third of women (33%) and almost half of men (47%) in the highest wealth quintile have completed senior high or a higher level of education. In the lowest quintile, only 2% of women and 10% of men have completed senior high school or higher.

- Literacy among women decreases with age, from 72% among those age 15-19 to 22% among those age 45-49 (**Table 3.3.1**).

- Urban Liberians are more likely than their rural counterparts to be literate. Sixty-three percent of urban women and 84% of urban men are literate, as compared with 34% of rural women and 61% of rural men (**Tables 3.3.1** and **3.3.2**).

Figure 3.2 Education by county

Percentage of women age 15-49 with a completed senior high education or higher



3.3 MASS MEDIA EXPOSURE

Exposure to mass media

Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media.

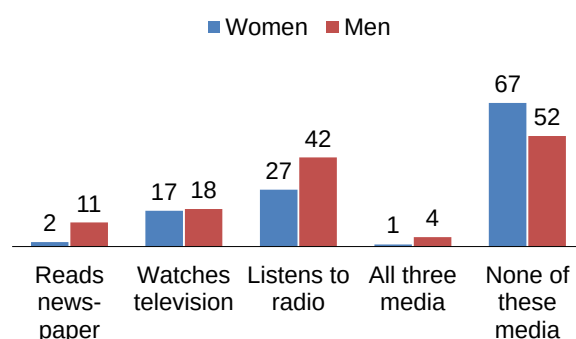
Sample: Women and men age 15-49

Access to information is essential in increasing people's knowledge and awareness of important issues. Data on women's and men's exposure to mass media are especially crucial in the development of health education programs and the dissemination of information, particularly on family planning, nutrition, HIV/AIDS, and other essential topics.

Tables 3.4.1 and **3.4.2** show the percentages of women and men who are exposed to specific types of media, by background characteristics. The level of exposure to mass media is generally low in Liberia. Radio is the dominant medium of information for both women and men: 27% of women and 42% of men listen to the radio. Men are more likely (4%) than women (1%) to access all three forms of media (newspaper, television, and radio) on a weekly basis. Sixty-seven percent of women and 52% of men do not access any of the three media on a weekly basis (**Figure 3.3**).

Figure 3.3 Exposure to mass media

Percentage of women and men age 15-49 who are exposed to media on a weekly basis



The internet is also a critical tool through which people access and share information. Internet use includes accessing web pages, email, and social media. Among all women and men age 15-49, 22% and 36% have used the internet in the last 12 months, respectively. Of those who have accessed the internet in the past 12 months, more women (49%) than men (43%) use the internet almost daily (**Tables 3.5.1** and **3.5.2**).

Trends: Exposure to mass media has decreased over time. The percentage of women age 15-49 with no weekly access to mass media increased from 45% in 2007 to 67% in 2019-20. Among men, the percentage increased from 23% to 52%.

Patterns by background characteristics

- Urban women and men (2% and 7%, respectively) are more likely than their rural counterparts (less than 1% and 1%, respectively) to have accessed all three forms of mass media in the last week (**Tables 3.4.1** and **3.4.2**).
- The percentage of women who do not access any of the three media on a weekly basis decreases with increasing education, from 79% among those with no education to 27% among those with a higher education. The corresponding percentages among men are 78% and 12%.
- The South Central region has the highest percentages of women (41%) and men (65%) who have ever used the internet (**Tables 3.5.1** and **3.5.2**).
- By county, Montserrado has the highest percentages of women and men who have used the internet in the past 12 months (41% and 64%, respectively). Internet use is lowest in Gbarpolu and Lofa among women (4% each) and in Gbarpolu, Nimba, and River Cess among men (10% each).
- Liberians in the highest wealth quintile (55% of women and 77% of men) are more likely to have used the internet during the past 12 months than those in the lowest wealth quintile (2% of women and 4% of men).

3.4 EMPLOYMENT

Currently employed

Respondents who were employed in the 7 days before the survey.

Sample: Women and men age 15-49

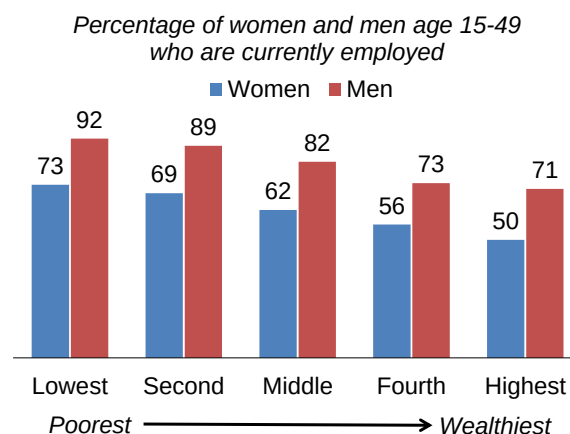
Men (81%) are more likely than women (61%) to be currently employed (**Tables 3.6.1** and **3.6.2**). Three percent of women and 4% of men were not currently employed but had worked in the past 12 months.

Trends: The percentage of women who are currently employed has fluctuated over time, decreasing from 59% in 2007 to 55% in 2013 before increasing to 61% in 2019-20. Among men, the percentage currently employed decreased from 78% in 2007 to 72% in 2013 and subsequently increased to 81% in 2019-20.

Patterns by background characteristics

- Employment increases with age, from 33% among women age 15-19 to 83% among those age 45-49 and from 54% among men age 15-19 to 97% among those age 45-49.
- Women and men who are married or living together with a partner (73% and 95%, respectively) are more likely than those who have never been married (42% and 63%, respectively) to be employed.
- Current employment is higher among rural Liberians than urban Liberians (67% versus 57% among women and 88% versus 76% among men).
- The percentage of women who are currently employed is highest in Gbarpolu (82%) and lowest in Grand Cape Mount (48%). Conversely, the percentage of men who are employed is highest in Nimba (97%) and lowest in Maryland (66%).
- Women (76%) and men (96%) with no education are more likely than their counterparts to be employed.
- Employment is lowest among women (50%) and men (71%) in the highest wealth quintile (**Figure 3.4**).

Figure 3.4 Employment status by wealth



3.5 OCCUPATION

Occupation

Categorized as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, domestic service, agriculture, and other.

Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

Among women who are currently employed or worked in the 12 months before the survey, one in two work in sales (52%) and nearly two in five (38%) work in agriculture. Forty-one percent of men work in agriculture, and 23% are engaged in skilled manual labor (**Table 3.7.1**, **Table 3.7.2**, and **Figure 3.5**).

Thirty-two percent of employed women in Liberia are not paid for the work they do. Women engaged in agricultural work (57%) are more likely than women performing nonagricultural work (17%) not to be paid for their work. Seventy-eight percent of women who worked in the past year are self-employed (**Table 3.8**).

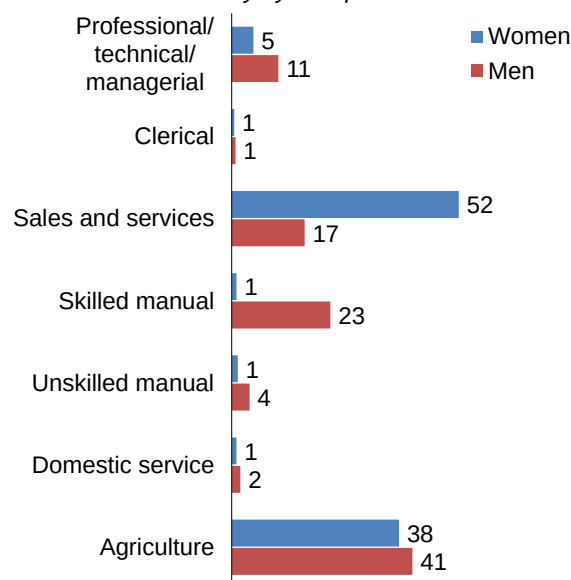
Trends: The percentage of women working in agriculture decreased from 55% in 2007 to 38% in 2019-20. Among men, the percentage decreased from 53% to 41% over the same period.

Patterns by background characteristics

- Urban women (68%) are twice as likely as rural women (30%) to work in sales and services, while urban men (32%) are three times more likely than their rural counterparts (10%) to perform skilled manual labor. Rural women (66%) and rural men (69%) are more likely than urban women (18%) and men (21%) to be engaged in the agricultural sector (**Tables 3.7.1** and **3.7.2**).
- Women and men with no education (56% and 66%, respectively) are more likely than those with education beyond senior high school (2% and 4%, respectively) to work in the agricultural sector.
- The percentages of men and women employed in professional/technical/managerial and clerical occupations rise with increasing wealth.

Figure 3.5 Occupation

Percentage of women and men age 15-49 employed in the 12 months before the survey by occupation



3.6 HEALTH INSURANCE COVERAGE

Only 4% of women and 7% of men age 15-49 have health insurance. Among those with insurance, most women and men (3% and 5%, respectively) have employer-based insurance (**Tables 3.9.1** and **3.9.2**).

Trends: Since 2013, the percentage of uninsured Liberians has remained the same (96% among women and 93% among men).

3.7 TOBACCO USE

One percent of women age 15-49 smoke any kind of tobacco (**Table 3.10.1**), as compared with 7% of men (**Table 3.10.2**). Four percent of men smoke daily, and 4% are occasional smokers. Three out of five men (61%) who are daily smokers reported that they smoke on average less than five cigarettes per day (data not shown). Three percent of men use smokeless tobacco (**Table 3.11**).

Trends: The percentage of men age 15-49 who smoke any type of tobacco declined from 15% in 2007 to 7% in 2019-20.

Patterns by background characteristics

- The percentage of men who smoke any type of tobacco increases from 2% among those age 15-19 to 16% among those age 45-49.
- By county, cigarette smoking ranges from 3% in Margibi and Maryland to 15% in Grand Cape Mount.
- Tobacco use varies by education, from a high of 16% among men with no education to a low of 4% among men who have attained a higher education.

3.8 KNOWLEDGE OF TUBERCULOSIS

Ninety-one percent of women and 92% of men age 15-49 have heard of tuberculosis (TB). Among those have heard of TB, 61% of women and 58% of men report hemoptysis as a common symptom of TB, 48% of women and 62% of men report coughing for more than 2 weeks, and 18% of women and 27% of men report chest pain. Additionally, 79% of women and 80% of men believe that TB can be cured, and 86% of women and 88% of men would not keep it a secret if a family member was diagnosed with TB (**Tables 3.12.1 and 3.12.2**).

3.9 POSSESSION OF IDENTITY DOCUMENTS

Three out of four women and men (75% each) age 15-49 possess a form of identification document (ID). A voter card is the most common form of ID among both women and men (93% and 90%, respectively). Only 11% of women and 16% of men possess a national ID. Twenty-one percent of women and 32% of men have a birth certificate. The proportion of women and men with a birth certificate increases with increasing wealth. Among women the percentage increases from 6% among those in the lowest wealth quintile to 43% among those in the highest wealth quintile. Among men, possession of a birth certificate increases from 13% in the lowest wealth quintile to 54% in the highest quintile (**Tables 3.13.1 and 3.13.2**).

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Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Liberia DHS 2019-20

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	20.5	1,657	1,716	22.9	876	885
20-24	18.7	1,506	1,408	17.2	658	596
25-29	17.0	1,375	1,202	14.6	558	459
30-34	13.8	1,112	1,052	12.9	494	482
35-39	12.6	1,020	1,103	12.8	487	488
40-44	9.5	769	857	10.9	418	456
45-49	7.8	626	727	8.6	330	394
Religion						
Christian	84.0	6,776	6,878	83.1	3,175	3,114
Muslim	14.3	1,153	1,046	13.8	527	484
Traditional religion	0.4	31	42	2.0	75	108
No religion	1.2	100	98	1.1	41	50
Other	0.1	4	1	0.1	2	4
Marital status						
Never married	38.8	3,129	2,621	44.1	1,684	1,537
Married	25.6	2,067	2,315	21.7	831	934
Living together	26.6	2,149	2,339	28.1	1,075	1,090
Divorced/separated	7.2	584	645	5.5	211	184
Widowed	1.7	137	145	0.5	20	15
Residence						
Urban	62.3	5,023	3,338	60.5	2,313	1,434
Greater Monrovia	35.5	2,866	917	35.8	1,368	385
Other urban	26.7	2,157	2,421	24.7	944	1,049
Rural	37.7	3,042	4,727	39.5	1,508	2,326
Region						
North Western	7.7	621	1,158	7.9	301	508
South Central	50.9	4,105	2,301	50.6	1,932	1,016
South Eastern A	5.7	458	1,195	6.7	254	665
South Eastern B	5.5	441	1,486	5.9	226	741
North Central	30.2	2,439	1,925	29.0	1,107	830
County						
Bomi	3.1	249	401	3.1	118	161
Bong	9.9	796	671	8.5	324	257
Gbarpolu	1.4	112	337	1.4	53	160
Grand Bassa	5.8	467	543	5.2	197	233
Grand Cape Mount	3.2	260	420	3.4	130	187
Grand Gedeh	2.1	172	384	2.4	92	210
Grand Kru	1.7	136	449	1.7	67	213
Lofa	8.2	658	581	7.5	287	240
Margibi	5.5	441	539	5.5	209	260
Maryland	2.7	215	574	2.9	110	281
Montserrado	39.6	3,197	1,219	39.9	1,525	523
Nimba	12.2	985	673	13.0	496	333
River Cess	1.3	104	365	1.4	52	192
River Gee	1.1	91	463	1.3	50	247
Sinoe	2.3	182	446	2.9	110	263
Education						
No education	30.7	2,474	2,985	13.0	498	613
Elementary	23.7	1,911	2,389	23.0	877	1,114
Junior high	17.9	1,445	1,329	19.3	738	800
Senior high	21.8	1,761	1,117	34.1	1,303	986
Higher	5.9	474	245	10.6	405	247
Wealth quintile						
Lowest	17.1	1,379	2,104	17.2	657	970
Second	17.7	1,431	2,029	17.3	663	965
Middle	18.8	1,517	1,723	19.4	743	816
Fourth	22.7	1,829	1,242	21.9	838	537
Highest	23.7	1,910	967	24.1	920	472
Total 15-49	100.0	8,065	8,065	100.0	3,821	3,760
50-59	na	na	na	na	428	489
Total 15-59	na	na	na	na	4,249	4,249

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

na = Not applicable

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Highest level of schooling								Total	Median years completed	Number of women
	No education	Some elementary	Completed elementary ¹	Some junior high	Completed junior high ²	Some senior high	Completed senior high ³	Higher			
Age											
15-24	12.5	27.3	4.2	4.2	24.1	8.4	15.8	3.5	100.0	5.7	3,163
15-19	10.4	34.8	5.3	4.2	29.3	2.9	12.2	0.8	100.0	5.3	1,657
20-24	14.8	18.9	3.0	4.1	18.4	14.5	19.8	6.6	100.0	6.4	1,506
25-29	24.5	15.4	3.1	2.8	13.0	21.7	10.3	9.3	100.0	6.1	1,375
30-34	34.7	14.2	2.7	1.7	11.2	18.0	7.4	10.1	100.0	5.2	1,112
35-39	51.1	18.3	3.8	2.6	5.0	9.2	4.0	6.0	100.0	0.0	1,020
40-44	57.2	13.8	2.3	1.9	8.0	9.0	2.8	4.9	100.0	0.0	769
45-49	63.1	17.9	2.3	0.2	5.5	5.2	2.0	3.7	100.0	0.0	626
Residence											
Urban	21.0	15.2	3.2	3.9	16.7	17.5	13.4	9.1	100.0	6.3	5,023
Greater Monrovia	17.2	9.7	2.4	4.8	14.5	23.7	15.0	12.6	100.0	7.3	2,866
Other urban	26.1	22.6	4.2	2.7	19.6	9.2	11.3	4.3	100.0	5.1	2,157
Rural	46.6	28.6	3.8	1.1	12.3	2.7	4.1	0.6	100.0	0.7	3,042
Region											
North Western	48.9	20.0	5.8	1.1	14.4	4.1	4.5	1.1	100.0	0.0	621
South Central	22.2	14.8	2.4	3.8	15.3	18.5	13.3	9.6	100.0	6.4	4,105
South Eastern A	37.1	34.0	3.2	1.9	13.8	3.6	5.0	1.3	100.0	2.5	458
South Eastern B	37.7	27.8	4.3	1.7	14.3	5.8	6.3	2.0	100.0	2.9	441
North Central	37.9	25.6	4.3	2.1	15.1	5.5	7.1	2.4	100.0	3.1	2,439
County											
Bomi	43.2	18.7	7.2	0.8	14.8	5.1	7.9	2.3	100.0	2.7	249
Bong	40.8	24.3	5.2	3.4	9.5	5.5	6.6	4.7	100.0	2.3	796
Gbarpolu	50.6	29.5	6.4	2.1	7.4	2.1	1.1	0.8	100.0	0.0	112
Grand Bassa	41.6	27.9	3.6	1.2	15.2	2.1	6.4	2.0	100.0	1.4	467
Grand Cape Mount	53.6	17.1	4.2	1.0	17.0	4.1	2.8	0.2	100.0	0.0	260
Grand Gedeh	33.2	32.8	4.3	2.4	13.8	6.0	5.4	2.0	100.0	3.5	172
Grand Kru	41.4	33.0	4.5	1.4	13.6	3.5	2.5	0.1	100.0	2.2	136
Lofa	49.8	21.4	2.6	1.4	13.8	4.7	5.5	0.7	100.0	0.0	658
Margibi	31.6	26.2	1.9	1.0	16.6	9.8	10.1	2.9	100.0	3.5	441
Maryland	36.9	23.6	2.5	1.4	13.5	8.4	9.7	4.0	100.0	3.4	215
Montserrado	18.1	11.3	2.4	4.6	15.2	22.1	14.8	11.6	100.0	7.1	3,197
Nimba	27.6	29.5	4.7	1.5	20.5	6.0	8.6	1.7	100.0	4.4	985
River Cess	44.9	36.1	3.5	1.3	10.7	1.6	1.2	0.6	100.0	1.1	104
River Gee	34.0	30.0	8.5	2.6	17.5	3.1	4.0	0.3	100.0	3.3	91
Sinoe	36.3	34.0	2.0	1.7	15.5	2.6	6.8	1.1	100.0	2.4	182
Wealth quintile											
Lowest	54.3	29.1	4.0	1.2	8.6	1.0	1.6	0.2	100.0	0.0	1,379
Second	43.5	30.7	3.5	0.9	14.7	2.5	4.2	0.1	100.0	1.8	1,431
Middle	32.6	24.3	4.3	2.1	18.1	7.5	9.7	1.3	100.0	4.2	1,517
Fourth	20.9	13.5	3.0	5.6	20.1	15.4	16.6	4.9	100.0	6.3	1,829
Highest	11.9	9.5	2.6	3.5	12.6	27.1	14.0	18.9	100.0	7.9	1,910
Total	30.7	20.3	3.4	2.9	15.0	11.9	9.9	5.9	100.0	4.8	8,065

¹ Completed grade 6 at the elementary level

² Completed grade 9 at the junior high level

³ Completed grade 12 at the senior high level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Highest level of schooling								Total	Median years completed	Number of men
	No education	Some elementary	Completed elementary ¹	Some junior high	Completed junior high ²	Some senior high	Completed senior high ³	Higher			
Age											
15-24	6.8	29.2	3.6	3.4	23.2	10.6	19.8	3.2	100.0	6.1	1,533
15-19	7.2	43.3	3.9	4.0	25.6	0.9	14.7	0.6	100.0	5.0	876
20-24	6.4	10.5	3.2	2.8	20.1	23.7	26.6	6.8	100.0	7.3	658
25-29	12.6	11.0	2.4	2.6	13.7	26.4	17.7	13.7	100.0	7.4	558
30-34	10.4	12.8	1.8	1.9	10.8	27.4	16.9	18.0	100.0	7.8	494
35-39	18.6	15.8	3.5	1.9	11.9	19.1	12.4	16.8	100.0	6.9	487
40-44	19.1	18.0	2.4	2.0	10.7	21.8	12.1	14.0	100.0	6.7	418
45-49	30.5	12.8	1.9	1.5	15.0	14.6	8.7	15.0	100.0	6.0	330
Residence											
Urban	7.4	15.1	1.3	2.7	15.3	22.5	20.0	15.7	100.0	7.4	2,313
Greater Monrovia	5.3	11.1	0.6	2.7	12.3	27.1	21.4	19.5	100.0	7.9	1,368
Other urban	10.4	20.9	2.2	2.8	19.7	15.9	18.0	10.1	100.0	6.9	944
Rural	21.7	27.7	5.4	2.4	18.8	10.4	10.8	2.8	100.0	5.1	1,508
Region											
North Western	26.3	20.8	6.4	2.9	18.0	11.3	9.8	4.5	100.0	5.3	301
South Central	8.0	14.7	1.1	2.3	13.7	23.5	19.9	16.9	100.0	7.5	1,932
South Eastern A	12.9	30.7	4.9	3.1	20.9	11.3	11.6	4.6	100.0	5.5	254
South Eastern B	14.7	27.1	6.7	3.1	20.1	11.2	11.8	5.2	100.0	5.6	226
North Central	17.9	25.4	3.9	2.9	20.0	12.1	14.0	3.7	100.0	5.6	1,107
County											
Bomi	20.5	17.5	4.8	2.6	21.5	14.6	11.1	7.5	100.0	6.3	118
Bong	19.4	26.5	6.6	4.9	15.7	9.6	12.3	5.0	100.0	5.5	324
Gbarpolu	21.1	28.4	5.2	3.2	20.7	8.4	9.0	4.0	100.0	5.0	53
Grand Bassa	20.7	32.2	1.3	2.0	15.9	8.3	13.8	5.8	100.0	4.6	197
Grand Cape Mount	33.7	20.6	8.3	3.0	13.8	9.5	9.1	1.9	100.0	4.5	130
Grand Gedeh	13.9	27.1	3.7	2.1	20.5	12.8	13.5	6.4	100.0	6.0	92
Grand Kru	12.7	30.1	3.3	2.4	26.9	10.5	9.2	4.8	100.0	5.4	67
Lofa	24.5	23.5	3.1	3.2	15.9	15.7	11.7	2.5	100.0	5.3	287
Margibi	13.4	20.9	2.8	1.3	17.1	15.4	14.7	14.4	100.0	6.7	209
Maryland	16.8	25.6	8.4	2.7	16.1	9.0	14.0	7.4	100.0	5.5	110
Montserrado	5.6	11.5	0.8	2.4	12.9	26.6	21.4	18.7	100.0	7.8	1,525
Nimba	13.1	25.8	2.6	1.4	25.3	11.8	16.5	3.5	100.0	5.8	496
River Cess	10.6	37.3	7.8	3.9	23.4	7.4	6.6	2.8	100.0	5.2	52
River Gee	12.6	26.6	7.8	5.0	19.8	16.9	10.5	0.8	100.0	6.1	50
Sinoe	13.1	30.5	4.5	3.7	19.9	11.9	12.4	4.0	100.0	5.4	110
Wealth quintile											
Lowest	29.5	28.5	5.8	2.2	18.0	6.1	9.2	0.7	100.0	3.9	657
Second	18.3	29.0	4.7	2.7	21.7	10.5	10.7	2.2	100.0	5.2	663
Middle	13.0	24.7	3.9	2.3	16.2	15.4	19.4	5.0	100.0	6.1	743
Fourth	8.1	13.8	0.9	2.7	17.5	24.5	21.2	11.3	100.0	7.2	838
Highest	1.9	9.5	0.5	2.9	11.8	26.9	18.9	27.6	100.0	8.2	920
Total 15-49	13.0	20.1	2.9	2.6	16.7	17.7	16.4	10.6	100.0	6.6	3,821
50-59	24.0	16.6	2.7	3.6	10.7	17.7	11.4	13.4	100.0	6.3	428
Total 15-59	14.1	19.7	2.9	2.7	16.1	17.7	15.9	10.9	100.0	6.6	4,249

¹ Completed grade 6 at the elementary level

² Completed grade 9 at the junior high level

³ Completed grade 12 at the senior high level

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Higher than senior high school	No schooling, elementary, junior high, or senior high school					Total	Percentage literate ¹	Number of women
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired			
Age									
15-24	3.5	41.6	24.0	30.7	0.1	0.1	100.0	69.1	3,163
15-19	0.8	44.5	26.6	27.9	0.1	0.1	100.0	71.9	1,657
20-24	6.6	38.3	21.1	33.8	0.2	0.0	100.0	66.0	1,506
25-29	9.3	33.1	15.9	41.7	0.0	0.1	100.0	58.2	1,375
30-34	10.1	22.7	14.7	52.0	0.5	0.0	100.0	47.5	1,112
35-39	6.0	13.5	13.4	66.9	0.2	0.0	100.0	32.9	1,020
40-44	4.9	12.4	9.7	72.9	0.0	0.0	100.0	27.1	769
45-49	3.7	8.7	9.3	78.2	0.0	0.0	100.0	21.7	626
Residence									
Urban	9.1	36.6	17.5	36.6	0.2	0.0	100.0	63.2	5,023
Greater Monrovia	12.6	40.2	15.9	31.1	0.1	0.1	100.0	68.7	2,866
Other urban	4.3	31.9	19.6	43.8	0.3	0.0	100.0	55.8	2,157
Rural	0.6	15.4	17.5	66.4	0.1	0.0	100.0	33.5	3,042
Region									
North Western	1.1	21.7	19.8	57.2	0.0	0.1	100.0	42.7	621
South Central	9.6	36.1	16.6	37.6	0.1	0.1	100.0	62.3	4,105
South Eastern A	1.3	23.6	15.1	59.8	0.1	0.0	100.0	40.1	458
South Eastern B	2.0	24.1	22.1	51.7	0.0	0.1	100.0	48.2	441
North Central	2.4	19.7	17.9	59.6	0.3	0.0	100.0	40.0	2,439
County									
Bomi	2.3	31.6	14.0	52.0	0.0	0.0	100.0	48.0	249
Bong	4.7	20.5	20.2	54.6	0.0	0.0	100.0	45.4	796
Gbarpolu	0.8	9.6	18.7	70.7	0.0	0.1	100.0	29.1	112
Grand Bassa	2.0	18.9	15.3	63.8	0.0	0.0	100.0	36.2	467
Grand Cape Mount	0.2	17.5	25.8	56.4	0.0	0.1	100.0	43.5	260
Grand Gedeh	2.0	23.8	18.9	55.1	0.3	0.0	100.0	44.6	172
Grand Kru	0.1	13.4	19.2	66.9	0.0	0.3	100.0	32.8	136
Lofa	0.7	13.6	15.3	70.3	0.1	0.0	100.0	29.6	658
Margibi	2.9	29.1	17.9	50.1	0.0	0.0	100.0	49.9	441
Maryland	4.0	29.4	23.6	43.0	0.0	0.0	100.0	57.0	215
Montserrado	11.6	39.5	16.7	32.0	0.1	0.1	100.0	67.8	3,197
Nimba	1.7	23.1	17.9	56.6	0.8	0.0	100.0	42.7	985
River Cess	0.6	25.9	14.1	59.5	0.0	0.0	100.0	40.5	104
River Gee	0.3	27.2	22.8	49.7	0.0	0.0	100.0	50.3	91
Sinoe	1.1	22.2	12.2	64.5	0.0	0.0	100.0	35.5	182
Wealth quintile									
Lowest	0.2	9.3	14.2	75.7	0.5	0.0	100.0	23.7	1,379
Second	0.1	14.2	17.8	67.9	0.0	0.0	100.0	32.1	1,431
Middle	1.3	27.7	21.7	49.4	0.0	0.0	100.0	50.6	1,517
Fourth	4.9	38.2	20.5	36.2	0.1	0.0	100.0	63.7	1,829
Highest	18.9	45.0	13.4	22.4	0.2	0.1	100.0	77.3	1,910
Total	5.9	28.6	17.5	47.8	0.1	0.0	100.0	52.0	8,065

¹ Refers to women who attended schooling higher than senior high school and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Higher than senior high school	No schooling, elementary, junior high, or senior high school					Total	Percentage literate ¹	Number of men
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired			
Age									
15-24	3.2	56.7	20.4	19.2	0.3	0.1	100.0	80.3	1,533
15-19	0.6	53.6	23.5	22.2	0.0	0.2	100.0	77.6	876
20-24	6.8	60.7	16.4	15.3	0.8	0.0	100.0	83.9	658
25-29	13.7	45.0	14.3	27.0	0.0	0.0	100.0	73.0	558
30-34	18.0	43.5	18.4	19.8	0.0	0.4	100.0	79.9	494
35-39	16.8	36.3	18.7	28.2	0.0	0.0	100.0	71.8	487
40-44	14.0	38.6	16.7	29.7	0.1	1.0	100.0	69.2	418
45-49	15.0	29.5	14.3	41.1	0.0	0.0	100.0	58.9	330
Residence									
Urban	15.7	53.3	15.0	15.4	0.2	0.3	100.0	84.0	2,313
Greater Monrovia	19.5	55.4	13.4	10.9	0.4	0.6	100.0	88.2	1,368
Other urban	10.1	50.3	17.5	22.1	0.0	0.0	100.0	77.9	944
Rural	2.8	35.7	22.8	38.7	0.0	0.0	100.0	61.3	1,508
Region									
North Western	4.5	38.2	18.0	39.3	0.0	0.0	100.0	60.7	301
South Central	16.9	53.0	14.0	15.4	0.3	0.4	100.0	83.9	1,932
South Eastern A	4.6	38.9	21.8	34.6	0.0	0.0	100.0	65.4	254
South Eastern B	5.2	46.1	18.1	30.4	0.1	0.0	100.0	69.4	226
North Central	3.7	38.8	24.4	33.2	0.0	0.0	100.0	66.8	1,107
County									
Bomi	7.5	46.7	11.5	34.3	0.0	0.0	100.0	65.7	118
Bong	5.0	41.6	20.5	32.8	0.0	0.0	100.0	67.2	324
Gbarpolu	4.0	29.5	30.7	35.8	0.0	0.0	100.0	64.2	53
Grand Bassa	5.8	40.5	14.2	39.6	0.0	0.0	100.0	60.4	197
Grand Cape Mount	1.9	34.1	18.7	45.2	0.0	0.0	100.0	54.8	130
Grand Gedeh	6.4	27.1	31.0	35.6	0.0	0.0	100.0	64.4	92
Grand Kru	4.8	38.6	29.9	26.2	0.5	0.0	100.0	73.3	67
Lofa	2.5	31.0	26.1	40.5	0.0	0.0	100.0	59.5	287
Margibi	14.4	48.3	13.8	23.5	0.0	0.0	100.0	76.5	209
Maryland	7.4	51.6	8.2	32.9	0.0	0.0	100.0	67.1	110
Montserrado	18.7	55.2	14.1	11.2	0.3	0.5	100.0	88.0	1,525
Nimba	3.5	41.4	25.8	29.3	0.0	0.0	100.0	70.7	496
River Cess	2.8	47.7	19.6	29.8	0.0	0.0	100.0	70.2	52
River Gee	0.8	44.1	24.4	30.7	0.0	0.0	100.0	69.3	50
Sinoe	4.0	44.7	15.1	36.1	0.0	0.0	100.0	63.9	110
Wealth quintile									
Lowest	0.7	29.3	21.0	49.0	0.1	0.0	100.0	50.9	657
Second	2.2	34.3	25.5	38.0	0.0	0.0	100.0	62.0	663
Middle	5.0	45.6	21.6	27.8	0.0	0.0	100.0	72.2	743
Fourth	11.3	59.3	15.0	12.9	0.6	0.9	100.0	85.5	838
Highest	27.6	56.0	10.8	5.7	0.0	0.0	100.0	94.3	920
Total 15-49	10.6	46.3	18.1	24.6	0.1	0.2	100.0	75.0	3,821
50-59	13.4	33.4	20.8	32.4	0.0	0.0	100.0	67.6	428
Total 15-59	10.9	45.0	18.4	25.4	0.1	0.2	100.0	74.3	4,249

¹ Refers to men who attended schooling higher than senior high school and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	1.9	14.6	20.1	0.4	72.0	1,657
20-24	2.1	18.7	26.8	0.5	65.2	1,506
25-29	1.5	20.6	30.8	0.7	62.0	1,375
30-34	2.5	17.0	25.9	1.6	66.8	1,112
35-39	1.7	18.4	30.2	1.0	65.5	1,020
40-44	1.7	12.3	30.4	1.4	66.3	769
45-49	3.6	11.3	23.4	3.0	71.8	626
Residence						
Urban	2.9	24.7	32.0	1.5	58.4	5,023
Greater Monrovia	3.8	33.7	36.5	2.3	50.7	2,866
Other urban	1.7	12.7	25.9	0.5	68.7	2,157
Rural	0.6	3.6	17.4	0.2	81.0	3,042
Region						
North Western	0.8	6.3	19.3	0.3	77.1	621
South Central	3.1	27.0	31.2	1.7	58.2	4,105
South Eastern A	1.8	11.3	24.7	0.6	71.2	458
South Eastern B	1.7	8.6	20.4	0.4	76.2	441
North Central	0.8	4.6	21.9	0.2	76.6	2,439
County						
Bomi	0.4	4.2	15.0	0.2	82.6	249
Bong	1.0	3.9	21.4	0.4	76.9	796
Gbarpolu	0.2	4.4	36.1	0.0	63.2	112
Grand Bassa	0.4	8.9	20.6	0.1	74.6	467
Grand Cape Mount	1.3	9.1	16.1	0.5	77.7	260
Grand Gedeh	0.8	9.0	27.4	0.3	68.6	172
Grand Kru	0.0	0.7	1.2	0.0	98.5	136
Lofa	0.7	3.3	14.3	0.0	84.0	658
Margibi	3.1	18.4	23.3	0.7	67.9	441
Maryland	2.2	16.3	33.9	0.5	59.7	215
Montserrado	3.4	30.8	33.8	2.0	54.4	3,197
Nimba	0.7	6.1	27.3	0.2	71.3	985
River Cess	0.2	1.5	12.2	0.0	87.4	104
River Gee	2.8	2.5	16.9	0.8	82.1	91
Sinoe	3.6	19.1	29.3	1.3	64.5	182
Education						
No education	0.0	6.5	18.6	0.0	78.6	2,474
Elementary	0.7	8.9	20.1	0.3	76.0	1,911
Junior high	2.3	15.9	23.5	0.6	69.1	1,445
Senior high	3.6	30.6	37.1	1.5	49.6	1,761
Higher	12.0	52.5	63.0	8.3	26.9	474
Wealth quintile						
Lowest	0.3	2.0	14.2	0.2	85.0	1,379
Second	0.7	2.6	19.8	0.0	79.0	1,431
Middle	1.8	7.5	23.0	0.7	73.7	1,517
Fourth	2.1	19.7	29.1	0.7	62.1	1,829
Highest	4.5	42.5	40.7	2.9	44.0	1,910
Total	2.1	16.7	26.5	1.0	66.9	8,065

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	4.0	19.0	28.9	1.1	62.3	876
20-24	10.4	17.0	43.5	2.9	48.0	658
25-29	14.9	18.4	43.0	5.0	47.2	558
30-34	18.6	16.1	45.9	8.6	50.2	494
35-39	12.2	17.9	46.0	5.7	48.6	487
40-44	12.4	16.2	51.0	5.1	44.0	418
45-49	11.5	16.1	42.9	5.9	53.0	330
Residence						
Urban	16.1	25.4	48.2	6.9	42.0	2,313
Greater Monrovia	20.0	34.0	55.5	10.1	33.0	1,368
Other urban	10.5	12.8	37.6	2.2	55.0	944
Rural	3.7	5.4	31.2	0.5	66.1	1,508
Region						
North Western	2.5	9.0	38.4	0.0	56.9	301
South Central	18.3	27.9	52.5	8.4	37.8	1,932
South Eastern A	3.1	10.1	37.2	0.8	59.6	254
South Eastern B	6.3	12.4	20.4	0.6	68.6	226
North Central	4.0	4.4	28.4	0.2	68.6	1,107
County						
Bomi	1.7	12.6	48.1	0.0	46.3	118
Bong	1.0	3.2	25.8	0.0	72.9	324
Gbarpolu	1.8	9.0	46.1	0.0	50.8	53
Grand Bassa	19.8	10.2	51.9	3.9	45.6	197
Grand Cape Mount	3.5	5.7	26.6	0.0	68.9	130
Grand Gedeh	2.4	15.4	48.9	1.6	48.9	92
Grand Kru	1.1	4.5	13.4	0.0	82.8	67
Lofa	4.0	6.2	30.3	0.0	65.4	287
Margibi	11.9	14.8	48.6	3.8	44.3	209
Maryland	11.0	19.9	25.2	0.9	56.4	110
Montserrado	19.0	32.0	53.1	9.6	35.9	1,525
Nimba	6.0	4.0	29.1	0.4	67.6	496
River Cess	0.9	2.5	20.6	0.5	79.4	52
River Gee	3.0	6.5	19.1	0.6	76.5	50
Sinoe	4.7	9.3	35.2	0.3	59.2	110
Education						
No education	0.0	5.1	20.8	0.0	77.7	498
Elementary	0.9	7.7	25.9	0.2	69.4	877
Junior high	4.6	20.0	34.4	1.1	55.8	738
Senior high	18.4	21.2	54.0	7.4	39.3	1,303
Higher	35.8	37.6	73.3	15.1	12.1	405
Wealth quintile						
Lowest	1.9	2.4	23.2	0.1	75.6	657
Second	4.0	5.5	30.8	0.7	66.6	663
Middle	8.3	9.0	34.8	1.1	58.9	743
Fourth	14.0	22.3	47.6	6.0	43.0	838
Highest	22.7	39.5	62.1	11.2	25.2	920
Total 15-49	11.2	17.5	41.5	4.4	51.5	3,821
50-59	8.4	11.0	50.3	3.8	48.8	428
Total 15-59	10.9	16.8	42.4	4.3	51.2	4,249

Table 3.5.1 Internet usage: Women

Percentage of women age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among women who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number of women	Among women who have used the internet in the past 12 months, percentage who, in the past month, used the internet:					Total	Number
				Almost every day	At least once a week	Less than once a week	Not at all			
Age										
15-19	19.9	16.8	1,657	34.2	28.2	32.8	4.9	100.0	279	
20-24	36.7	30.9	1,506	50.9	26.5	18.3	4.3	100.0	466	
25-29	35.2	28.4	1,375	54.0	29.9	14.3	1.8	100.0	391	
30-34	32.6	27.2	1,112	55.2	25.6	16.0	3.2	100.0	302	
35-39	20.8	17.9	1,020	50.3	29.8	18.7	1.2	100.0	183	
40-44	15.0	13.2	769	33.6	43.3	18.0	5.0	100.0	101	
45-49	10.1	8.5	626	(52.1)	(32.2)	(15.4)	(0.4)	100.0	53	
Residence										
Urban	38.3	32.9	5,023	49.9	28.2	18.8	3.1	100.0	1,652	
Greater Monrovia	50.4	44.1	2,866	53.7	26.7	16.8	2.8	100.0	1,263	
Other urban	22.1	18.1	2,157	37.7	32.9	25.3	4.0	100.0	389	
Rural	6.5	4.0	3,042	31.8	37.6	25.4	5.2	100.0	123	
Region										
North Western	11.4	8.0	621	31.2	35.8	21.8	11.2	100.0	50	
South Central	40.6	35.1	4,105	52.0	27.9	17.4	2.7	100.0	1,441	
South Eastern A	16.8	12.3	458	37.4	37.0	19.2	6.4	100.0	56	
South Eastern B	15.8	12.1	441	40.6	37.8	20.2	1.5	100.0	53	
North Central	9.7	7.2	2,439	32.5	29.3	33.2	4.9	100.0	175	
County										
Bomi	14.1	10.5	249	29.4	47.7	18.3	4.6	100.0	26	
Bong	13.2	11.7	796	39.2	37.4	21.4	2.1	100.0	93	
Gbarpolu	6.1	4.3	112	*	*	*	*	100.0	5	
Grand Bassa	13.7	11.3	467	32.5	37.0	30.5	0.0	100.0	53	
Grand Cape Mount	11.1	7.2	260	(35.7)	(21.3)	(23.4)	(19.6)	100.0	19	
Grand Gedeh	23.1	16.1	172	49.1	30.1	11.1	9.7	100.0	28	
Grand Kru	7.5	5.5	136	(17.3)	(33.0)	(45.5)	(4.3)	100.0	7	
Lofa	6.9	3.8	658	*	*	*	*	100.0	25	
Margibi	19.1	18.0	441	39.0	42.4	16.7	1.9	100.0	79	
Maryland	23.3	18.1	215	48.4	37.9	13.1	0.6	100.0	39	
Montserrado	47.5	40.9	3,197	53.6	26.6	17.0	2.9	100.0	1,309	
Nimba	8.7	5.7	985	(33.3)	(8.9)	(46.2)	(11.7)	100.0	56	
River Cess	7.3	4.5	104	*	*	*	*	100.0	5	
River Gee	10.3	7.9	91	(22.5)	(42.0)	(32.2)	(3.2)	100.0	7	
Sinoe	16.2	13.1	182	25.0	42.6	30.1	2.2	100.0	24	
Education										
No education	4.6	3.2	2,474	27.3	35.3	37.4	0.0	100.0	79	
Elementary	7.0	4.8	1,911	27.4	23.9	47.7	1.0	100.0	91	
Junior high	23.0	18.1	1,445	27.2	39.5	27.7	5.6	100.0	262	
Senior high	62.3	52.3	1,761	48.2	30.7	17.0	4.2	100.0	922	
Higher	93.9	88.7	474	71.9	18.0	9.4	0.7	100.0	421	
Wealth quintile										
Lowest	2.7	1.7	1,379	(21.5)	(23.2)	(46.9)	(8.4)	100.0	24	
Second	4.5	2.1	1,431	21.3	47.0	26.7	4.9	100.0	31	
Middle	14.0	10.4	1,517	24.6	39.2	33.1	3.2	100.0	157	
Fourth	34.6	27.8	1,829	37.8	34.7	23.7	3.8	100.0	508	
Highest	61.5	55.2	1,910	58.9	24.1	14.2	2.8	100.0	1,055	
Total	26.3	22.0	8,065	48.7	28.8	19.3	3.2	100.0	1,775	

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men

Percentage of men age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among men who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number of women	Among men who have used the internet in the past 12 months, percentage who, in the past month, used the internet:				Total	Number
				Almost every day	At least once a week	Less than once a week	Not at all		
Age									
15-19	33.9	28.4	876	27.4	38.4	23.7	10.6	100.0	248
20-24	61.2	49.0	658	39.3	34.5	17.6	8.5	100.0	322
25-29	51.0	41.5	558	54.4	29.0	8.5	8.1	100.0	232
30-34	50.8	43.9	494	43.2	31.2	15.0	10.6	100.0	217
35-39	38.3	34.1	487	41.1	22.6	24.5	11.9	100.0	166
40-44	31.9	27.7	418	56.8	13.4	26.0	3.9	100.0	116
45-49	28.7	27.2	330	55.0	30.1	14.4	0.6	100.0	90
Residence									
Urban	60.5	53.1	2,313	45.8	30.3	16.2	7.7	100.0	1,228
Greater Monrovia	73.7	65.8	1,368	45.1	30.8	15.5	8.6	100.0	901
Other urban	41.5	34.6	944	47.6	29.1	18.2	5.1	100.0	327
Rural	16.6	10.8	1,508	22.0	30.0	31.9	16.1	100.0	163
Region									
North Western	16.4	11.8	301	32.4	27.6	25.6	14.4	100.0	36
South Central	65.1	57.2	1,932	44.1	30.1	17.3	8.5	100.0	1,104
South Eastern A	28.9	21.2	254	36.7	33.0	23.9	6.3	100.0	54
South Eastern B	27.3	21.2	226	42.3	33.8	17.2	6.8	100.0	48
North Central	18.7	13.4	1,107	39.9	30.2	20.2	9.7	100.0	149
County									
Bomi	13.6	13.1	118	*	*	*	*	100.0	15
Bong	20.5	19.3	324	(40.6)	(37.0)	(22.4)	(0.0)	100.0	63
Gbarpolu	14.9	9.8	53	*	*	*	*	100.0	5
Grand Bassa	28.6	23.7	197	67.1	20.9	7.1	5.0	100.0	47
Grand Cape Mount	19.6	11.5	130	(9.4)	(48.7)	(14.2)	(27.7)	100.0	15
Grand Gedeh	25.3	19.4	92	(51.7)	(29.4)	(18.9)	(0.0)	100.0	18
Grand Kru	18.1	14.9	67	(31.5)	(34.1)	(27.1)	(7.3)	100.0	10
Lofa	18.2	13.3	287	(23.2)	(34.2)	(26.8)	(15.8)	100.0	38
Margibi	51.6	42.2	209	29.5	37.1	19.4	14.0	100.0	88
Maryland	34.9	27.3	110	51.7	34.3	7.0	7.0	100.0	30
Montserrado	71.7	63.5	1,525	44.3	29.9	17.6	8.2	100.0	969
Nimba	17.9	9.7	496	(52.5)	(18.1)	(12.1)	(17.4)	100.0	48
River Cess	19.8	10.1	52	(7.8)	(29.1)	(54.4)	(8.7)	100.0	5
River Gee	22.9	16.3	50	(20.4)	(31.7)	(42.8)	(5.1)	100.0	8
Sinoe	36.3	28.0	110	33.0	35.8	21.6	9.6	100.0	31
Education									
No education	9.7	6.7	498	(15.6)	(54.0)	(29.4)	(0.9)	100.0	33
Elementary	10.8	7.1	877	16.7	38.3	33.4	11.6	100.0	62
Junior high	38.7	29.4	738	21.3	41.9	24.7	12.1	100.0	217
Senior high	65.5	55.8	1,303	39.6	31.6	18.4	10.4	100.0	728
Higher	91.0	86.6	405	70.8	16.7	9.4	3.1	100.0	351
Wealth quintile									
Lowest	8.3	4.4	657	(18.4)	(35.9)	(22.0)	(23.7)	100.0	29
Second	15.6	7.9	663	17.5	31.5	32.5	18.5	100.0	52
Middle	31.1	23.3	743	22.9	37.5	28.7	10.9	100.0	173
Fourth	60.0	50.8	838	29.1	33.9	25.0	12.1	100.0	425
Highest	82.4	77.3	920	59.1	26.1	10.1	4.7	100.0	711
Total 15-49	43.2	36.4	3,821	43.0	30.3	18.1	8.6	100.0	1,391
50-59	20.5	16.4	428	34.6	35.4	27.8	2.3	100.0	70
Total 15-59	40.9	34.4	4,249	42.6	30.5	18.5	8.3	100.0	1,461

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed ¹	Not currently employed			
Age					
15-19	32.7	2.4	64.9	100.0	1,657
20-24	48.7	2.8	48.5	100.0	1,506
25-29	63.8	4.6	31.6	100.0	1,375
30-34	74.0	4.3	21.7	100.0	1,112
35-39	77.3	3.9	18.8	100.0	1,020
40-44	81.1	3.7	15.2	100.0	769
45-49	83.0	2.7	14.3	100.0	626
Marital status					
Never married	42.1	3.0	54.9	100.0	3,129
Married or living together	72.7	3.2	24.0	100.0	4,216
Divorced/separated/ widowed	72.4	6.8	20.8	100.0	721
Number of living children					
0	34.4	2.0	63.6	100.0	1,916
1-2	60.9	3.7	35.3	100.0	3,023
3-4	75.5	4.6	19.8	100.0	1,832
5+	79.0	3.1	17.9	100.0	1,294
Residence					
Urban	57.1	3.2	39.7	100.0	5,023
Greater Monrovia	53.1	3.7	43.2	100.0	2,866
Other urban	62.4	2.5	35.0	100.0	2,157
Rural	67.0	3.9	29.1	100.0	3,042
Region					
North Western	63.2	3.4	33.4	100.0	621
South Central	54.4	3.9	41.6	100.0	4,105
South Eastern A	73.6	2.0	24.4	100.0	458
South Eastern B	54.1	4.0	41.9	100.0	441
North Central	69.8	2.8	27.4	100.0	2,439
County					
Bomi	70.7	2.1	27.2	100.0	249
Bong	68.4	4.3	27.3	100.0	796
Gbarpolu	82.0	7.5	10.5	100.0	112
Grand Bassa	63.6	2.6	33.8	100.0	467
Grand Cape Mount	47.9	3.0	49.1	100.0	260
Grand Gedeh	78.2	1.2	20.6	100.0	172
Grand Kru	52.7	1.6	45.7	100.0	136
Lofa	71.7	2.9	25.3	100.0	658
Margibi	63.9	3.5	32.6	100.0	441
Maryland	51.2	6.1	42.7	100.0	215
Montserrado	51.8	4.2	44.0	100.0	3,197
Nimba	69.7	1.5	28.9	100.0	985
River Cess	71.2	1.7	27.1	100.0	104
River Gee	63.2	2.3	34.5	100.0	91
Sinoe	70.7	2.9	26.5	100.0	182
Education					
No education	75.5	3.3	21.2	100.0	2,474
Elementary	61.4	3.8	34.8	100.0	1,911
Junior high	47.5	3.7	48.9	100.0	1,445
Senior high	52.0	3.0	44.9	100.0	1,761
Higher	55.5	3.5	41.1	100.0	474
Wealth quintile					
Lowest	72.7	4.1	23.3	100.0	1,379
Second	69.2	3.4	27.5	100.0	1,431
Middle	62.1	2.0	35.9	100.0	1,517
Fourth	56.0	5.0	38.9	100.0	1,829
Highest	49.6	2.7	47.7	100.0	1,910
Total	60.8	3.4	35.7	100.0	8,065

¹ "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed ¹	Not currently employed			
Age					
15-19	53.7	5.8	40.5	100.0	876
20-24	73.8	5.6	20.7	100.0	658
25-29	88.7	3.5	7.8	100.0	558
30-34	93.9	0.9	5.3	100.0	494
35-39	92.5	5.8	1.7	100.0	487
40-44	93.4	1.1	5.5	100.0	418
45-49	97.4	1.0	1.5	100.0	330
Marital status					
Never married	62.6	6.1	31.2	100.0	1,684
Married or living together	94.8	2.1	3.1	100.0	1,906
Divorced/separated/ widowed	93.4	1.6	5.0	100.0	231
Number of living children					
0	62.2	6.1	31.7	100.0	1,616
1-2	91.4	2.3	6.4	100.0	937
3-4	96.1	2.2	1.7	100.0	673
5+	95.6	2.2	2.2	100.0	594
Residence					
Urban	75.9	4.4	19.7	100.0	2,313
Greater Monrovia	71.6	5.5	22.8	100.0	1,368
Other urban	82.2	2.7	15.1	100.0	944
Rural	87.6	3.0	9.4	100.0	1,508
Region					
North Western	81.0	5.6	13.4	100.0	301
South Central	74.2	5.0	20.8	100.0	1,932
South Eastern A	89.9	2.6	7.5	100.0	254
South Eastern B	74.1	3.5	22.4	100.0	226
North Central	90.6	1.8	7.6	100.0	1,107
County					
Bomi	75.7	5.9	18.4	100.0	118
Bong	78.6	4.3	17.1	100.0	324
Gbarpolu	95.9	1.7	2.3	100.0	53
Grand Bassa	94.3	3.8	1.9	100.0	197
Grand Cape Mount	79.8	6.8	13.4	100.0	130
Grand Gedeh	90.7	0.7	8.6	100.0	92
Grand Kru	84.6	4.9	10.5	100.0	67
Lofa	92.6	0.0	7.4	100.0	287
Margibi	77.1	3.9	19.0	100.0	209
Maryland	66.0	2.6	31.4	100.0	110
Montserrado	71.2	5.3	23.5	100.0	1,525
Nimba	97.4	1.1	1.5	100.0	496
River Cess	81.0	6.0	13.0	100.0	52
River Gee	77.9	3.6	18.5	100.0	50
Sinoe	93.4	2.5	4.1	100.0	110
Education					
No education	96.0	1.5	2.6	100.0	498
Elementary	78.9	3.6	17.4	100.0	877
Junior high	76.9	3.3	19.8	100.0	738
Senior high	77.6	4.8	17.6	100.0	1,303
Higher	81.1	5.1	13.8	100.0	405
Wealth quintile					
Lowest	92.1	1.9	6.0	100.0	657
Second	89.1	3.4	7.4	100.0	663
Middle	82.4	2.8	14.7	100.0	743
Fourth	73.4	5.9	20.7	100.0	838
Highest	71.0	4.5	24.5	100.0	920
Total 15-49	80.5	3.8	15.6	100.0	3,821
50-59	91.1	1.6	7.2	100.0	428
Total 15-59	81.6	3.6	14.8	100.0	4,249

¹ "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of women
Age										
15-19	0.3	1.1	52.1	1.8	0.8	0.6	40.1	3.2	100.0	581
20-24	5.8	0.3	52.5	1.9	2.0	0.2	37.1	0.2	100.0	776
25-29	4.8	0.8	59.8	0.4	1.6	1.3	30.9	0.3	100.0	941
30-34	8.0	1.4	55.9	1.3	1.5	1.8	30.1	0.0	100.0	870
35-39	4.8	0.4	50.3	1.0	1.7	0.2	41.5	0.0	100.0	828
40-44	4.8	0.1	46.2	0.6	1.4	1.7	45.1	0.0	100.0	652
45-49	4.6	0.2	40.5	0.6	0.5	2.2	51.4	0.0	100.0	536
Marital status										
Never married	6.4	0.9	60.4	1.3	3.3	1.6	24.9	1.2	100.0	1,411
Married or living together	4.1	0.5	47.7	1.1	0.6	1.0	44.9	0.1	100.0	3,202
Divorced/separated/ widowed	6.5	0.9	55.4	0.4	1.4	0.3	34.6	0.4	100.0	571
Number of living children										
0	5.8	1.0	59.2	2.3	1.8	0.6	27.0	2.3	100.0	698
1-2	7.7	1.2	59.0	1.2	2.4	0.9	27.2	0.4	100.0	1,955
3-4	3.8	0.1	51.6	0.7	0.4	1.7	41.7	0.0	100.0	1,469
5+	1.1	0.0	34.8	0.5	0.8	1.1	61.6	0.0	100.0	1,063
Residence										
Urban	7.2	1.1	67.7	1.3	2.1	1.8	18.4	0.5	100.0	3,028
Greater Monrovia	10.1	1.6	79.2	1.8	3.5	2.7	0.4	0.8	100.0	1,626
Other urban	3.8	0.5	54.2	0.7	0.5	0.7	39.2	0.2	100.0	1,402
Rural	1.9	0.0	30.0	0.7	0.5	0.2	66.4	0.3	100.0	2,156
Region										
North Western	3.2	0.0	47.5	1.6	0.7	0.1	44.8	2.0	100.0	414
South Central	7.7	1.3	72.1	1.4	2.8	2.1	12.0	0.5	100.0	2,396
South Eastern A	1.9	0.0	54.1	0.7	0.5	0.3	42.4	0.1	100.0	347
South Eastern B	3.9	0.0	48.3	0.4	1.0	0.8	45.0	0.5	100.0	256
North Central	2.4	0.1	25.9	0.6	0.0	0.2	70.7	0.0	100.0	1,771
County										
Bomi	5.0	0.0	49.6	1.9	0.1	0.1	39.1	4.2	100.0	181
Bong	2.8	0.2	35.4	0.1	0.0	0.4	61.1	0.0	100.0	579
Gbarpolu	0.9	0.2	21.0	0.4	0.6	0.0	76.9	0.0	100.0	100
Grand Bassa	1.5	1.0	54.1	0.5	2.0	0.5	40.4	0.0	100.0	309
Grand Cape Mount	2.3	0.0	64.8	2.2	1.7	0.0	28.5	0.5	100.0	132
Grand Gedeh	2.7	0.0	62.0	0.3	0.0	0.0	35.0	0.0	100.0	137
Grand Kru	6.0	0.0	40.8	0.4	0.0	0.4	52.4	0.0	100.0	74
Lofa	1.4	0.1	21.0	1.9	0.0	0.1	75.5	0.0	100.0	491
Margibi	3.1	0.7	65.8	0.5	1.0	2.0	26.8	0.0	100.0	297
Maryland	3.6	0.0	51.8	0.3	1.5	1.2	40.5	1.1	100.0	123
Montserrado	9.6	1.4	76.2	1.7	3.2	2.5	4.7	0.7	100.0	1,790
Nimba	2.8	0.0	21.7	0.1	0.0	0.1	75.3	0.1	100.0	701
River Cess	1.4	0.0	39.3	0.1	0.0	0.2	59.0	0.0	100.0	76
River Gee	2.1	0.0	50.5	0.7	1.2	0.3	45.2	0.0	100.0	60
Sinoe	1.3	0.0	54.4	1.4	1.3	0.8	40.6	0.2	100.0	134
Education										
No education	0.6	0.1	40.3	0.9	0.9	1.3	56.1	0.0	100.0	1,950
Elementary	0.8	0.1	44.8	1.3	1.6	0.9	49.4	0.9	100.0	1,246
Junior high	0.5	0.0	67.6	0.9	1.3	1.5	27.3	0.8	100.0	739
Senior high	11.2	1.7	75.6	0.8	2.1	1.0	7.4	0.2	100.0	970
Higher	44.1	4.9	42.4	2.7	2.4	0.2	1.8	1.6	100.0	280
Wealth quintile										
Lowest	0.5	0.0	19.9	0.2	0.3	0.3	78.8	0.1	100.0	1,058
Second	1.3	0.0	28.7	0.6	0.5	0.1	68.2	0.5	100.0	1,038
Middle	2.3	0.2	55.2	1.0	0.8	1.1	39.0	0.4	100.0	973
Fourth	6.2	0.3	80.8	1.3	2.8	3.0	5.0	0.5	100.0	1,117
Highest	14.7	2.8	74.8	2.2	2.7	1.0	1.1	0.8	100.0	999
Total	5.0	0.6	52.0	1.1	1.4	1.1	38.3	0.5	100.0	5,184

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of men
Age										
15-19	2.6	0.4	15.0	16.2	3.9	8.2	47.1	6.5	100.0	521
20-24	9.0	2.4	19.1	22.5	4.4	3.1	36.5	3.0	100.0	522
25-29	16.4	0.1	15.0	26.3	3.3	0.4	38.4	0.0	100.0	515
30-34	13.3	0.8	17.4	25.7	6.4	0.1	36.2	0.1	100.0	467
35-39	12.0	0.3	17.6	25.1	4.3	0.0	40.7	0.0	100.0	479
40-44	9.9	2.1	18.4	22.3	3.5	0.0	43.8	0.0	100.0	395
45-49	13.3	0.3	13.5	18.9	2.6	0.9	50.5	0.0	100.0	325
Marital status										
Never married	10.0	1.4	15.8	20.7	3.5	4.8	39.8	4.0	100.0	1,158
Married or living together	10.9	0.4	17.2	22.4	4.2	0.5	44.2	0.2	100.0	1,847
Divorced/separated/ widowed	13.7	2.2	16.7	33.4	7.5	0.1	26.5	0.0	100.0	219
Number of living children										
0	7.4	1.4	16.4	20.7	3.9	5.3	40.6	4.4	100.0	1,103
1-2	15.1	1.1	19.3	27.9	5.4	0.2	30.8	0.2	100.0	877
3-4	12.4	0.2	17.3	24.1	3.5	0.1	42.2	0.0	100.0	662
5+	8.7	0.6	12.6	16.3	3.2	0.5	58.1	0.0	100.0	581
Residence										
Urban	15.0	1.3	24.7	31.7	2.0	2.6	21.4	1.3	100.0	1,858
Greater Monrovia	17.2	1.9	30.9	40.8	1.4	2.2	4.4	1.2	100.0	1,056
Other urban	12.2	0.5	16.4	19.8	2.7	3.2	43.9	1.4	100.0	802
Rural	4.9	0.4	5.8	10.1	7.1	1.1	68.6	2.0	100.0	1,366
Region										
North Western	5.2	0.0	6.8	14.0	6.9	0.1	66.2	0.9	100.0	261
South Central	15.2	1.4	26.2	34.9	1.6	3.7	15.4	1.5	100.0	1,529
South Eastern A	9.0	1.7	12.4	14.3	18.0	2.4	39.1	3.1	100.0	235
South Eastern B	9.5	0.9	12.8	10.4	21.1	0.3	45.1	0.0	100.0	176
North Central	6.1	0.2	6.5	10.3	1.2	0.1	74.0	1.7	100.0	1,023
County										
Bomi	7.3	0.0	10.7	14.5	3.2	0.0	64.3	0.0	100.0	96
Bong	5.7	0.5	12.0	16.3	1.1	0.3	63.7	0.3	100.0	269
Gbarpolu	4.8	0.0	4.3	11.3	19.1	0.0	60.2	0.3	100.0	52
Grand Bassa	5.0	0.0	12.9	18.8	0.0	9.2	48.5	5.7	100.0	194
Grand Cape Mount	3.7	0.0	4.5	14.7	4.3	0.2	70.5	2.0	100.0	113
Grand Gedeh	10.4	0.7	13.3	11.2	21.5	0.0	35.9	7.1	100.0	84
Grand Kru	11.7	2.2	6.6	9.9	21.4	0.0	48.2	0.0	100.0	60
Lofa	7.2	0.4	4.9	8.8	0.6	0.0	77.0	1.0	100.0	266
Margibi	14.9	0.9	17.8	23.4	2.9	7.5	32.8	0.0	100.0	169
Maryland	8.1	0.0	16.7	9.0	19.3	0.6	46.2	0.0	100.0	75
Montserrado	17.0	1.7	29.7	39.3	1.7	2.3	7.3	1.1	100.0	1,166
Nimba	5.6	0.0	4.4	7.8	1.5	0.0	77.9	2.8	100.0	488
River Cess	1.6	1.9	8.0	12.5	12.8	0.0	63.1	0.0	100.0	45
River Gee	8.8	0.4	14.7	13.6	23.9	0.0	38.4	0.0	100.0	41
Sinoe	11.0	2.3	13.6	17.7	17.4	5.3	31.4	1.3	100.0	105
Education										
No education	2.8	0.0	7.3	19.9	3.7	0.5	65.8	0.0	100.0	485
Elementary	1.3	0.0	7.5	19.3	6.6	2.9	59.5	2.8	100.0	724
Junior high	3.4	1.2	14.0	20.1	6.5	3.3	49.3	2.2	100.0	592
Senior high	13.2	1.2	24.8	29.4	2.2	1.9	26.2	1.2	100.0	1,074
Higher	46.5	2.6	28.1	16.1	1.6	0.1	3.7	1.3	100.0	349
Wealth quintile										
Lowest	1.3	0.1	2.0	4.8	8.0	0.3	81.6	1.9	100.0	618
Second	5.9	0.3	5.7	10.1	5.3	0.8	70.4	1.6	100.0	613
Middle	7.6	0.5	13.5	21.6	3.2	2.6	49.1	1.8	100.0	633
Fourth	12.0	1.1	25.7	41.0	3.7	4.3	10.0	2.2	100.0	664
Highest	25.1	2.4	33.7	32.6	0.9	1.8	3.1	0.3	100.0	695
Total 15-49	10.7	0.9	16.7	22.6	4.1	2.0	41.4	1.6	100.0	3,224
50-59	18.4	1.0	14.4	9.2	3.2	0.1	53.6	0.1	100.0	397
Total 15-59	11.6	0.9	16.4	21.1	4.0	1.8	42.8	1.4	100.0	3,621

Table 3.8 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Liberia DHS 2019-20

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	22.6	74.9	54.7
Cash and in-kind	16.9	7.6	11.2
In-kind only	3.6	0.7	1.8
Not paid	56.8	16.8	32.3
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	17.3	9.4	12.6
Employed by non-family member	3.7	13.4	9.6
Self-employed	79.0	77.2	77.8
Total	100.0	100.0	100.0
Continuity of employment			
All year	70.9	77.7	74.9
Seasonal	23.8	15.9	19.0
Occasional	5.3	6.4	6.1
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	1,988	3,173	5,184

Note: Total includes women with missing information on type of employment who are not shown separately.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Social security	Employer-based insurance	Mutual health organization/ community-based insurance	Privately purchased commercial insurance	Other	None	Any health insurance	Number of women
Age								
15-19	0.2	3.3	0.2	0.1	0.0	96.2	3.8	1,657
20-24	0.2	3.0	0.6	0.0	0.2	96.0	4.0	1,506
25-29	0.2	2.7	0.5	0.0	0.0	96.7	3.3	1,375
30-34	0.3	3.0	0.2	0.2	0.0	96.3	3.7	1,112
35-39	0.4	2.2	0.2	0.4	0.1	97.1	2.9	1,020
40-44	0.4	3.7	0.4	0.0	0.0	95.4	4.6	769
45-49	0.6	3.9	0.6	0.2	0.0	95.0	5.0	626
Residence								
Urban	0.4	4.2	0.2	0.1	0.1	95.0	5.0	5,023
Greater Monrovia	0.4	5.5	0.3	0.2	0.1	93.6	6.4	2,866
Other urban	0.4	2.6	0.2	0.0	0.0	96.9	3.1	2,157
Rural	0.2	1.1	0.6	0.1	0.0	98.1	1.9	3,042
Region								
North Western	0.7	2.7	1.1	0.1	0.0	95.7	4.3	621
South Central	0.3	5.0	0.2	0.2	0.1	94.3	5.7	4,105
South Eastern A	0.2	0.5	1.6	0.0	0.0	97.7	2.3	458
South Eastern B	0.0	1.0	0.2	0.0	0.2	98.6	1.4	441
North Central	0.3	0.7	0.2	0.0	0.0	98.8	1.2	2,439
County								
Bomi	0.7	4.0	0.0	0.2	0.0	95.9	4.1	249
Bong	0.3	0.8	0.6	0.0	0.1	98.4	1.6	796
Gbarpolu	0.5	0.2	5.3	0.0	0.0	94.1	5.9	112
Grand Bassa	0.1	2.7	0.0	0.0	0.0	97.2	2.8	467
Grand Cape Mount	0.9	2.5	0.4	0.0	0.0	96.3	3.7	260
Grand Gedeh	0.2	0.4	4.2	0.0	0.0	95.5	4.5	172
Grand Kru	0.0	0.6	0.0	0.0	0.0	99.4	0.6	136
Lofa	0.1	0.9	0.2	0.0	0.0	99.0	1.0	658
Margibi	0.1	7.5	0.6	0.3	0.0	91.5	8.5	441
Maryland	0.0	1.6	0.4	0.0	0.3	97.7	2.3	215
Montserrado	0.3	5.0	0.2	0.2	0.1	94.2	5.8	3,197
Nimba	0.4	0.4	0.0	0.1	0.0	99.1	0.9	985
River Cess	0.0	0.1	0.0	0.0	0.0	99.9	0.1	104
River Gee	0.0	0.2	0.0	0.0	0.0	99.8	0.2	91
Sinoe	0.3	0.9	0.1	0.0	0.0	98.7	1.3	182
Education								
No education	0.1	0.9	0.4	0.0	0.0	98.7	1.3	2,474
Elementary	0.2	1.0	0.5	0.1	0.0	98.2	1.8	1,911
Junior high	0.5	2.4	0.4	0.1	0.0	96.7	3.3	1,445
Senior high	0.2	6.4	0.2	0.1	0.1	93.1	6.9	1,761
Higher	1.9	12.0	0.8	0.9	0.2	84.7	15.3	474
Wealth quintile								
Lowest	0.0	0.3	0.6	0.0	0.0	99.1	0.9	1,379
Second	0.1	0.7	0.8	0.0	0.0	98.5	1.5	1,431
Middle	0.2	1.0	0.3	0.1	0.0	98.4	1.6	1,517
Fourth	0.5	2.6	0.0	0.0	0.0	96.9	3.1	1,829
Highest	0.5	8.7	0.4	0.4	0.2	90.0	10.0	1,910
Total	0.3	3.0	0.4	0.1	0.0	96.2	3.8	8,065

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Social security	Employer-based insurance	Mutual health organization/ community-based insurance	Privately purchased commercial insurance	Other	None	Any health insurance	Number of men
Age								
15-19	1.4	5.2	0.5	0.1	0.2	92.6	7.4	876
20-24	0.3	1.9	0.8	0.4	0.8	95.8	4.2	658
25-29	0.4	3.3	0.1	0.4	0.0	95.8	4.2	558
30-34	1.3	6.5	2.7	0.8	0.1	88.8	11.2	494
35-39	0.4	5.8	1.2	0.1	0.0	92.7	7.3	487
40-44	0.2	6.5	0.8	0.1	0.0	92.6	7.4	418
45-49	1.3	9.0	0.8	0.1	0.5	89.2	10.8	330
Residence								
Urban	1.1	7.1	0.6	0.4	0.2	90.6	9.4	2,313
Greater Monrovia	1.5	8.7	0.4	0.0	0.4	89.0	11.0	1,368
Other urban	0.6	4.7	0.8	1.0	0.1	92.9	7.1	944
Rural	0.3	1.9	1.4	0.2	0.3	96.3	3.7	1,508
Region								
North Western	1.6	4.3	0.9	0.0	0.1	95.1	4.9	301
South Central	1.2	7.5	0.6	0.4	0.5	89.8	10.2	1,932
South Eastern A	0.5	4.1	0.6	0.8	0.0	94.4	5.6	254
South Eastern B	0.1	4.0	0.4	0.2	0.0	95.3	4.7	226
North Central	0.1	1.5	1.6	0.1	0.0	96.6	3.4	1,107
County								
Bomi	3.6	7.3	1.7	0.0	0.0	91.8	8.2	118
Bong	0.4	2.3	0.3	0.5	0.0	96.5	3.5	324
Gbarpolu	1.0	1.6	1.2	0.0	0.3	96.9	3.1	53
Grand Bassa	0.0	2.9	0.8	0.3	0.7	95.3	4.7	197
Grand Cape Mount	0.0	2.7	0.0	0.0	0.0	97.3	2.7	130
Grand Gedeh	1.0	2.0	0.7	0.6	0.0	95.8	4.2	92
Grand Kru	0.0	5.3	0.5	0.0	0.0	94.2	5.8	67
Lofa	0.0	0.6	4.8	0.0	0.0	94.6	5.4	287
Margibi	0.9	7.2	0.1	3.2	1.7	86.9	13.1	209
Maryland	0.0	4.2	0.4	0.4	0.0	95.0	5.0	110
Montserrado	1.4	8.1	0.7	0.0	0.3	89.5	10.5	1,525
Nimba	0.0	1.5	0.5	0.0	0.0	97.9	2.1	496
River Cess	0.0	3.7	1.7	0.0	0.0	96.3	3.7	52
River Gee	0.7	1.8	0.0	0.0	0.0	97.5	2.5	50
Sinoe	0.3	6.0	0.0	1.5	0.0	92.3	7.7	110
Education								
No education	0.1	1.4	1.5	0.0	0.0	97.1	2.9	498
Elementary	0.2	0.3	0.5	0.1	0.2	98.7	1.3	877
Junior high	0.8	5.1	0.3	0.3	0.4	93.2	6.8	738
Senior high	1.3	5.3	1.2	0.3	0.4	91.6	8.4	1,303
Higher	1.3	18.9	1.2	1.3	0.0	78.2	21.8	405
Wealth quintile								
Lowest	0.0	0.4	0.9	0.2	0.0	98.6	1.4	657
Second	0.3	2.0	1.3	0.1	0.4	96.3	3.7	663
Middle	0.0	2.4	1.1	0.8	0.3	95.5	4.5	743
Fourth	0.5	4.4	1.2	0.2	0.4	93.3	6.7	838
Highest	2.6	13.3	0.3	0.3	0.1	83.7	16.3	920
Total 15-49	0.8	5.1	0.9	0.3	0.3	92.8	7.2	3,821
50-59	0.9	6.3	2.0	0.1	0.4	90.7	9.3	428
Total 15-59	0.8	5.2	1.0	0.3	0.3	92.6	7.4	4,249

Table 3.10.1 Tobacco smoking: Women

Percentage of women age 15-49 who smoke various tobacco products, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who smoke: ¹			Number of women
	Cigarettes	Other type of tobacco ²	Any type of tobacco	
Age				
15-19	0.7	0.9	1.0	1,657
20-24	0.8	1.2	2.0	1,506
25-29	0.5	0.5	0.7	1,375
30-34	0.5	0.5	0.8	1,112
35-39	0.4	0.0	0.4	1,020
40-44	1.3	0.3	1.3	769
45-49	0.2	0.1	0.2	626
Residence				
Urban	0.6	0.7	1.1	5,023
Greater Monrovia	0.8	1.2	1.6	2,866
Other urban	0.4	0.1	0.5	2,157
Rural	0.7	0.4	0.8	3,042
Region				
North Western	0.9	0.6	1.3	621
South Central	0.7	0.9	1.2	4,105
South Eastern A	0.2	0.1	0.3	458
South Eastern B	1.1	0.7	1.1	441
North Central	0.5	0.1	0.6	2,439
County				
Bomi	0.2	0.8	1.0	249
Bong	0.4	0.2	0.5	796
Gbarpolu	1.1	0.2	1.3	112
Grand Bassa	0.8	0.7	1.1	467
Grand Cape Mount	1.6	0.6	1.6	260
Grand Gedeh	0.2	0.2	0.4	172
Grand Kru	1.5	1.8	1.8	136
Lofa	0.6	0.0	0.6	658
Margibi	0.0	0.0	0.0	441
Maryland	1.2	0.3	1.2	215
Montserrado	0.7	1.1	1.4	3,197
Nimba	0.6	0.1	0.7	985
River Cess	0.5	0.1	0.5	104
River Gee	0.1	0.0	0.1	91
Sinoe	0.1	0.0	0.1	182
Education				
No education	0.7	0.2	0.7	2,474
Elementary	0.3	0.2	0.5	1,911
Junior high	1.1	0.9	1.1	1,445
Senior high	0.3	1.1	1.3	1,761
Higher	1.6	1.6	3.0	474
Wealth quintile				
Lowest	0.8	0.3	0.9	1,379
Second	0.7	0.4	0.9	1,431
Middle	0.5	0.1	0.6	1,517
Fourth	0.2	0.5	0.5	1,829
Highest	1.0	1.5	1.9	1,910
Total	0.6	0.6	1.0	8,065

¹ Includes daily and occasional (less than daily) use

² Includes pipes full of tobacco, cigars, cheroots, cigarillos, and water pipes/shisha

Table 3.10.2 Tobacco smoking: Men

Percentage of men age 15-49 who smoke various tobacco products, and percent distribution of men by smoking frequency, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who smoke: ¹			Smoking frequency			Total	Number of men
	Cigarettes ²	Other type of tobacco ³	Any type of tobacco	Daily smoker	Occasional smoker ⁴	Non-smoker		
Age								
15-19	1.7	0.2	1.8	1.4	1.1	97.6	100.0	876
20-24	2.0	1.5	2.7	2.4	2.9	94.7	100.0	658
25-29	5.0	3.6	6.1	2.6	4.6	92.7	100.0	558
30-34	8.5	1.8	9.8	6.4	4.2	89.4	100.0	494
35-39	11.5	1.5	11.5	7.0	5.3	87.7	100.0	487
40-44	13.1	2.0	13.2	5.4	8.0	86.5	100.0	418
45-49	15.8	1.0	16.0	11.3	6.1	82.5	100.0	330
Residence								
Urban	4.9	2.0	5.6	3.0	3.8	93.2	100.0	2,313
Greater Monrovia	6.2	2.6	6.8	3.5	5.1	91.4	100.0	1,368
Other urban	3.0	1.2	3.8	2.2	1.9	95.9	100.0	944
Rural	9.8	0.9	10.0	6.6	4.5	88.9	100.0	1,508
Region								
North Western	12.9	1.1	12.9	7.7	5.6	86.7	100.0	301
South Central	6.2	2.5	7.0	4.1	4.3	91.6	100.0	1,932
South Eastern A	10.7	0.9	11.2	8.9	4.9	86.2	100.0	254
South Eastern B	5.8	0.7	6.1	4.0	3.2	92.8	100.0	226
North Central	5.6	0.4	5.6	3.1	3.1	93.8	100.0	1,107
County								
Bomi	11.0	0.1	11.0	7.2	3.9	89.0	100.0	118
Bong	3.9	0.5	3.9	1.5	2.7	95.9	100.0	324
Gbarpolu	11.0	0.0	11.0	6.9	6.5	86.6	100.0	53
Grand Bassa	10.5	2.9	12.9	9.2	4.7	86.1	100.0	197
Grand Cape Mount	15.4	2.3	15.4	8.5	6.9	84.6	100.0	130
Grand Gedeh	13.3	1.0	14.3	12.1	4.0	83.9	100.0	92
Grand Kru	6.4	1.5	6.9	4.0	5.1	90.9	100.0	67
Lofa	9.7	0.3	9.7	7.2	3.7	89.1	100.0	287
Margibi	2.8	2.6	4.1	3.1	1.5	95.4	100.0	209
Maryland	3.4	0.2	3.6	1.5	2.1	96.4	100.0	110
Montserrado	6.1	2.4	6.7	3.6	4.7	91.7	100.0	1,525
Nimba	4.4	0.4	4.4	1.7	3.1	95.2	100.0	496
River Cess	6.8	1.9	6.8	6.3	0.4	93.2	100.0	52
River Gee	10.2	0.7	10.6	9.6	3.1	87.3	100.0	50
Sinoe	10.4	0.4	10.8	7.5	7.9	84.7	100.0	110
Education								
No education	16.1	1.0	16.4	11.3	6.1	82.6	100.0	498
Elementary	6.1	1.2	6.7	3.2	4.5	92.3	100.0	877
Junior high	5.2	0.8	5.2	3.3	3.5	93.2	100.0	738
Senior high	6.0	2.2	6.4	3.9	3.9	92.2	100.0	1,303
Higher	2.5	2.4	4.2	2.1	2.1	95.8	100.0	405
Wealth quintile								
Lowest	11.7	1.1	11.8	7.5	5.4	87.1	100.0	657
Second	7.6	0.6	7.8	5.5	3.6	90.9	100.0	663
Middle	8.8	2.3	9.0	4.4	5.1	90.5	100.0	743
Fourth	3.8	1.4	4.6	2.7	3.8	93.5	100.0	838
Highest	4.0	2.2	4.8	2.9	2.9	94.2	100.0	920
Total 15-49	6.8	1.6	7.3	4.4	4.1	91.5	100.0	3,821
50-59	13.4	2.8	13.4	7.9	5.4	86.6	100.0	428
Total 15-59	7.5	1.7	7.9	4.8	4.2	91.0	100.0	4,249

¹ Includes daily and occasional (less than daily) use

² Includes manufactured cigarettes and kreteks

³ Includes pipes full of tobacco, cigars, cheroots, cigarillos, and water pipes/shisha

⁴ Occasional refers to less often than daily use.

Table 3.11 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15-49 who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, Liberia DHS 2019-20

Tobacco product	Women	Men
Snuff, by mouth	0.1	0.5
Snuff, by nose	0.0	1.3
Chewing tobacco	0.0	0.4
Other type of smokeless tobacco	0.0	0.7
Any type of smokeless tobacco ¹	0.1	2.5
Any type of tobacco ²	1.1	10.1
Number	8,065	3,821

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).

¹ Includes snuff by mouth, snuff by nose, and chewing tobacco

² Includes all types of smokeless tobacco shown in this table along with cigarettes, kreteks, pipes, cigars, cheroots, cigarillos, and water pipes/shisha

Table 3.12.1 Knowledge concerning tuberculosis: Women

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, percentage who know about common symptoms of TB, percentage who know that TB is spread through the air by coughing or sneezing, percentage who believe that TB can be cured, and percentage who would not keep it a secret if a family member is diagnosed with TB, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among respondents who have heard of TB:								Number of women
	Among all respondents:		Knowledge about common symptoms			Percentage who report that TB is spread through coughing or sneezing	Percentage who believe that TB can be cured	Percentage who report that they would not want to keep it a secret if a family member is diagnosed with TB	
	Percentage who have heard of TB	Number of women	Percentage who report coughing for more than 2 weeks	Percentage who report chest pain	Percentage who report hemoptysis				
Age									
15-19	85.8	1,657	43.0	13.1	55.6	49.2	66.6	81.4	1,422
20-24	89.2	1,506	51.0	16.7	60.2	61.0	77.3	86.4	1,344
25-29	93.3	1,375	49.2	18.5	61.2	58.0	81.2	89.4	1,283
30-34	94.1	1,112	46.2	21.7	68.6	59.7	84.1	87.5	1,046
35-39	93.1	1,020	48.9	19.8	64.5	59.9	81.7	87.0	950
40-44	94.7	769	49.4	20.6	58.0	57.7	85.1	85.3	728
45-49	95.8	626	48.7	19.7	64.3	56.1	81.4	88.3	600
Marital status									
Never married	90.9	3,129	48.6	16.2	61.2	59.4	78.0	85.0	2,844
Married or living together	91.0	4,216	47.7	18.8	61.2	55.0	78.2	86.9	3,837
Divorced/separated/widowed	96.0	721	46.1	21.6	63.0	60.0	82.6	88.1	692
Residence									
Urban	93.2	5,023	47.4	18.0	63.4	60.1	82.1	86.4	4,680
Greater Monrovia	95.6	2,866	42.7	18.0	69.9	63.0	85.7	87.3	2,739
Other urban	90.0	2,157	53.9	18.0	54.2	55.9	76.9	85.1	1,941
Rural	88.5	3,042	48.7	18.1	57.9	52.1	72.4	86.1	2,694
Region									
North Western	87.2	621	45.6	19.4	62.5	60.2	75.0	84.1	542
South Central	94.6	4,105	44.9	18.5	66.1	60.7	84.1	87.2	3,882
South Eastern A	98.0	458	49.2	27.9	69.5	64.0	75.8	89.1	449
South Eastern B	92.1	441	42.0	14.9	64.0	41.4	77.1	88.8	407
North Central	85.9	2,439	54.9	15.3	49.9	51.3	70.0	84.0	2,094
County									
Bomi	96.2	249	65.2	17.5	56.9	72.0	81.4	84.8	240
Bong	92.3	796	57.6	9.6	58.5	53.4	74.2	90.9	735
Gbarpolu	94.2	112	36.4	28.0	74.9	58.8	67.9	94.1	105
Grand Bassa	93.2	467	46.6	24.2	62.4	64.6	80.2	87.7	435
Grand Cape Mount	75.7	260	26.7	17.3	62.8	46.7	70.9	77.9	197
Grand Gedeh	96.8	172	51.9	39.8	68.4	64.5	81.6	93.9	167
Grand Kru	85.0	136	26.5	19.3	63.8	31.6	72.4	90.8	115
Lofa	89.2	658	48.8	16.7	49.6	49.9	67.0	75.2	587
Margibi	90.2	441	51.3	20.7	56.3	52.4	75.6	84.9	398
Maryland	95.6	215	38.7	14.4	67.8	40.6	78.9	88.6	205
Montserrado	95.4	3,197	43.8	17.5	67.9	61.3	85.8	87.4	3,049
Nimba	78.4	985	56.9	19.6	42.0	50.5	68.3	84.2	772
River Cess	98.9	104	49.6	19.8	79.9	67.8	75.8	87.5	103
River Gee	94.5	91	70.4	10.1	55.4	56.4	79.2	86.6	86
Sinoe	98.5	182	46.4	21.3	64.5	61.4	70.5	85.5	180
Education									
No education	87.5	2,474	47.5	17.0	56.4	50.3	72.2	84.8	2,165
Elementary	88.1	1,911	47.3	16.2	55.8	51.2	71.7	86.9	1,682
Junior high	93.2	1,445	43.2	16.2	60.6	54.8	80.6	85.5	1,347
Senior high	97.0	1,761	48.8	19.8	68.5	67.1	88.0	88.3	1,708
Higher	99.1	474	61.4	28.4	80.0	80.7	92.2	85.9	470
Wealth quintile									
Lowest	87.7	1,379	47.7	17.2	56.7	49.6	68.8	88.2	1,210
Second	86.2	1,431	49.3	17.3	54.5	52.8	70.7	87.3	1,233
Middle	90.7	1,517	51.0	18.7	57.2	53.2	77.9	81.1	1,376
Fourth	94.0	1,829	43.6	16.6	63.5	59.4	84.2	87.7	1,720
Highest	96.1	1,910	48.7	19.9	70.0	66.0	85.4	86.8	1,835
Total	91.4	8,065	47.9	18.0	61.4	57.2	78.5	86.3	7,373

Table 3.12.2 Knowledge concerning tuberculosis: Men

Percentage of men age 15-49 who have heard of tuberculosis (TB), and among men who have heard of TB, percentage who know about common symptoms of TB, percentage who know that TB is spread through the air by coughing or sneezing, percentage who believe that TB can be cured, and percentage who would not keep it a secret if a family member is diagnosed with TB, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among respondents who have heard of TB:								Number of men
	Among all respondents:		Knowledge about common symptoms			Percentage who report that TB is spread through coughing or sneezing	Percentage who believe that TB can be cured	Percentage who report that they would not want to keep it a secret if a family member is diagnosed with TB	
	Percentage who have heard of TB	Number of men	Percentage who report coughing for more than 2 weeks	Percentage who report chest pain	Percentage who report hemoptysis				
Age									
15-19	94.1	1,047	65.7	26.5	56.9	68.1	83.4	88.6	986
20-24	91.7	877	59.3	27.5	55.5	62.0	81.7	89.0	804
25-29	96.0	627	66.4	25.2	62.5	67.4	80.9	89.6	602
30-34	94.5	495	68.7	33.7	58.7	70.1	83.4	89.8	468
35-39	91.6	533	52.7	27.4	60.1	49.2	77.6	88.8	488
40-44	86.2	375	53.8	35.0	55.4	57.0	73.8	86.8	323
45-49	89.5	296	58.2	25.8	59.2	54.8	73.8	85.9	265
Marital status									
Never married	86.3	1,684	56.6	25.3	55.4	59.8	76.6	84.6	1,453
Married or living together	96.7	1,906	64.2	29.7	58.4	63.9	81.8	91.2	1,843
Divorced/separated/widowed	95.2	231	72.8	21.8	65.0	71.7	87.4	87.7	220
Residence									
Urban	93.5	2,313	66.8	27.8	60.1	70.5	82.8	87.5	2,162
Greater Monrovia	96.1	1,368	79.5	25.4	61.1	82.2	88.1	86.6	1,315
Other urban	89.7	944	47.1	31.5	58.6	52.4	74.7	88.8	848
Rural	89.8	1,508	53.2	26.7	53.5	50.3	75.5	89.6	1,354
Region									
North Western	85.6	301	63.2	37.6	63.6	68.4	77.1	93.8	258
South Central	95.9	1,932	76.9	23.1	58.4	76.7	86.1	84.8	1,853
South Eastern A	95.3	254	76.5	27.4	51.7	60.6	70.8	85.5	242
South Eastern B	87.5	226	48.2	36.8	51.5	53.5	65.2	93.8	198
North Central	87.1	1,107	30.7	30.8	57.1	36.9	74.4	93.1	965
County									
Bomi	93.0	118	92.0	46.6	83.7	93.6	89.9	93.5	109
Bong	92.5	324	47.8	20.4	60.0	55.5	67.8	92.4	300
Gbarpolu	92.2	53	73.5	23.9	61.9	64.8	72.2	92.9	49
Grand Bassa	95.9	197	81.5	14.3	49.9	51.3	76.9	84.6	189
Grand Cape Mount	76.2	130	26.3	34.4	42.3	42.3	65.4	94.5	99
Grand Gedeh	89.5	92	76.4	38.4	60.8	66.5	64.3	82.4	82
Grand Kru	79.0	67	90.1	46.2	63.1	77.1	72.6	89.2	53
Lofa	78.7	287	45.4	19.8	28.3	37.3	70.4	95.5	226
Margibi	96.6	209	68.7	20.2	65.6	71.6	81.7	86.4	202
Maryland	91.6	110	38.1	37.6	45.3	44.1	60.7	97.4	101
Montserrado	95.8	1,525	77.5	24.7	58.5	80.7	87.9	84.6	1,461
Nimba	88.5	496	11.5	43.5	70.0	23.8	81.0	92.4	439
River Cess	97.8	52	91.5	22.2	75.2	85.0	88.2	95.6	51
River Gee	90.0	50	21.6	24.1	51.6	46.5	66.7	91.1	45
Sinoe	99.0	110	69.5	21.5	33.8	44.7	67.6	83.0	109
Education									
No education	85.8	498	50.8	26.1	53.3	46.3	71.9	91.0	427
Elementary	81.2	877	52.2	23.0	50.2	49.2	66.6	87.8	712
Junior high	94.2	738	56.5	27.9	59.1	55.5	77.3	88.2	695
Senior high	98.1	1,303	69.6	29.0	62.5	72.8	88.1	89.0	1,278
Higher	99.6	405	72.9	30.2	56.7	84.4	91.3	84.1	403
Wealth quintile									
Lowest	89.8	657	49.5	32.9	54.6	46.0	70.1	91.7	590
Second	86.5	663	48.1	29.0	54.9	48.2	74.6	93.0	573
Middle	90.9	743	54.9	22.1	56.9	52.9	79.2	89.7	675
Fourth	94.4	838	72.3	27.0	61.3	75.7	85.3	85.6	790
Highest	96.4	920	73.8	26.8	58.5	79.1	86.0	84.3	887
Total 15-49	92.0	3,821	61.6	27.3	57.6	62.7	80.0	88.3	3,516
50-59	98.0	428	63.4	34.5	62.6	64.0	84.8	91.9	420
Total 15-59	92.6	4,249	61.8	28.1	58.1	62.9	80.5	88.7	3,935

Table 3.13.1 Possession of identity documents: Women

Percentage of women age 15-49 who possess a form of identification document (ID), and among women who possess a form of ID, percentage who possess a birth certificate, a voter card, and a national ID, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among all respondents:		Among respondents who possess a form of ID:			
	Percentage who possess a form of ID	Number of women	Percentage who possess a birth certificate	Percentage who possess a voter card	Percentage who possess a national ID	Number of women
Age						
15-19	25.2	1,657	64.9	39.5	7.4	418
20-24	77.2	1,506	18.5	95.8	9.2	1,162
25-29	89.4	1,375	20.4	96.6	13.2	1,229
30-34	92.2	1,112	18.4	97.9	13.2	1,025
35-39	92.0	1,020	16.5	97.9	12.0	938
40-44	92.4	769	12.5	97.9	11.6	711
45-49	92.5	626	12.6	97.9	8.2	579
Marital status						
Never married	57.5	3,129	34.8	83.0	14.8	1,799
Married or living together	85.7	4,216	14.5	97.4	9.9	3,614
Divorced/separated/widowed	90.0	721	14.4	98.3	8.2	648
Residence						
Urban	76.0	5,023	27.6	91.4	15.9	3,819
Greater Monrovia	76.6	2,866	32.3	89.8	20.7	2,195
Other urban	75.3	2,157	21.3	93.6	9.3	1,623
Rural	73.7	3,042	8.4	96.3	3.2	2,243
Region						
North Western	73.8	621	18.5	94.2	4.4	458
South Central	73.4	4,105	28.0	90.9	16.8	3,014
South Eastern A	77.9	458	11.3	96.1	7.4	357
South Eastern B	74.7	441	12.9	95.5	6.8	330
North Central	78.0	2,439	12.0	95.7	5.3	1,903
County						
Bomi	73.5	249	18.6	92.5	5.7	183
Bong	75.8	796	11.5	95.3	5.1	604
Gbarpolu	77.5	112	13.2	95.2	2.7	86
Grand Bassa	67.9	467	10.5	95.6	6.0	317
Grand Cape Mount	72.6	260	20.9	95.5	4.0	189
Grand Gedeh	82.1	172	15.8	93.2	10.6	141
Grand Kru	71.8	136	4.0	95.6	7.1	97
Lofa	72.4	658	7.6	95.5	3.6	476
Margibi	64.2	441	21.7	92.3	7.0	283
Maryland	76.5	215	21.6	94.7	7.0	164
Montserrado	75.5	3,197	31.1	90.1	19.4	2,414
Nimba	83.6	985	15.0	96.0	6.5	823
River Cess	76.6	104	6.4	97.2	2.0	79
River Gee	74.5	91	4.5	97.2	6.1	68
Sinoe	74.6	182	9.5	98.4	7.4	136
Education						
No education	80.0	2,474	4.8	97.4	4.2	1,979
Elementary	61.3	1,911	14.7	92.2	6.5	1,172
Junior high	66.8	1,445	23.6	85.0	6.4	965
Senior high	84.8	1,761	33.2	92.4	17.0	1,494
Higher	95.2	474	55.7	97.7	44.9	452
Wealth quintile						
Lowest	75.1	1,379	6.4	97.7	2.6	1,036
Second	75.2	1,431	7.4	96.4	3.9	1,076
Middle	73.5	1,517	14.1	94.1	5.6	1,114
Fourth	75.6	1,829	22.7	91.9	9.9	1,383
Highest	76.1	1,910	43.0	88.1	28.2	1,452
Total	75.2	8,065	20.5	93.2	11.2	6,062

Table 3.13.2 Possession of identity documents: Men

Percentage of men age 15-49 who possess a form of identification document (ID), and among men who possess a form of ID, percentage who possess a birth certificate, a voter card, and a national ID, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among all respondents:		Among respondents who possess a form of ID:			
	Percentage who possess a form of ID	Number of men	Percentage who possess a birth certificate	Percentage who possess a voter card	Percentage who possess a national ID	Number of men
Age						
15-19	76.6	1,047	35.6	88.0	21.1	802
20-24	77.3	877	30.6	89.3	14.3	677
25-29	78.3	627	30.3	96.6	19.6	491
30-34	81.9	495	23.7	91.8	17.3	406
35-39	73.7	533	20.3	93.5	11.4	392
40-44	74.9	375	27.5	90.3	12.8	281
45-49	75.9	296	33.8	87.2	17.2	224
Marital status						
Never married	55.7	1,684	47.2	75.4	12.8	938
Married or living together	90.9	1,906	22.7	97.6	17.4	1,732
Divorced/separated/widowed	85.0	231	46.7	86.1	16.3	196
Residence						
Urban	74.4	2,313	40.3	86.2	19.7	1,720
Greater Monrovia	74.8	1,368	47.0	82.8	22.6	1,023
Other urban	73.8	944	30.4	91.1	15.4	697
Rural	76.0	1,508	20.5	94.5	10.0	1,146
Region						
North Western	63.3	301	15.0	96.3	8.4	191
South Central	75.8	1,932	42.5	84.5	20.2	1,465
South Eastern A	74.5	254	24.3	94.5	20.6	189
South Eastern B	74.4	226	14.9	95.8	16.1	168
North Central	77.0	1,107	24.1	94.3	8.8	853
County						
Bomi	69.1	118	15.3	97.1	11.1	81
Bong	77.7	324	30.3	89.9	8.0	252
Gbarpolu	81.5	53	14.9	96.1	12.6	43
Grand Bassa	78.6	197	28.7	90.3	7.6	155
Grand Cape Mount	50.6	130	14.7	95.4	2.3	66
Grand Gedeh	72.5	92	18.9	96.6	17.1	67
Grand Kru	76.5	67	20.5	96.2	25.2	51
Lofa	76.5	287	28.1	94.4	13.5	220
Margibi	79.5	209	35.9	87.0	21.7	166
Maryland	74.2	110	7.4	97.8	7.2	82
Montserrado	75.0	1,525	45.4	83.3	21.7	1,144
Nimba	76.9	496	17.6	97.2	6.7	381
River Cess	71.8	52	13.2	97.2	22.9	37
River Gee	71.8	50	23.9	90.8	23.4	36
Sinoe	77.6	110	33.3	91.8	22.3	85
Education						
No education	74.5	498	9.7	98.4	7.4	371
Elementary	54.2	877	25.7	84.8	5.5	475
Junior high	68.1	738	31.3	81.4	8.5	502
Senior high	86.5	1,303	33.1	91.1	17.8	1,128
Higher	96.4	405	61.3	92.6	40.1	390
Wealth quintile						
Lowest	75.5	657	12.5	97.5	5.4	496
Second	75.4	663	19.4	95.9	9.4	499
Middle	71.6	743	24.9	92.2	12.1	532
Fourth	72.9	838	39.5	82.3	16.3	611
Highest	79.1	920	54.2	83.8	29.5	728
Total 15-49	75.0	3,821	32.4	89.5	15.8	2,866
50-59	94.9	428	10.3	99.9	24.1	406
Total 15-59	77.0	4,249	29.6	90.8	16.8	3,273

MARRIAGE AND SEXUAL ACTIVITY

Key Findings

- **Current marital status:** 52% of women and 50% of men age 15-49 are currently married or living together with a partner as though married.
- **Polygyny:** 10% of women age 15-49 have one or more co-wives.
- **Median age at first marriage:** The median age at first marriage is 21.2 years among women and 24.5 years among men age 25-49.
- **Median age at first sexual intercourse:** The median age at first sexual intercourse among women age 20-49 is 16.1 years.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

4.1 MARITAL STATUS

Currently married

Women and men who report being married or living together with a partner as though married at the time of the survey.

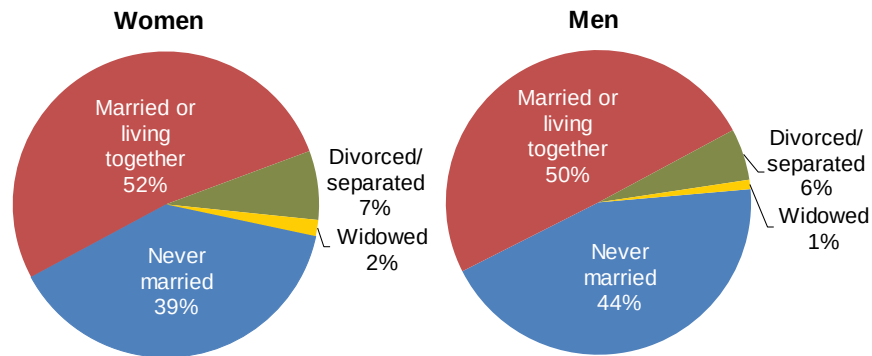
Sample: Women and men age 15-49

Table 4.1 and **Figure 4.1** show that 52% of women and 50% of men age 15-49 are currently in union. About half of these unions are marriages, while in the other half a woman and man are living together as though married. Thirty-nine percent of women have never been married, as compared with 44% of men. At younger ages, more women than men are married or in union; by age 45-49, however, 89% of men and 72% of women are married or in union.

Trends: The percentage of women who are currently married or in union has declined over time, from 64% in 2007 to 52% in 2019-20. The percentage of men who are married or in union decreased from 57% in 2007 to 50% in 2019-20.

Figure 4.1 Marital status

Percent distribution of women and men age 15-49



Note: Figures may not add up to 100% due to rounding.

4.2 POLYGYNY

Polygyny

Women who report that their husband or partner has other wives are considered to be in a polygynous marriage.

Men who report that they have more than one wife, or who live with more than one woman as if married, are considered to be in a polygynous marriage.

Sample: Currently married women and men age 15-49

Tables 4.2.1 and **4.2.2** present the number of co-wives reported by women and the number of wives reported by men. A total of 10% of women age 15-49 reported that their husband has other wives (**Table 4.2.1**). Younger women are less likely than women over age 35 to report that their husband has other wives. As education levels increase, the percentage of women who report having co-wives generally decreases. Only 4% of men age 15-49 reported having more than one wife.

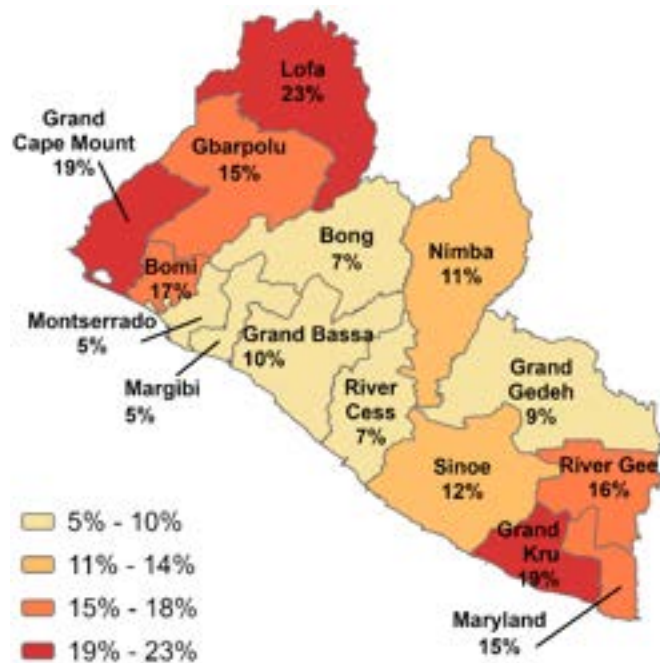
Trends: The percentage of married women in a polygynous union has declined over time, from 16% in 2007 to 10% in 2019-20.

Patterns by background characteristics

- Eight percent of men with no education report having more than one wife, as compared with 1% of men with a higher education.
- Men who live in households in the top two wealth quintiles (2% each) are less likely to report having more than one wife than those in the lowest two quintiles (4% and 8%, respectively).
- The percentage of men with more than one wife increases with age, from 1% among those age 20-24 to 8% among those age 45-49.
- The percentage of women in a polygynous marriage varies by county, ranging from 5% in Margibi and Montserrado to 23% in Lofa (Figure 4.2).

Figure 4.2 Polygyny by county

Percent of currently married women age 15-49 in a polygynous union



4.3 AGE AT FIRST MARRIAGE

Median age at first marriage

Age by which half of respondents have been married.

Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

When marriage and sexual activity begin at young ages, childbearing often begins at early ages and is therefore linked to patterns of fertility. Direct measures of exposure to pregnancy are age at first intercourse and frequency of intercourse.

Women and men were independently asked the month and year that they started living together with their first spouse. **Table 4.3** presents the percentages of women and men age 25-49 who first married by exact ages and median ages at marriage. The median age at first marriage is 21.2 years women age 25-49. Median ages at first marriage are 19.8 years among women age 45-49 and 22.6 years among women age 25-29, indicating that the median age has risen by almost 1 year every 5 years.

Men tend to marry later than women. The median age at first marriage among men age 25-49 is 24.5 years, almost 3 years higher than the median age among women. There are only minimal differences by age group; the median age at first marriage is 25.3 years among men age 45-49, as compared with 24.0 years among men age 25-29.

Trends: Median age at first marriage has increased over time among both women (from 18.4 years in 2007 to 21.2 years in 2019-20) and men (from 23.9 years in 2007 to 24.5 years in 2019-20).

Patterns by background characteristics

- Median age at first marriage among women age 25-49 is lower (19.1 years) in rural areas than in urban areas (23.3 years) (**Table 4.4**).
- Among women age 25-49, median age at first marriage generally increases with increasing wealth.

4.4 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse.

Sample: Women age 20-49 and 25-49 and men age 20-59 and 25-59

The median age at first sexual intercourse among women age 20-49 in Liberia is 16.1 years (**Table 4.5**). The median age changes only slightly between age groups, peaking at 16.4 years among women age 20-24 before falling to 16.0 years by age 30-34 and then remaining constant through age 45-49.

Among men age 20-59, the median age at first sexual intercourse is 18.4 years. Among men age 20-49, median age at first intercourse increases with increasing age, from 17.4 years among men age 20-24 to 19.2 years among men age 45-49.

Trends: Median age at first sexual intercourse among women age 25-49 has remained relatively stable over time, declining only slightly from 16.2 years in 2007 to 16.1 years in 2019-20. Median age at first intercourse among men age 25-49 has increased slightly during the same period, from 18.2 years to 18.5 years.

Patterns by background characteristics

- Among women age 20-49, median age at first sexual intercourse is higher in urban areas (16.4 years) than in rural areas (15.8 years) (**Table 4.6**).
- Median age at first sexual intercourse among women age 20-49 increases with increasing household wealth, from 15.8 years among those in the lowest wealth quintile to 16.6 years among those in the highest quintile.
- Median age also increases with increasing education, from 15.8 years among women with no education to 17.2 years among those with a higher education.

4.5 RECENT SEXUAL ACTIVITY

Information on sexual activity can be used to refine measures of exposure to pregnancy. Women and men were asked to report on the frequency and timing of their sexual activity. **Tables 4.7.1** and **4.7.2** show that over half of women and men have had sexual intercourse within the last 4 weeks. Only 7% of women and 14% of men age 15-49 report that they have never had sex.

LIST OF TABLES

For more information on marriage and sexual activity, see the following tables:

- **Table 4.1** **Current marital status**
- **Table 4.2.1** **Number of women’s co-wives**
- **Table 4.2.2** **Number of men’s wives**
- **Table 4.3** **Age at first marriage**
- **Table 4.4** **Median age at first marriage by background characteristics**
- **Table 4.5** **Age at first sexual intercourse**
- **Table 4.6** **Median age at first sexual intercourse according to background characteristics**
- **Table 4.7.1** **Recent sexual activity: Women**
- **Table 4.7.2** **Recent sexual activity: Men**

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Liberia DHS 2019-20

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
WOMEN									
15-19	86.4	2.2	10.1	0.0	1.3	0.0	100.0	12.3	1,657
20-24	51.8	13.1	28.4	0.0	6.6	0.0	100.0	41.5	1,506
25-29	34.1	22.4	34.9	0.2	7.8	0.6	100.0	57.3	1,375
30-34	17.3	34.6	39.1	0.5	7.6	1.0	100.0	73.6	1,112
35-39	10.6	43.7	33.2	1.2	8.6	2.6	100.0	76.9	1,020
40-44	13.9	47.0	23.9	1.4	8.9	4.9	100.0	70.9	769
45-49	6.6	53.1	18.7	2.3	10.9	8.3	100.0	71.8	626
Total 15-49	38.8	25.6	26.6	0.6	6.7	1.7	100.0	52.3	8,065
MEN									
15-19	98.0	0.1	1.3	0.0	0.6	0.0	100.0	1.4	876
20-24	74.3	4.9	16.5	0.4	3.9	0.0	100.0	21.4	658
25-29	35.1	18.0	37.1	1.0	8.1	0.7	100.0	55.1	558
30-34	18.3	26.3	48.0	0.9	6.4	0.1	100.0	74.3	494
35-39	4.7	40.3	47.8	1.0	5.3	0.9	100.0	88.1	487
40-44	4.9	48.1	37.2	0.4	8.4	1.0	100.0	85.3	418
45-49	2.3	51.5	37.3	0.8	6.1	2.0	100.0	88.8	330
Total 15-49	44.1	21.7	28.1	0.6	4.9	0.5	100.0	49.9	3,821
50-59	4.0	61.0	22.6	1.8	9.2	1.5	100.0	83.6	428
Total 15-59	40.0	25.7	27.6	0.7	5.4	0.6	100.0	53.3	4,249

Table 4.2.1 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, and percentage of currently married women with one or more co-wives, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Number of co-wives				Total	Percentage with one or more co-wives ¹	Number of women
	0	1	2+	Don't know			
Age							
15-19	89.5	8.1	0.0	2.4	100.0	8.1	204
20-24	89.2	7.4	0.3	3.1	100.0	7.7	625
25-29	91.5	6.6	0.4	1.5	100.0	7.0	788
30-34	89.8	7.3	0.7	2.2	100.0	8.0	819
35-39	85.3	11.9	1.3	1.6	100.0	13.2	785
40-44	84.5	14.3	0.5	0.7	100.0	14.8	545
45-49	85.3	10.7	3.2	0.8	100.0	13.8	449
Residence							
Urban	90.4	7.2	0.5	1.9	100.0	7.7	2,268
Greater Monrovia	93.1	3.8	0.3	2.8	100.0	4.1	1,150
Other urban	87.6	10.7	0.7	1.0	100.0	11.4	1,118
Rural	85.2	11.8	1.4	1.6	100.0	13.2	1,947
Region							
North Western	79.7	15.7	1.9	2.7	100.0	17.6	400
South Central	92.2	5.2	0.2	2.4	100.0	5.4	1,801
South Eastern A	89.1	9.1	0.9	0.9	100.0	10.0	296
South Eastern B	82.3	14.6	1.9	1.3	100.0	16.4	254
North Central	85.9	11.9	1.3	1.0	100.0	13.1	1,464
County							
Bomi	80.8	16.8	0.6	1.8	100.0	17.4	148
Bong	92.4	7.0	0.3	0.3	100.0	7.3	411
Gbarpolu	83.4	13.9	1.5	1.2	100.0	15.4	80
Grand Bassa	88.9	9.3	0.3	1.5	100.0	9.6	253
Grand Cape Mount	77.0	15.6	3.2	4.2	100.0	18.8	172
Grand Gedeh	89.9	8.1	1.0	1.0	100.0	9.1	116
Grand Kru	81.2	15.1	3.4	0.3	100.0	18.5	79
Lofa	76.9	18.6	3.9	0.6	100.0	22.5	380
Margibi	93.4	5.3	0.1	1.2	100.0	5.4	239
Maryland	82.3	14.1	1.1	2.5	100.0	15.2	120
Montserrado	92.6	4.3	0.2	2.8	100.0	4.6	1,309
Nimba	87.1	11.1	0.3	1.5	100.0	11.4	673
River Cess	90.1	7.3	0.2	2.5	100.0	7.4	66
River Gee	83.8	14.8	1.4	0.0	100.0	16.2	56
Sinoe	87.7	11.0	1.3	0.0	100.0	12.3	114
Education							
No education	84.3	13.2	1.5	0.9	100.0	14.7	1,814
Elementary	87.2	9.6	0.5	2.7	100.0	10.1	935
Junior high	89.5	7.6	0.7	2.2	100.0	8.3	586
Senior high	96.2	2.2	0.0	1.6	100.0	2.2	697
Higher	92.6	2.5	0.6	4.3	100.0	3.1	184
Wealth quintile							
Lowest	87.6	10.5	0.4	1.5	100.0	10.9	930
Second	84.7	12.6	1.3	1.4	100.0	13.9	903
Middle	84.3	12.8	1.8	1.1	100.0	14.6	808
Fourth	92.4	5.0	0.3	2.3	100.0	5.3	783
Highest	91.7	5.0	0.6	2.7	100.0	5.6	792
Total	88.0	9.3	0.9	1.8	100.0	10.2	4,216

¹ Excludes women who responded "don't know" when asked if their husband has other wives

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15-19	*	*	100.0	12
20-24	99.4	0.6	100.0	141
25-29	96.9	3.1	100.0	308
30-34	97.7	2.3	100.0	367
35-39	95.0	5.0	100.0	429
40-44	94.7	5.3	100.0	357
45-49	91.8	8.2	100.0	293
Residence				
Urban	96.9	3.1	100.0	1,004
Greater Monrovia	98.5	1.5	100.0	583
Other urban	94.7	5.3	100.0	422
Rural	94.2	5.8	100.0	901
Region				
North Western	94.7	5.3	100.0	175
South Central	97.5	2.5	100.0	878
South Eastern A	94.1	5.9	100.0	148
South Eastern B	93.0	7.0	100.0	109
North Central	94.0	6.0	100.0	596
County				
Bomi	95.2	4.8	100.0	63
Bong	99.5	0.5	100.0	169
Gbarpolu	93.7	6.3	100.0	37
Grand Bassa	91.9	8.1	100.0	111
Grand Cape Mount	94.7	5.3	100.0	75
Grand Gedeh	92.8	7.2	100.0	55
Grand Kru	93.2	6.8	100.0	37
Lofa	86.3	13.7	100.0	154
Margibi	97.3	2.7	100.0	106
Maryland	92.1	7.9	100.0	47
Montserrado	98.5	1.5	100.0	662
Nimba	94.8	5.2	100.0	273
River Cess	99.0	1.0	100.0	27
River Gee	94.4	5.6	100.0	25
Sinoe	93.1	6.9	100.0	66
Education				
No education	92.5	7.5	100.0	343
Elementary	94.2	5.8	100.0	349
Junior high	95.0	5.0	100.0	298
Senior high	97.1	2.9	100.0	687
Higher	98.9	1.1	100.0	229
Wealth quintile				
Lowest	95.8	4.2	100.0	417
Second	91.7	8.3	100.0	397
Middle	93.9	6.1	100.0	335
Fourth	98.5	1.5	100.0	362
Highest	98.2	1.8	100.0	395
Total 15-49	95.6	4.4	100.0	1,906
50-59	86.4	13.6	100.0	358
Total 15-59	94.2	5.8	100.0	2,264

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Liberia DHS 2019-20

	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
WOMEN								
15-19	2.7	na	na	na	na	86.4	1,657	a
20-24	5.8	24.9	36.8	na	na	51.8	1,506	a
25-29	9.7	27.3	38.4	46.5	59.5	34.1	1,375	22.6
30-34	12.3	32.5	47.9	59.5	67.1	17.3	1,112	20.4
35-39	7.7	28.7	41.3	52.0	65.1	10.6	1,020	21.6
40-44	10.9	32.3	44.7	56.8	67.3	13.9	769	20.9
45-49	12.6	37.8	51.4	60.6	68.6	6.6	626	19.8
20-49	9.3	29.5	42.2	na	na	26.5	6,408	a
25-49	10.4	30.9	43.8	54.0	64.8	18.7	4,902	21.2
MEN								
15-19	0.1	na	na	na	na	98.0	876	a
20-24	2.9	8.4	15.8	na	na	74.3	658	a
25-29	3.4	13.1	23.0	35.2	56.8	35.1	558	24.0
30-34	4.2	14.5	24.4	36.3	50.4	18.3	494	24.9
35-39	2.6	12.8	24.4	38.1	55.1	4.7	487	24.0
40-44	4.8	10.9	23.4	39.5	53.1	4.9	418	24.3
45-49	1.0	6.9	23.6	33.9	47.9	2.3	330	25.3
20-49	3.2	11.2	21.9	na	na	28.0	2,945	a
25-49	3.3	12.0	23.7	36.6	53.1	14.7	2,287	24.5
20-59	3.2	11.1	21.4	na	na	25.0	3,373	a
25-59	3.2	11.8	22.8	35.4	53.0	13.0	2,716	24.5

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.

na = Not applicable due to censoring

a = Omitted because less than 50% of the women or men began living with their spouse/partner for the first time before reaching the beginning of the age group

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men 25-59, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women age		Men age 25-59
	20-49	25-49	
Residence			
Urban	a	23.3	a
Greater Monrovia	a	a	a
Other urban	a	20.9	a
Rural	19.1	19.1	23.4
Region			
North Western	19.5	19.5	24.9
South Central	a	23.5	a
South Eastern A	19.0	19.0	23.7
South Eastern B	19.9	19.7	a
North Central	a	20.0	23.5
County			
Bomi	a	20.3	24.3
Bong	a	20.0	24.1
Gbarpolu	18.7	18.9	22.9
Grand Bassa	18.6	17.9	22.0
Grand Cape Mount	19.1	19.2	a
Grand Gedeh	19.3	19.6	23.5
Grand Kru	20.0	19.6	a
Lofa	a	20.2	22.6
Margibi	a	20.2	a
Maryland	a	20.4	a
Montserrado	a	a	a
Nimba	20.0	19.9	23.4
River Cess	19.3	19.2	a
River Gee	19.1	18.7	a
Sinoe	18.6	18.6	23.5
Education			
No education	19.5	19.6	24.4
Elementary	19.3	19.5	23.5
Junior high	a	21.1	23.8
Senior high	a	a	24.5
Higher	a	a	a
Wealth quintile			
Lowest	19.0	19.3	23.2
Second	19.2	19.1	23.4
Middle	a	20.4	24.6
Fourth	a	23.3	a
Highest	a	a	a
Total	a	21.2	24.5

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = Omitted because less than 50% of the respondents began living with their spouse/partner for the first time before reaching the beginning of the age group

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Liberia DHS 2019-20

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
WOMEN								
15-19	18.5	na	na	na	na	30.9	1,657	a
20-24	23.0	79.3	94.8	na	na	2.3	1,506	16.4
25-29	24.5	77.9	95.8	98.0	98.6	0.1	1,375	16.2
30-34	25.9	82.7	95.9	97.0	98.5	0.2	1,112	16.0
35-39	23.4	78.6	93.9	98.0	98.7	0.0	1,020	16.0
40-44	21.6	81.0	93.1	97.6	97.6	0.0	769	16.0
45-49	28.7	81.5	93.8	97.4	97.6	0.0	626	16.0
20-49	24.3	79.9	94.8	na	na	0.6	6,408	16.1
25-49	24.7	80.1	94.8	97.6	98.3	0.1	4,902	16.1
15-24	20.6	na	na	na	na	17.3	3,163	a
MEN								
15-19	9.4	na	na	na	na	54.8	876	a
20-24	12.6	58.9	88.7	na	na	5.1	658	17.4
25-29	9.8	53.5	84.2	92.5	95.6	0.9	558	17.8
30-34	5.5	38.8	73.5	88.2	93.6	0.2	494	18.6
35-39	2.5	40.7	71.5	90.1	95.7	0.0	487	18.6
40-44	4.6	32.1	69.9	89.6	93.9	0.0	418	18.8
45-49	3.9	33.2	63.0	82.2	89.9	0.3	330	19.2
20-49	7.1	44.8	76.9	na	na	1.4	2,945	18.3
25-49	5.5	40.8	73.5	89.0	94.0	0.3	2,287	18.5
15-24	10.8	na	na	na	na	33.5	1,533	a
20-59	6.7	43.0	74.5	na	na	1.3	3,373	18.4
25-59	5.2	39.1	71.0	87.0	92.7	0.3	2,716	18.6

na = Not applicable due to censoring

a = Omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.6 Median age at first sexual intercourse according to background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-59 and age 25-59, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women age		Men age	
	20-49	25-49	20-59	25-59
Residence				
Urban	16.4	16.2	18.3	18.6
Greater Monrovia	16.4	16.2	18.5	18.7
Other urban	16.3	16.2	18.1	18.5
Rural	15.8	15.8	18.5	18.6
Region				
North Western	16.0	16.0	19.0	19.0
South Central	16.4	16.3	18.5	18.7
South Eastern A	15.8	15.8	17.8	18.1
South Eastern B	16.1	16.0	18.3	18.4
North Central	15.9	15.9	18.2	18.5
County				
Bomi	15.8	15.7	19.1	19.3
Bong	16.1	15.9	18.3	18.5
Gbarpolu	15.8	15.9	18.9	19.0
Grand Bassa	16.3	16.2	17.7	18.0
Grand Cape Mount	16.4	16.4	18.6	18.7
Grand Gedeh	16.1	16.1	17.9	18.1
Grand Kru	15.8	15.8	17.5	17.5
Lofa	15.8	15.7	18.8	18.9
Margibi	16.5	16.4	18.5	18.6
Maryland	16.6	16.5	18.6	18.8
Montserrado	16.4	16.2	18.4	18.7
Nimba	15.8	15.9	17.4	17.8
River Cess	15.7	15.8	18.7	19.0
River Gee	15.7	15.6	17.6	17.6
Sinoe	15.6	15.7	16.8	17.2
Education				
No education	15.8	15.8	18.7	18.7
Elementary	15.9	16.0	18.4	18.6
Junior high	16.4	16.2	18.1	18.5
Senior high	16.7	16.4	18.3	18.6
Higher	17.2	17.0	18.7	18.9
Wealth quintile				
Lowest	15.8	15.8	18.2	18.4
Second	15.8	15.8	18.4	18.5
Middle	16.0	16.0	18.6	19.0
Fourth	16.4	16.2	18.2	18.5
Highest	16.6	16.5	18.5	18.7
Total	16.1	16.1	18.4	18.6

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year ¹	One or more years			
Age						
15-19	31.0	30.5	7.6	30.9	100.0	1,657
20-24	54.1	32.7	10.9	2.3	100.0	1,506
25-29	54.5	32.5	12.8	0.1	100.0	1,375
30-34	61.9	28.6	9.3	0.2	100.0	1,112
35-39	60.4	27.7	11.9	0.0	100.0	1,020
40-44	56.6	26.4	17.0	0.0	100.0	769
45-49	54.0	23.7	22.3	0.0	100.0	626
Marital status						
Never married	36.5	33.4	12.5	17.6	100.0	3,129
Married or living together	65.5	25.9	8.6	0.0	100.0	4,216
Divorced/separated/ widowed	35.0	36.0	29.0	0.0	100.0	721
Marital duration²						
0-4 years	62.2	26.9	10.9	0.0	100.0	911
5-9 years	61.7	29.3	9.0	0.0	100.0	719
10-14 years	68.6	24.5	6.9	0.0	100.0	609
15-19 years	66.1	24.5	9.3	0.0	100.0	477
20-24 years	70.9	20.1	9.0	0.0	100.0	298
25+ years	66.1	25.7	8.2	0.0	100.0	311
Married more than once	67.6	25.8	6.7	0.0	100.0	890
Residence						
Urban	49.7	30.3	12.3	7.7	100.0	5,023
Greater Monrovia	49.6	30.5	12.5	7.4	100.0	2,866
Other urban	49.9	29.9	12.1	8.0	100.0	2,157
Rural	54.5	28.8	11.3	5.4	100.0	3,042
Region						
North Western	51.9	32.5	8.8	6.9	100.0	621
South Central	49.0	30.9	12.2	8.0	100.0	4,105
South Eastern A	65.1	22.1	8.4	4.4	100.0	458
South Eastern B	62.9	27.8	4.4	5.0	100.0	441
North Central	51.1	28.8	14.4	5.7	100.0	2,439
County						
Bomi	51.2	32.5	8.6	7.7	100.0	249
Bong	45.9	28.7	19.2	6.2	100.0	796
Gbarpolu	63.0	26.8	6.8	3.4	100.0	112
Grand Bassa	47.6	32.4	12.6	7.4	100.0	467
Grand Cape Mount	47.8	34.9	9.7	7.6	100.0	260
Grand Gedeh	64.6	21.7	10.0	3.8	100.0	172
Grand Kru	66.7	23.6	4.1	5.7	100.0	136
Lofa	47.8	32.1	12.4	7.7	100.0	658
Margibi	51.2	33.3	7.2	8.3	100.0	441
Maryland	59.6	31.9	3.8	4.7	100.0	215
Montserrado	48.9	30.3	12.8	8.0	100.0	3,197
Nimba	57.6	26.7	11.8	3.9	100.0	985
River Cess	69.1	21.0	5.2	4.8	100.0	104
River Gee	64.9	24.3	6.1	4.7	100.0	91
Sinoe	63.4	23.1	8.7	4.8	100.0	182
Education						
No education	55.9	28.5	13.4	2.2	100.0	2,474
Elementary	46.2	28.7	11.5	13.6	100.0	1,911
Junior high	49.5	31.1	9.8	9.6	100.0	1,445
Senior high	52.9	31.2	11.6	4.3	100.0	1,761
Higher	51.7	30.4	13.8	4.1	100.0	474
Wealth quintile						
Lowest	54.1	28.6	14.3	2.9	100.0	1,379
Second	53.4	29.0	12.6	5.0	100.0	1,431
Middle	51.5	30.9	9.9	7.7	100.0	1,517
Fourth	51.4	30.1	11.5	7.0	100.0	1,829
Highest	48.5	29.6	11.7	10.2	100.0	1,910
Total	51.5	29.7	11.9	6.8	100.0	8,065

¹ Excludes women who had sexual intercourse within the last 4 weeks

² Excludes women who are not currently married

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within 1 year ¹	One or more years			
Age						
15-19	16.5	24.1	4.6	54.8	100.0	876
20-24	56.8	33.3	4.9	5.1	100.0	658
25-29	67.9	27.9	3.3	0.9	100.0	558
30-34	70.5	25.3	4.0	0.2	100.0	494
35-39	70.9	24.7	4.4	0.0	100.0	487
40-44	70.8	26.4	2.7	0.0	100.0	418
45-49	73.4	22.1	4.2	0.3	100.0	330
Marital status						
Never married	34.5	30.0	4.6	30.9	100.0	1,684
Married or living together	74.1	23.0	2.9	0.0	100.0	1,906
Divorced/separated/widowed	58.9	30.8	10.3	0.0	100.0	231
Marital duration²						
0-4 years	66.4	29.5	4.0	0.0	100.0	327
5-9 years	73.3	21.8	4.9	0.0	100.0	270
10-14 years	74.9	22.5	2.6	0.0	100.0	269
15-19 years	71.1	26.7	2.3	0.0	100.0	166
20-24 years	77.3	18.5	4.3	0.0	100.0	134
25+ years	80.5	19.0	0.5	0.0	100.0	47
Married more than once	77.4	20.8	1.8	0.0	100.0	693
Residence						
Urban	54.7	27.4	4.4	13.6	100.0	2,313
Greater Monrovia	53.5	27.9	4.6	14.0	100.0	1,368
Other urban	56.4	26.7	4.0	13.0	100.0	944
Rural	57.4	25.2	3.7	13.7	100.0	1,508
Region						
North Western	50.7	23.5	7.5	18.3	100.0	301
South Central	54.5	27.3	4.4	13.8	100.0	1,932
South Eastern A	66.5	19.5	3.7	10.3	100.0	254
South Eastern B	61.4	21.2	1.4	15.9	100.0	226
North Central	55.6	28.7	3.4	12.3	100.0	1,107
County						
Bomi	47.8	22.5	10.1	19.6	100.0	118
Bong	53.0	31.4	3.5	12.1	100.0	324
Gbarpolu	67.4	17.7	8.2	6.7	100.0	53
Grand Bassa	64.0	21.2	4.2	10.7	100.0	197
Grand Cape Mount	46.4	26.7	5.0	21.9	100.0	130
Grand Gedeh	70.6	16.3	3.9	9.3	100.0	92
Grand Kru	70.7	13.4	1.3	14.5	100.0	67
Lofa	50.1	29.7	4.5	15.7	100.0	287
Margibi	53.5	27.9	1.9	16.7	100.0	209
Maryland	59.0	22.5	1.7	16.8	100.0	110
Montserrado	53.4	28.0	4.7	13.8	100.0	1,525
Nimba	60.5	26.4	2.7	10.4	100.0	496
River Cess	56.5	22.3	6.0	15.2	100.0	52
River Gee	54.1	28.9	0.9	16.0	100.0	50
Sinoe	67.7	21.0	2.6	8.7	100.0	110
Education						
No education	60.7	25.6	4.0	9.7	100.0	498
Elementary	42.2	20.6	5.2	31.9	100.0	877
Junior high	50.0	30.0	2.6	17.4	100.0	738
Senior high	61.9	28.3	4.9	4.9	100.0	1,303
Higher	69.3	28.5	2.3	0.0	100.0	405
Wealth quintile						
Lowest	60.1	24.4	4.4	11.1	100.0	657
Second	57.0	26.3	3.8	12.9	100.0	663
Middle	55.7	27.2	2.0	15.0	100.0	743
Fourth	51.0	30.1	6.0	12.9	100.0	838
Highest	56.0	24.4	4.2	15.4	100.0	920
Total 15-49	55.7	26.5	4.1	13.6	100.0	3,821
50-59	64.6	23.1	11.8	0.5	100.0	428
Total 15-59	56.6	26.2	4.9	12.3	100.0	4,249

¹ Excludes men who had sexual intercourse within the last 4 weeks

² Excludes men who are not currently married

Key Findings

- **Total fertility rate (TFR):** The TFR in Liberia is 4.2 children per woman. Urban areas have a lower TFR (3.4) than rural areas (5.5).
- **Median birth interval:** The median birth interval in Liberia is 40.2 months.
- **Menopause:** The percentage of women who are menopausal ranges from 3% among those age 30-34 to 47% among those age 48-49.
- **Median age at first birth:** The median age at first birth among women age 20-49 is 19.1 years.
- **Teenage motherhood:** The percentage of women age 15-19 who have begun childbearing increases with age, from 4% among those age 15 to 55% among those age 19.

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility in Liberia and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

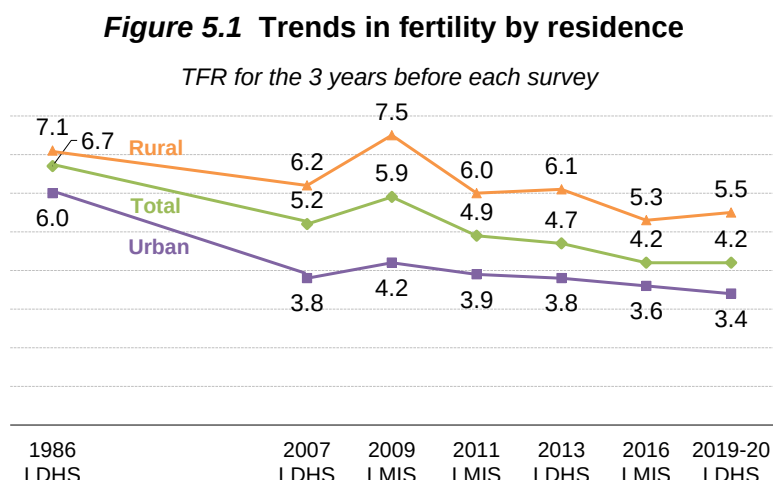
Total fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

Sample: Women age 15-49

The total fertility rate (TFR) in Liberia is 4.2 children per woman. The TFR is lower in urban areas (3.4 children per woman) than in rural areas (5.5 children per woman). Age-specific fertility rates peak at age 20-24 (193 births per 1,000 women) and are lowest among young women less than age 15 (4 births per 1,000 women) and women age 45-49 (16 births per 1,000 women) (**Table 5.1**).

Trends: The TFR in Liberia has declined by over two children since 1986 (from 6.7 to 4.2 children per woman). TFR declines have been higher in urban areas (from 6.0 children per woman in 1986 to 3.4 in 2019-20) than in rural areas (from 7.1 to 5.5 children per woman) (**Figure 5.1**). Since 1986, the largest decline in fertility has been among women age 25-29 (**Table 5.3.2**).

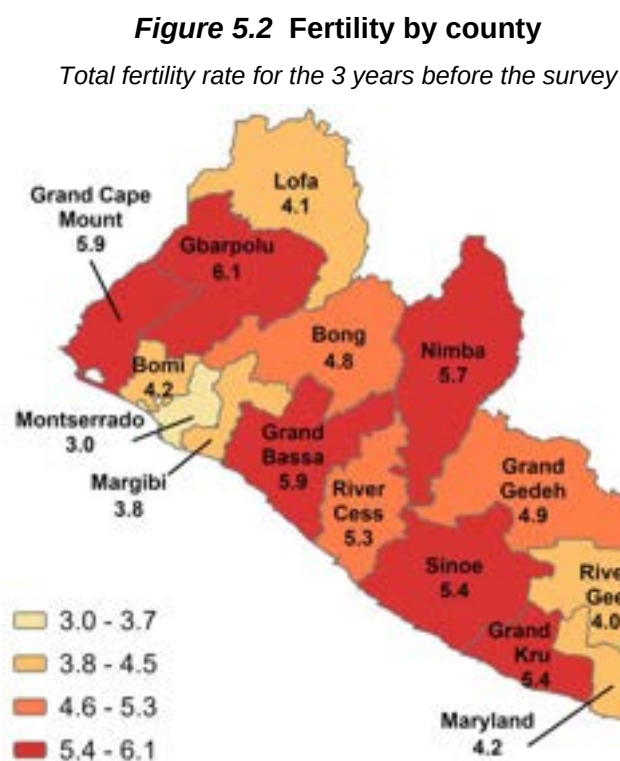


Patterns by background characteristics

- By county, the TFR ranges from a low of 3.0 children per woman in Montserrado to a high of 6.1 children per woman in Gbarpolu (**Table 5.2** and **Figure 5.2**).
- The average number of children per woman declines with increasing education. Women with no education have an average of 5.3 children, as compared with 2.0 children among women with a higher education.
- Women in the lowest wealth quintile (6.2) have more than twice as many children as those in the highest wealth quintile (2.8).

5.2 CHILDREN EVER BORN AND LIVING

The 2019-20 LDHS collected data on the number of children ever born to women age 15-49 and whether each child was still alive at the time of the survey. On average, women have given birth to 2.64 children, of whom 2.28 were still living at the time of the survey (**Table 5.4**). The number of children ever born increases with women's age; women age 45-49 have given birth to 5.77 children, among whom 4.53 were still living at the time of the survey. Currently married women age 15-49 have had an average of 3.75 children, of whom 3.22 were still living at the time of the survey (**Table 5.4**).



5.3 BIRTH INTERVALS

Median birth interval

Number of months since the preceding birth by which half of children are born.

Sample: Non-first births in the 5 years before the survey

After a live birth, the recommended interval before the next pregnancy is at least 24 months in order to reduce the risk of adverse maternal, perinatal, and infant outcomes (WHO 2005b). In Liberia, the median birth interval is 40.2 months. Fifteen percent of births occurred less than the recommended 24 months after the preceding birth (6% occurred 7-17 months after the preceding birth, and 9% occurred 18-23 months after the preceding birth) (**Table 5.5** and **Figure 5.3**).

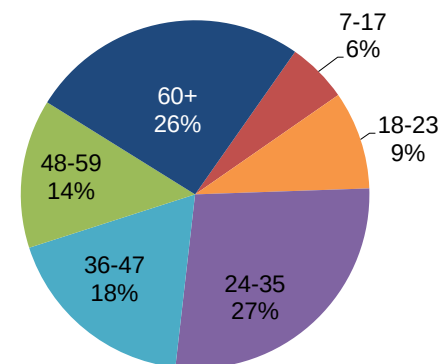
Trends: The median birth interval in Liberia has exceeded the WHO-recommended 24 months after the preceding birth since 1986. Between 1986 and 2019-20, the median birth interval increased by 10.2 months (from 30.0 months to 40.2 months).

Patterns by background characteristics

- Birth intervals increase with age, from 26.0 months among women age 15-19 to 46.7 months among women age 40-49 (**Table 5.5**).
- The median birth interval varies only slightly according to the sex of the preceding birth.
- The median birth interval is shorter if the child from the preceding birth is dead (32.1 months) than if the child is alive (41.2 months).
- Women with seven or more children have a shorter median birth interval (36.4 months) than women with two or three children (43.3 months).
- The median birth interval is longer in urban areas (45.9 months) than in rural areas (36.8 months).
- Across the counties, the median birth interval ranges from 33.6 months in Nimba to 52.0 months in Montserrado.
- Median birth intervals generally increase with increasing education and household wealth. The median birth interval is 39.7 months among women with no education, as compared with 63.8 months among women with a higher education. Similarly, the median birth interval is 34.8 months among women in the lowest wealth quintile, compared with 55.2 months among women in the highest wealth quintile.

Figure 5.3 Birth intervals

Percent distribution of non-first births by number of months since the preceding birth



5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhea

The period of time after the birth of a child and before the resumption of menstruation.

Postpartum abstinence

The period of time after the birth of a child and before the resumption of sexual intercourse.

Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy because she is postpartum amenorrheic and/or abstaining from sexual intercourse postpartum.

Median duration of postpartum amenorrhea

Number of months after childbirth by which time half of women have begun menstruating.

Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility

Number of months after childbirth by which time half of women are no longer protected against pregnancy by either postpartum amenorrhea or abstinence from sexual intercourse.

Sample: Women who gave birth in the 3 years before the survey

Postpartum amenorrhea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. Among women who are not using contraception, exposure to the risk of pregnancy in the period following childbirth is determined by two major factors, namely breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by the length and intensity of breastfeeding or by delayed resumption of sexual activities (postpartum abstinence).

The median duration of postpartum amenorrhea among women who gave birth in the 3 years before the survey is 9.3 months, while the median durations of abstinence and insusceptibility are 12.9 months and 14.1 months, respectively (Table 5.6).

Trends: Although median durations of postpartum amenorrhea, abstinence, and insusceptibility have generally increased from 1986 to 2019-20, changes have fluctuated over the years. The median duration of postpartum amenorrhea increased from 8.0 months in 1986 to 9.6 months in 2007. However, in 2013 the duration decreased to 8.3 months before increasing again to 9.3 months in 2019-20. Similarly, the median duration of postpartum abstinence increased from 10.2 months in 1986 to 12.2 months in 2007, decreased to 11.6 months in 2013, and increased again to 12.9 months in 2019-20. The median duration of postpartum insusceptibility increased from 13.2 months in 1986 to 13.7 months in 2007 before decreasing to 13.1 months in 2013 and once again increasing to 14.1 months in 2019-20.

Patterns by background characteristics

- The median duration of postpartum amenorrhea is longer among rural women (10.6 months) than among those in urban areas (6.9 months). However, the median durations of postpartum abstinence and

insusceptibility are longer among women in urban areas (13.7 and 14.2 months, respectively) than among those in rural areas (11.6 and 13.9 months, respectively) (**Table 5.7**).

- Median durations of postpartum amenorrhea are longest among women in South Eastern A and North Central (10.7 months each) and shortest among women in South Central (6.9 months). The median duration of postpartum insusceptibility is longest in North Central (15.8 months) and shortest in South Eastern B (11.8 months).

5.5 MENOPAUSE

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrheic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30-49

The 2019-20 LDHS collected data on the percentage of women age 30-49 who are menopausal. Nationally, 10% of women are menopausal. By age group, the percentage of women who are menopausal ranges from 3% among those age 30-34 to 47% among those age 48-49 (**Table 5.8**).

5.6 AGE AT FIRST BIRTH

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 20-49 and 25-49

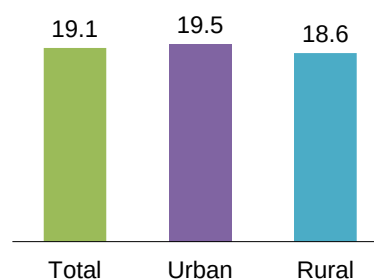
The age at which childbearing commences has a direct influence on a woman's cumulative fertility, particularly when there is little or no contraceptive use. The earlier a woman begins childbearing, the greater her likelihood of having many children. Also, having children at too young an age can have negative repercussions for the mother's health and can put her child's health at risk. In Liberia, the median age at first birth among women age 20-49 is 19.1 years (**Table 5.9**).

Patterns by background characteristics

- The median age at first birth ranges from 18.8 years among women age 45-49 to 19.4 years among women age 35-39.
- Among women age 25-49, the median age at first birth is higher in urban areas (19.5 years) than rural areas (18.6 years) (**Table 5.10** and **Figure 5.4**).
- Across the counties, median age at first birth is lowest in River Gee (18.2 years) and highest in Montserrado (19.8 years).
- The median age at first birth increases with increasing education, from 18.6 years among women with no education to 22.3 years among women with a higher education.

Figure 5.4 Median age at first birth by residence

Median age at first birth among women age 25-49



- The median age at first birth is lowest among women in the lowest (18.7 years) and second (18.6 years) wealth quintiles and highest among those in the highest quintile (20.0 years).

5.7 TEENAGE CHILDBEARING

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child.

Sample: Women age 15-19

Adolescent pregnancy undermines girls' human rights and compromises their opportunity to fully realize their socioeconomic development potential. Teenagers who have early exposure to sexual intercourse are thereby at risk of pregnancy and childbearing. The 2019-20 LDHS collected data on pregnancy in late adolescence (age 15-19). Thirty percent of adolescents had begun childbearing at the time of the survey. Twenty-five percent had given birth, while 5% were pregnant with their first child (**Table 5.11**).

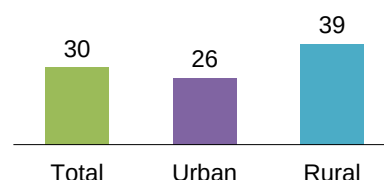
Trends: Teenage childbearing increased from 32% in 2007 to 38% in 2009 before declining to 30% in 2019-20.

Patterns by background characteristics

- The percentage of women age 15-19 who have begun childbearing increases with age, from 4% among those age 15 to 55% among those age 19 (**Table 5.11**).
- The percentage of teenagers who have begun childbearing is higher in rural areas (39%) than in urban areas (26%) (**Figure 5.5**).
- Across the counties, the percentage of teenagers who have begun childbearing ranges from 19% in Maryland to 55% in River Cess (**Table 5.11**).
- The percentage of women age 15-19 who have begun childbearing generally declines with increasing education and household wealth. Forty-seven percent of young women with no education have begun childbearing, as compared with 20% of those with a senior high school education. Similarly, 42% of young women in the lowest wealth quintile have begun childbearing, compared with 10% of those in the highest quintile.

Figure 5.5 Teenage pregnancy and motherhood by residence

Percentage of women age 15-19 who have begun childbearing



5.8 SEXUAL AND REPRODUCTIVE BEHAVIORS BEFORE AGE 15

Among women and men age 15-19, 19% of women and 9% of men had sexual intercourse by age 15. Only 3% of women and less than 1% of men age 15-19 were married by age 15. Two percent of women age 15-19 gave birth before age 15, and less than 1% of men in that age group fathered a child before age 15 (**Table 5.12**).

LIST OF TABLES

For more information on fertility levels and some of the determinants of fertility, see the following tables:

- **Table 5.1** **Current fertility**
- **Table 5.2** **Fertility by background characteristics**
- **Table 5.3.1** **Trends in age-specific fertility rates**
- **Table 5.3.2** **Trends in age-specific and total fertility rates**
- **Table 5.4** **Children ever born and living**
- **Table 5.5** **Birth intervals**
- **Table 5.6** **Postpartum amenorrhea, abstinence, and insusceptibility**
- **Table 5.7** **Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility**
- **Table 5.8** **Menopause**
- **Table 5.9** **Age at first birth**
- **Table 5.10** **Median age at first birth**
- **Table 5.11** **Teenage pregnancy and motherhood**
- **Table 5.12** **Sexual and reproductive health behaviors before age 15**

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Liberia DHS 2019-20

Age group	Residence		Total
	Urban	Rural	
10-14	[4]	[4]	[4]
15-19	98	185	128
20-24	168	250	193
25-29	147	223	173
30-34	108	179	135
35-39	104	158	128
40-44	39	91	64
45-49	[7]	[22]	[16]
TFR (15-49)	3.4	5.5	4.2
GFR	121	188	146
CBR	27.5	33.6	30.1

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates are for the period 1-36 months preceding the interview. Rates for the 10-14 age group are based on retrospective data from women age 15-17.

TFR: Total fertility rate, expressed per woman

GFR: General fertility rate, expressed per 1,000 women age 15-44

CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.4	6.2	4.5
Greater Monrovia	2.9	5.7	3.9
Other urban	4.0	6.9	5.2
Rural	5.5	8.2	6.4
Region			
North Western	5.2	8.0	6.2
South Central	3.4	5.9	4.8
South Eastern A	5.1	7.7	6.4
South Eastern B	4.5	8.8	6.4
North Central	5.0	7.9	5.6
County			
Bomi	4.2	6.1	6.0
Bong	4.8	8.4	5.9
Gbarpolu	6.1	9.8	6.3
Grand Bassa	5.9	6.7	6.9
Grand Cape Mount	5.9	8.9	6.3
Grand Gedeh	4.9	6.6	5.9
Grand Kru	5.4	11.1	6.7
Lofa	4.1	6.4	5.0
Margibi	3.8	7.1	5.6
Maryland	4.2	7.9	6.3
Montserrado	3.0	5.7	4.2
Nimba	5.7	8.6	5.8
River Cess	5.3	11.9	6.1
River Gee	4.0	7.8	6.5
Sinoe	5.4	6.4	7.0
Education			
No education	5.3	6.0	5.8
Elementary	5.1	8.9	6.0
Junior high	4.4	8.5	5.2
Senior high	2.6	5.5	3.3
Higher	2.0	4.6	(2.9)
Wealth quintile			
Lowest	6.2	9.9	6.4
Second	5.3	7.9	6.2
Middle	4.2	7.5	5.6
Fourth	3.3	5.7	4.7
Highest	2.8	4.8	3.6
Total	4.2	7.0	5.4

Note: Total fertility rates are for the period 1-36 months preceding the interview. Figures in parentheses are based on 25-49 unweighted cases.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Liberia DHS 2019-20

Age group	Number of years preceding survey			
	0-4	5-9	10-14	15-19
10-14	[5]	[7]	[15]	[19]
15-19	135	146	161	154
20-24	191	219	243	239
25-29	185	204	233	249
30-34	149	198	216	[197]
35-39	122	151	[193]	
40-44	69	[96]		
45-49	[18]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview. For the 0-4 year period, rates for the 10-14 age group are based on retrospective data from women age 15-19.

Table 5.3.2 Trends in age-specific and total fertility rates

Age-specific and total fertility rates (TFR) for the 3-year period preceding several surveys, according to mother's age at the time of the birth, Liberia DHS 2019-20

Mother's age at birth	1986 LDHS	2007 LDHS	2009 LMIS	2011 LMIS	2013 LDHS	2016 LMIS	2019-20 LDHS
15-19	188	141	177	151	149	150	128
20-24	287	243	268	239	222	194	193
25-29	282	226	241	202	200	160	173
30-34	229	187	214	196	177	154	135
35-39	177	142	166	115	133	122	128
40-44	107	72	81	74	50	45	64
45-49	61	29	29	10	14	11	16
TFR (15-49)	6.7	5.2	5.9	4.9	4.7	4.2	4.2

Note: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Liberia DHS 2019-20

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	74.8	22.2	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,657	0.28	0.26
20-24	25.6	40.6	22.8	8.2	2.1	0.6	0.0	0.1	0.0	0.0	0.0	100.0	1,506	1.23	1.12
25-29	8.8	22.5	28.0	20.1	10.7	7.3	1.8	0.8	0.0	0.0	0.0	100.0	1,375	2.35	2.11
30-34	3.5	10.3	20.9	24.0	17.3	11.8	7.6	3.0	1.3	0.3	0.0	100.0	1,112	3.33	2.96
35-39	1.7	5.3	14.0	14.6	18.3	15.3	13.7	9.6	4.3	2.2	1.0	100.0	1,020	4.41	3.79
40-44	0.7	5.9	8.3	12.1	14.8	14.6	13.9	12.7	8.0	4.0	4.9	100.0	769	5.15	4.34
45-49	1.1	3.7	8.2	11.0	11.6	13.9	9.1	15.0	8.7	6.5	11.1	100.0	626	5.77	4.53
Total	22.5	18.9	15.7	12.2	9.2	7.4	5.1	4.2	2.2	1.2	1.5	100.0	8,065	2.64	2.28
CURRENTLY MARRIED WOMEN															
15-19	36.1	52.2	10.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	204	0.77	0.69
20-24	10.1	35.6	35.0	14.0	4.3	1.0	0.0	0.0	0.0	0.0	0.0	100.0	625	1.70	1.52
25-29	2.9	13.7	27.2	26.5	15.8	9.4	3.1	1.4	0.1	0.0	0.0	100.0	788	2.86	2.58
30-34	1.6	8.7	19.2	23.7	18.6	13.7	9.1	3.5	1.5	0.4	0.0	100.0	819	3.56	3.17
35-39	1.4	3.6	10.0	14.5	19.5	16.1	14.9	11.4	4.9	2.6	1.2	100.0	785	4.70	4.06
40-44	0.2	2.9	7.1	10.9	13.5	13.8	14.9	15.9	9.8	5.3	5.8	100.0	545	5.60	4.71
45-49	1.2	2.4	7.3	12.8	9.6	13.8	10.2	15.2	9.5	5.7	12.5	100.0	449	5.93	4.71
Total	4.5	13.3	18.1	17.2	13.6	10.8	8.1	6.7	3.5	1.9	2.3	100.0	4,216	3.75	3.22

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Mother's age									
15-19	5.3	29.7	47.9	7.4	6.6	3.1	100.0	51	26.0
20-29	6.4	11.3	30.5	19.2	14.6	17.9	100.0	1,743	36.8
30-39	4.6	6.6	24.7	18.4	13.1	32.6	100.0	1,554	44.7
40-49	6.2	7.2	22.2	15.4	14.0	34.9	100.0	492	46.7
Sex of preceding birth									
Male	5.4	8.6	28.9	18.7	13.6	24.6	100.0	2,020	39.7
Female	5.9	9.7	25.5	17.7	14.0	27.2	100.0	1,819	40.8
Survival of preceding birth									
Living	4.4	8.7	26.9	18.7	14.4	26.8	100.0	3,424	41.2
Dead	16.0	12.6	30.4	14.1	9.2	17.7	100.0	416	32.1
Birth order									
2-3	4.4	8.1	25.3	17.8	14.2	30.2	100.0	1,866	43.3
4-6	6.2	9.5	29.6	18.2	13.2	23.3	100.0	1,478	38.4
7+	8.8	12.0	28.1	20.0	14.1	17.1	100.0	496	36.4
Residence									
Urban	4.2	6.9	24.2	17.2	14.7	32.8	100.0	1,870	45.9
Greater Monrovia	3.9	4.8	21.6	14.2	16.5	39.0	100.0	899	53.1
Other urban	4.4	8.9	26.7	20.0	13.0	27.1	100.0	971	40.6
Rural	7.0	11.3	30.2	19.3	13.0	19.2	100.0	1,970	36.8
Region									
North Western	7.7	11.5	28.5	16.5	12.4	23.4	100.0	369	37.9
South Central	5.0	6.8	24.5	17.1	14.5	32.1	100.0	1,558	45.6
South Eastern A	5.7	10.7	29.7	18.5	15.2	20.1	100.0	258	38.2
South Eastern B	5.9	9.0	28.6	17.5	13.2	25.8	100.0	225	39.6
North Central	5.8	10.8	29.5	20.0	13.2	20.7	100.0	1,430	37.6
County									
Bomi	6.7	7.9	24.6	16.3	14.8	29.7	100.0	120	43.0
Bong	5.1	8.2	21.0	24.7	12.7	28.3	100.0	402	43.0
Gbarpolu	9.4	11.1	32.3	17.1	11.3	18.8	100.0	75	35.3
Grand Bassa	8.5	11.8	32.0	17.8	9.6	20.2	100.0	301	34.7
Grand Cape Mount	7.7	14.1	29.5	16.5	11.2	21.0	100.0	174	34.9
Grand Gedeh	6.2	11.8	24.9	20.3	13.0	23.8	100.0	94	39.5
Grand Kru	5.0	10.5	25.8	15.4	16.3	27.0	100.0	81	42.0
Lofa	5.3	10.1	22.9	21.1	16.1	24.5	100.0	303	42.3
Margibi	4.1	7.2	25.3	23.4	15.5	24.4	100.0	197	42.2
Maryland	7.4	8.0	32.5	18.6	9.9	23.6	100.0	107	36.9
Montserrado	4.1	5.4	22.1	15.8	15.8	36.9	100.0	1,060	52.0
Nimba	6.4	12.6	37.0	16.9	12.3	14.9	100.0	725	33.6
River Cess	6.2	10.1	34.5	17.9	13.5	17.7	100.0	60	35.5
River Gee	3.4	8.4	23.9	19.1	15.6	29.5	100.0	38	43.3
Sinoe	4.9	9.9	31.3	17.2	18.3	18.3	100.0	103	38.1
Mother's education									
No education	6.1	9.5	27.1	19.3	13.8	24.1	100.0	1,639	39.7
Elementary	5.8	11.1	33.1	17.3	11.9	20.8	100.0	958	36.0
Junior high	5.0	11.3	29.3	18.9	14.4	21.1	100.0	599	38.9
Senior high	4.8	3.9	17.7	16.8	18.9	37.9	100.0	511	53.2
Higher	4.9	0.5	16.6	14.6	4.8	58.6	100.0	132	63.8
Wealth quintile									
Lowest	8.6	12.3	32.5	18.5	12.4	15.6	100.0	1,040	34.8
Second	5.6	10.2	31.4	17.9	13.4	21.4	100.0	899	37.8
Middle	3.6	9.7	25.2	22.4	12.9	26.2	100.0	703	40.9
Fourth	4.4	7.0	21.9	17.0	18.5	31.3	100.0	630	47.9
Highest	4.2	3.5	19.8	14.6	12.8	45.1	100.0	568	55.2
Total	5.6	9.1	27.3	18.2	13.8	25.8	100.0	3,840	40.2

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Liberia DHS 2019-20

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible ¹	
<2	93.0	99.4	99.4	171
2-3	79.6	90.6	97.8	209
4-5	58.5	86.7	91.5	209
6-7	64.0	83.1	89.0	205
8-9	47.4	74.1	84.7	183
10-11	41.8	70.6	78.6	160
12-13	26.7	39.5	49.8	154
14-15	23.5	38.3	45.5	160
16-17	15.0	27.4	35.7	173
18-19	7.4	22.4	27.1	199
20-21	13.9	9.7	19.7	164
22-23	5.1	5.3	8.9	133
24-25	7.6	6.6	10.2	128
26-27	5.8	3.0	7.6	150
28-29	4.2	4.3	7.3	142
30-31	2.7	2.3	5.0	189
32-33	1.0	3.7	4.4	187
34-35	2.2	0.2	2.2	155
Total	29.8	40.0	45.4	3,071
Median	9.3	12.9	14.1	na
Mean	11.0	14.3	16.3	na

Note: Estimates are based on status at the time of the survey.

na = Not applicable

¹ Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility ¹
Mother's age			
15-29	8.3	12.4	13.6
30-49	10.3	14.2	15.6
Residence			
Urban	6.9	13.7	14.2
Greater Monrovia	6.0	(13.5)	(13.6)
Other urban	9.5	14.1	15.1
Rural	10.6	11.6	13.9
Region			
North Western	9.8	11.9	12.8
South Central	6.9	13.0	13.8
South Eastern A	10.7	11.2	12.8
South Eastern B	9.7	9.8	11.8
North Central	10.7	14.2	15.8
County			
Bomi	a	a	a
Bong	10.8	(16.2)	(16.8)
Gbarpolu	(13.9)	(10.4)	(14.2)
Grand Bassa	(9.8)	(9.6)	(11.9)
Grand Cape Mount	(6.6)	(12.4)	(12.4)
Grand Gedeh	(12.1)	(12.5)	(15.2)
Grand Kru	(9.0)	(8.8)	(10.1)
Lofa	(10.1)	(12.4)	(13.0)
Margibi	(7.4)	(11.8)	(13.7)
Maryland	(10.4)	(10.7)	(12.1)
Montserrado	6.4	13.7	13.9
Nimba	10.8	13.6	14.8
River Cess	(8.0)	(7.5)	(8.9)
River Gee	(9.6)	(8.4)	(13.8)
Sinoe	(10.3)	(10.7)	(12.4)
Mother's education			
No education	10.0	12.2	15.4
Elementary	10.1	12.7	14.8
Junior high	7.2	13.3	13.6
Senior high	6.6	13.9	14.0
Higher	a	a	a
Wealth quintile			
Lowest	11.7	11.6	15.2
Second	11.0	12.3	13.7
Middle	8.8	13.9	14.4
Fourth	5.3	12.6	13.2
Highest	6.8	(13.9)	(13.9)
Total	9.3	12.9	14.1

Note: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases.

a = Omitted because less than 50% of women are abstaining

¹ Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Liberia DHS 2019-20

Age	Percentage menopausal ¹	Number of women
30-34	3.1	1,112
35-39	2.4	1,020
40-41	5.2	358
42-43	10.6	282
44-45	17.6	297
46-47	38.8	238
48-49	47.0	220
Total	10.1	3,527

¹ Percentage of women (1) who are not pregnant, (2) who have had a birth in the past 5 years and are not postpartum amenorrheic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Liberia DHS 2019-20

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	2.2	na	na	na	na	74.8	1,657	a
20-24	4.3	34.4	58.6	na	na	25.6	1,506	19.2
25-29	7.6	38.7	59.5	74.2	84.2	8.8	1,375	19.1
30-34	7.5	37.2	60.5	77.0	89.7	3.5	1,112	19.0
35-39	5.1	31.6	55.6	70.5	88.2	1.7	1,020	19.4
40-44	7.5	36.7	59.4	77.0	87.5	0.7	769	19.0
45-49	11.2	41.9	62.2	77.1	84.9	1.1	626	18.8
20-49	6.7	36.4	59.1	na	na	9.0	6,408	19.1
25-49	7.5	37.0	59.2	74.9	86.9	3.9	4,902	19.1

na = Not applicable due to censoring

a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 and age 25-49, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women age	
	20-49	25-49
Residence		
Urban	19.6	19.5
Greater Monrovia	a	19.9
Other urban	19.2	19.1
Rural	18.5	18.6
Region		
North Western	18.7	18.8
South Central	19.6	19.5
South Eastern A	18.6	18.7
South Eastern B	18.8	18.7
North Central	18.8	18.9
County		
Bomi	18.5	18.4
Bong	18.6	18.6
Gbarpolu	18.8	19.1
Grand Bassa	18.4	18.3
Grand Cape Mount	18.9	19.0
Grand Gedeh	18.8	18.9
Grand Kru	18.7	18.9
Lofa	18.6	18.6
Margibi	19.2	19.0
Maryland	18.9	18.8
Montserrado	19.9	19.8
Nimba	19.0	19.3
River Cess	18.6	18.7
River Gee	18.5	18.2
Sinoe	18.6	18.6
Education		
No education	18.6	18.6
Elementary	18.4	18.6
Junior high	19.2	19.2
Senior high	a	19.9
Higher	a	22.3
Wealth quintile		
Lowest	18.6	18.7
Second	18.4	18.6
Middle	18.9	18.9
Fourth	19.3	19.2
Highest	a	20.0
Total	19.1	19.1

a = Omitted because less than 50% of the women had a birth before reaching the beginning of the age group

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of women age 15-19 who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
Age				
15-17	12.5	3.9	16.4	973
15	1.4	2.9	4.2	319
16	9.7	2.3	12.0	366
17	28.5	7.0	35.5	287
18	36.5	7.9	44.4	321
19	49.1	6.1	55.2	363
Residence				
Urban	21.5	4.3	25.8	1,067
Greater Monrovia	17.1	4.5	21.6	555
Other urban	26.2	4.2	30.4	511
Rural	31.8	6.7	38.5	590
Region				
North Western	30.2	6.9	37.1	134
South Central	21.6	4.5	26.1	859
South Eastern A	28.1	7.7	35.8	89
South Eastern B	20.8	4.7	25.4	104
North Central	30.6	5.6	36.2	471
County				
Bomi	22.4	8.4	30.9	56
Bong	31.7	5.5	37.1	164
Gbarpolu	44.5	3.8	48.3	19
Grand Bassa	37.8	1.5	39.4	110
Grand Cape Mount	32.9	6.4	39.3	59
Grand Gedeh	23.4	3.8	27.2	32
Grand Kru	26.4	6.4	32.8	34
Lofa	26.0	7.7	33.7	148
Margibi	27.5	6.8	34.3	94
Maryland	13.8	5.1	18.9	48
Montserrado	18.1	4.6	22.7	656
Nimba	33.9	3.6	37.5	158
River Cess	39.5	15.6	55.0	22
River Gee	27.1	1.1	28.1	22
Sinoe	25.4	6.4	31.7	35
Education				
No education	38.4	8.1	46.5	172
Elementary	26.4	4.1	30.5	665
Junior high	23.9	6.5	30.4	556
Senior high	17.0	3.3	20.2	251
Higher	*	*	*	13
Wealth quintile				
Lowest	35.8	6.2	42.0	225
Second	34.0	6.0	40.1	276
Middle	33.8	6.5	40.3	362
Fourth	22.8	5.8	28.6	401
Highest	7.3	2.2	9.5	393
Total	25.2	5.2	30.3	1,657

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 Sexual and reproductive health behaviors before age 15

Among women and men age 15-19, percentage who initiated sexual intercourse, were married, and had a live birth/fathered a child before age 15, according to sex, Liberia DHS 2019-20

Sex	Had sexual intercourse before age 15	Married before age 15	Gave birth/fathered a child before age 15	Number
Women	18.5	2.7	2.2	1,657
Men	9.4	0.1	0.0	876

FERTILITY PREFERENCES

Key Findings

- **Desire for another child:** Twenty-two percent of currently married women age 15-49 want to have another child within 2 years, and another 22% want to wait at least 2 years before having another child. Among currently married men age 15-49, 8% want to have another child within 2 years, and 33% want to wait at least 2 years.
- **Limiting childbearing:** Overall, 34% of currently married women and 24% of currently married men do not want another child or are sterilized.
- **Unwanted births:** Of all births in the past 5 years and current pregnancies, 60% were wanted at the time of conception, 33% were mistimed, and 8% were not wanted.
- **Wanted fertility:** The total wanted fertility rate (3.7) is lower than the actual fertility rate (4.2).

Information on fertility preferences can help family planning program planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future.

This chapter presents information on whether and when married women and men want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilized are assumed not to want any more children.

Sample: Currently married women and men age 15-49

Fifty-four percent of currently married women age 15-49 want to have another child; 22% of these women want to have another child within 2 years, another 22% want to wait at least 2 years, and 9% are undecided about when they want to have another child. Thirty-four percent of currently married women want no more children or are sterilized. Overall, 66% of currently married men age 15-49 want to have another child; 8% want to have another child soon, 33% want to wait at least 2 years, and 25% are undecided about when they want to have another child. Twenty-four percent of men want no more children or are sterilized (**Table 6.1**).

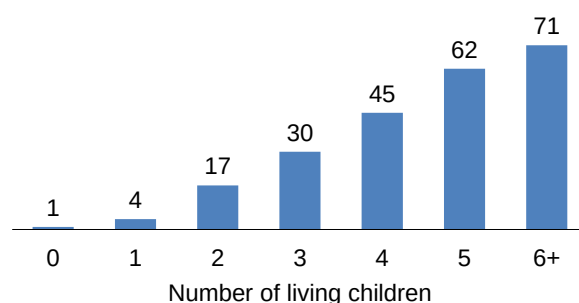
Trends: The percentage of currently married men who want to have another child soon declined from 32% in 2007 to 8% in 2019-20, while the percentage who want more children but are undecided about when increased from 3% to 25%. Among currently married women, the percentage who want to have more children soon increased slightly from 20% in 2007 to 22% in 2019-20, while the percentage who want more children but are undecided about when increased from 3% to 9%.

Patterns by background characteristics

- The more children a woman already has, the more likely she is to want no more children. Over 7 in 10 (71%) currently married women with six or more children want no more children or are sterilized, as compared with 4% of women who have one child (**Table 6.2.1** and **Figure 6.1**).
- The percentage of currently married women who want to limit childbearing varies geographically, from 27% in South Eastern A to 44% in North Western (**Table 6.2.1**).
- There are large differences in desire to limit childbearing by education. Forty-one percent of currently married women with no education want no more children, as compared with 19% of those with a senior high education.

Figure 6.1 Desire to limit childbearing by number of living children

Percentage of currently married women age 15-49 who want no more children



6.2 IDEAL FAMILY SIZE

Ideal family size

Respondents with no children were asked “If you could choose exactly the number of children to have in your whole life, how many would that be?”

Respondents who had children were asked “If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?”

Sample: Women and men age 15-49

Women want to have slightly fewer children than men (4.6 children and 4.9 children, respectively). Similarly, among those who are currently married, the mean ideal number of children is slightly higher among men (5.7 children) than among women (5.1 children) (**Table 6.3** and **Figure 6.2**).

Trends: From 1986 to 2019-20, the ideal number of children steadily decreased from 6.0 to 4.6 among all women and from 6.5 to 5.1 among currently married women. Similarly, between 2007 and 2019-20, the ideal number of children declined from 5.6 to 4.9 among all men and from 6.3 to 5.7 among currently married men.

Patterns by background characteristics

- The more children respondents already have, the more children they consider ideal. Women who have no children or one child consider 3.9 children to be ideal on average. In contrast, women with six or more children consider 6.7 children to be ideal (**Table 6.3** and **Figure 6.3**). Among men and women with the same number of children, men generally consider a slightly higher number of children to be ideal than women.
- Older women want larger families. Ideal family size increases from 3.9 children among women age 15-19 to 6.0 children among women age 45-49 (**Table 6.4**).
- Ideal family sizes vary by residence. Women who live in rural areas want 5.3 children, while women in urban areas want 4.2 children.
- Ideal number of children decreases with increasing education and wealth. Women with no education want 5.7 children and women with a higher education want 3.4 children. Similarly, women in the lowest wealth quintile want 5.5 children and women in the highest quintile want 3.9 children, a difference of less than two children.

6.3 FERTILITY PLANNING STATUS

Planning status of births/pregnancies

Women reported whether their births/pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

According to mothers' reports, 60% of births or current pregnancies were wanted, and 33% were mistimed. Just under 1 in 10 (8%) births or current pregnancies were not wanted at all (**Table 6.5**).

Figure 6.2 Ideal family size

Mean ideal number of children among women and men age 15-49

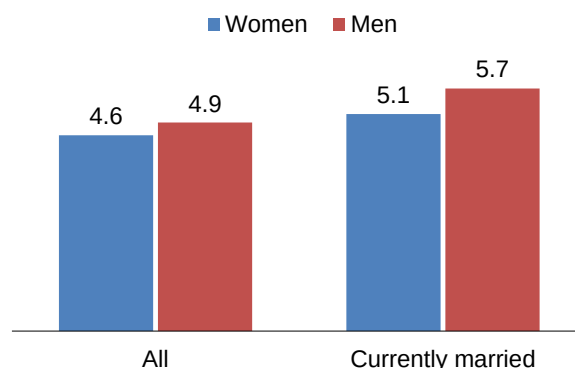
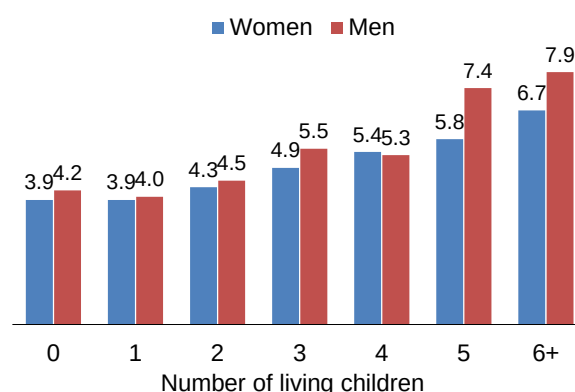


Figure 6.3 Ideal family size by number of living children

Mean ideal number of children



Trends: The proportion of births or current pregnancies wanted at the time of conception declined from 68% in 2007 to 60% in 2019-20. Over the same period, the proportion of births or current pregnancies that were mistimed increased from 27% to 33% and the proportion of unwanted births or pregnancies increased from 4% to 8%.

Patterns by background characteristics

- The more children a woman has, the more likely it is that her most recent birth was unwanted. Fourth- or higher-order births (14%) were more likely than first-order births (2%) to be described as unwanted (Table 6.5).
- Births to women age 25-29 (67%) and age 30-34 (68%) were most likely to be described as wanted.
- The proportion of births or current pregnancies that are mistimed decreases with increasing mother's age, from 53% among women less than age 20 to 16% among women age 40-44.

6.4 WANTED FERTILITY RATES

Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

Wanted birth

Any birth fewer than or equal to the number of children a woman reported as her ideal number.

Wanted fertility rate

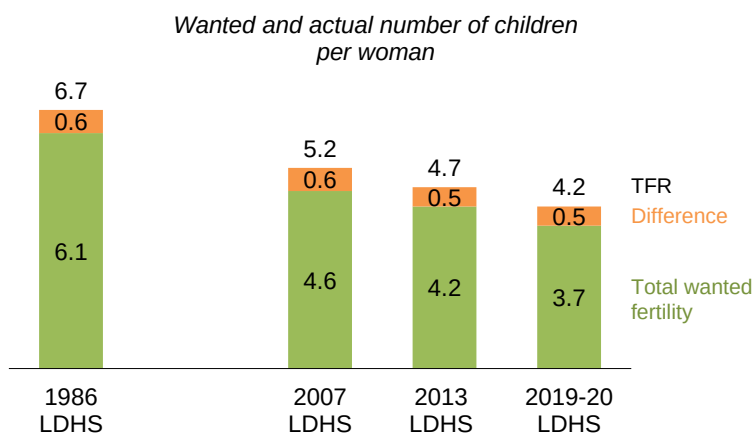
The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.

Sample: Women age 15-49

The wanted fertility rate reflects the level of fertility that would result if all unwanted births were prevented. The total wanted fertility rate in Liberia is 3.7 children, as compared with the actual total fertility rate of 4.2 children (Table 6.6).

Trends: The total wanted fertility rate in Liberia has decreased steadily over time, from 6.1 children in 1986 to 4.6 children in 2007 and 3.7 children in 2019-20. However, the gap between wanted and actual fertility has remained relatively constant (0.6 in 1986 and 0.5 in 2019-20) (Figure 6.4).

Figure 6.4 Trends in wanted and actual fertility



Patterns by background characteristics

- The total wanted fertility rate is consistently lower than the actual total fertility rate, but the size of the gap varies by women's background characteristics (**Table 6.6**).
- Women in rural areas want more children (4.8 children) than those in urban areas (3.1 children). The gap between the total fertility rate and the total wanted fertility rate is larger in rural areas (0.7) than in urban areas (0.3).
- Both the wanted fertility rate and the total fertility rate decrease with increasing education. The wanted fertility rate declines from 4.7 among women with no education to 1.9 among women with a higher education, while the total fertility rate decreases from 5.3 among women with no education to 2.0 among those with a higher education.
- Similarly, wanted fertility and total fertility decrease with increasing household wealth. The wanted fertility rate decreases from 5.4 in the lowest wealth quintile to 2.6 in the highest wealth quintile, while the total fertility rate decreases from 6.2 in the lowest quintile to 2.8 in the highest quintile.

LIST OF TABLES

For more information on fertility preferences, see the following tables:

- **Table 6.1** **Fertility preferences according to number of living children**
- **Table 6.2.1** **Desire to limit childbearing: Women**
- **Table 6.2.2** **Desire to limit childbearing: Men**
- **Table 6.3** **Ideal number of children according to number of living children**
- **Table 6.4** **Mean ideal number of children according to background characteristics**
- **Table 6.5** **Fertility planning status**
- **Table 6.6** **Wanted fertility rates**

Table 6.1 Fertility preferences according to number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Liberia DHS 2019-20

Desire for children	Number of living children ¹							Total 15-49	Total 15-59
	0	1	2	3	4	5	6+		
WOMEN									
Have another soon ²	70.9	33.1	27.9	23.2	14.7	10.5	4.7	22.3	na
Have another later ³	15.6	41.8	29.6	25.7	17.0	10.1	6.4	22.3	na
Have another, undecided when	5.4	17.0	14.2	8.8	8.0	1.9	3.4	9.2	na
Undecided	1.7	3.6	9.2	9.4	12.1	11.6	10.4	8.9	na
Want no more	1.1	4.2	16.6	29.6	44.6	61.4	69.9	33.9	na
Sterilized ⁴	0.0	0.0	0.2	0.3	0.0	0.1	0.9	0.2	na
Declared infecund	5.4	0.4	2.5	3.0	3.6	4.4	4.3	3.1	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
Number	197	630	850	777	609	549	604	4,216	na
MEN ⁵									
Have another soon ²	12.7	12.9	11.1	7.8	6.6	6.5	4.7	8.4	8.4
Have another later ³	21.7	50.0	36.8	37.7	27.0	30.1	20.9	32.9	28.8
Have another, undecided when	46.8	30.9	29.8	24.2	24.7	15.6	15.8	24.6	24.2
Undecided	18.1	4.0	8.9	9.0	6.4	13.2	9.6	8.9	8.6
Want no more	0.7	2.3	11.3	21.3	31.7	34.1	47.8	24.0	28.5
Sterilized ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Declared infecund	0.0	0.0	2.1	0.1	3.6	0.4	1.3	1.2	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	80	262	355	367	258	207	377	1,906	2,264

na = Not applicable

¹ The number of living children includes the current pregnancy.

² Wants next birth within 2 years

³ Wants to delay next birth for 2 or more years

⁴ Includes both female and male sterilization

⁵ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	0.8	4.4	18.8	31.5	48.2	71.1	72.4	31.2
Greater Monrovia	(0.0)	5.8	23.4	34.1	(59.1)	(89.0)	*	31.1
Other urban	2.0	2.9	11.2	28.4	39.8	59.9	76.3	31.3
Rural	1.7	3.9	13.0	27.2	41.3	53.9	70.1	37.6
Region								
North Western	*	6.7	15.7	38.6	58.3	57.0	76.2	44.0
South Central	1.0	4.7	23.3	32.9	53.5	72.3	70.0	33.6
South Eastern A	(0.0)	1.9	4.2	18.0	27.4	37.6	65.0	26.7
South Eastern B	(0.8)	3.6	10.3	19.4	42.8	47.5	65.3	33.2
North Central	(2.0)	3.5	8.6	27.3	36.2	60.3	72.1	33.8
Education								
No education	1.9	7.0	19.0	26.8	44.6	58.7	67.7	41.2
Elementary	(0.0)	4.3	9.2	28.6	41.1	59.3	73.9	33.6
Junior high	(2.5)	5.0	26.2	27.7	54.6	(76.0)	87.5	33.8
Senior high	(0.2)	2.1	12.6	36.1	(32.3)	(79.3)	*	19.4
Higher	*	(0.0)	(21.1)	(40.8)	*	*	*	24.3
Wealth quintile								
Lowest	(2.7)	2.9	10.6	29.0	41.9	50.5	73.1	39.0
Second	(0.0)	3.9	15.4	27.9	38.6	61.5	73.2	38.9
Middle	(0.0)	5.7	11.3	27.9	44.8	61.1	70.6	33.1
Fourth	(0.0)	5.7	24.7	23.5	47.1	73.1	(47.7)	29.4
Highest	(2.1)	2.5	18.2	38.0	57.3	(79.1)	*	28.7
Total	1.1	4.2	16.7	29.9	44.6	61.5	70.7	34.2

Notes: Women who have been sterilized or whose husband has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ The number of living children includes the current pregnancy.

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	(0.0)	0.6	12.7	24.5	22.7	38.5	44.5	20.5
Greater Monrovia	*	(0.0)	(9.5)	(27.3)	*	*	*	19.4
Other urban	*	1.4	19.6	18.9	26.9	(22.2)	42.6	22.0
Rural	(1.7)	5.4	8.9	16.3	39.6	30.3	49.5	27.9
Region								
North Western	*	(12.2)	10.6	17.8	(54.8)	(19.1)	50.3	28.7
South Central	*	0.0	8.7	24.6	28.7	42.9	49.2	21.3
South Eastern A	*	(3.1)	7.8	21.0	(28.9)	(16.2)	41.2	21.4
South Eastern B	*	(0.6)	10.8	15.3	(23.2)	(25.7)	43.8	22.0
North Central	*	4.9	18.2	16.6	30.6	34.4	48.5	27.6
Education								
No education	*	(3.5)	4.7	18.9	29.3	24.9	49.8	25.4
Elementary	*	(5.1)	16.0	8.1	32.4	31.2	38.1	23.1
Junior high	*	(5.6)	7.1	25.6	28.8	(27.3)	39.6	22.2
Senior high	*	0.8	11.5	22.7	37.1	45.3	55.6	24.7
Higher	*	*	*	(27.6)	(25.4)	*	*	23.5
Wealth quintile								
Lowest	*	5.9	13.0	12.1	35.3	19.9	46.2	26.1
Second	*	7.1	11.4	16.1	35.6	36.2	49.2	27.1
Middle	*	(0.0)	10.7	21.3	(30.8)	(34.6)	45.5	23.2
Fourth	*	(0.3)	(18.8)	(17.1)	(18.4)	(39.1)	(43.1)	19.5
Highest	*	(0.0)	(4.6)	31.8	(35.3)	*	(60.0)	23.4
Total 15-49	0.7	2.3	11.3	21.3	31.7	34.1	47.8	24.0
50-59	*	*	*	*	55.5	53.9	57.3	52.5
Total 15-59	0.7	2.7	12.4	21.0	35.4	37.9	51.3	28.5

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.3 Ideal number of children according to number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Liberia DHS 2019-20

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
WOMEN ¹								
0	0.4	0.5	0.6	0.3	0.6	0.4	1.8	0.6
1	1.4	0.4	0.8	0.4	0.2	0.5	0.1	0.6
2	15.9	12.9	8.3	4.1	3.3	3.2	1.9	8.9
3	19.8	24.0	14.0	10.7	5.7	4.8	2.4	14.4
4	37.5	39.4	42.3	30.2	29.0	14.0	14.8	33.0
5	9.9	8.3	12.4	21.2	15.3	19.2	8.6	12.6
6+	11.6	12.0	17.8	27.1	38.2	48.7	54.0	24.1
Non-numeric responses	3.5	2.5	3.8	6.0	7.6	9.1	16.5	5.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,760	1,718	1,366	1,067	800	647	707	8,065
Mean ideal number of children for: ²								
All women	3.9	3.9	4.3	4.9	5.4	5.8	6.7	4.6
Number of women	1,699	1,675	1,313	1,003	739	588	591	7,608
Currently married women	4.8	4.2	4.4	4.9	5.5	5.8	6.7	5.1
Number of currently married women	193	606	813	734	558	499	505	3,909
MEN ³								
0	0.4	0.0	0.9	0.5	0.5	1.2	2.3	0.7
1	1.3	1.8	0.1	0.4	0.0	0.2	0.2	0.9
2	17.9	16.7	6.1	6.1	5.5	0.7	3.4	11.7
3	18.3	18.2	15.9	6.2	6.3	5.2	4.1	13.6
4	29.5	36.7	40.4	34.7	24.8	17.2	15.5	29.7
5	12.4	7.8	13.0	22.7	20.5	13.7	7.5	13.2
6+	15.2	13.3	20.1	23.5	31.9	54.1	52.9	23.8
Non-numeric responses	4.9	5.5	3.6	5.9	10.5	7.6	14.1	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,585	475	457	401	285	224	395	3,821
Mean ideal number of children for: ²								
All men	4.2	4.0	4.5	5.5	5.3	7.4	7.9	4.9
Number of men	1,507	449	440	377	255	207	339	3,574
Currently married men	4.3	4.2	4.5	5.5	5.4	7.3	8.0	5.7
Number of currently married men	74	247	341	344	230	196	322	1,754
Mean ideal number of children for men 15-59: ²								
All men	4.2	4.0	4.5	5.4	5.3	7.3	7.6	5.1
Number of men	1,514	460	461	404	315	251	526	3,930
Currently married men	4.3	4.1	4.5	5.5	5.4	7.2	7.7	5.8
Number of currently married men	76	252	355	364	273	232	493	2,046

¹ The number of living children includes the current pregnancy.

² Means are calculated excluding respondents who gave non-numeric responses.

³ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 Mean ideal number of children according to background characteristics

Mean ideal number of children for all women age 15-49, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Mean	Number of women ¹
Age		
15-19	3.9	1,597
20-24	4.2	1,459
25-29	4.3	1,310
30-34	4.7	1,063
35-39	5.3	936
40-44	5.4	703
45-49	6.0	540
Residence		
Urban	4.2	4,829
Greater Monrovia	3.9	2,780
Other urban	4.6	2,050
Rural	5.3	2,779
Region		
North Western	4.8	591
South Central	4.2	3,920
South Eastern A	5.5	398
South Eastern B	4.9	409
North Central	5.1	2,290
County		
Bomi	4.6	238
Bong	4.5	710
Gbarpolu	5.0	103
Grand Bassa	5.5	400
Grand Cape Mount	5.0	250
Grand Gedeh	5.4	158
Grand Kru	5.3	128
Lofa	5.1	621
Margibi	4.5	420
Maryland	4.7	203
Montserrado	4.0	3,100
Nimba	5.5	958
River Cess	5.5	94
River Gee	4.9	78
Sinoe	5.8	146
Education		
No education	5.7	2,216
Elementary	4.7	1,788
Junior high	4.2	1,392
Senior high	3.9	1,740
Higher	3.4	473
Wealth quintile		
Lowest	5.5	1,250
Second	5.2	1,317
Middle	4.8	1,432
Fourth	4.2	1,757
Highest	3.9	1,851
Total	4.6	7,608

¹ Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Liberia DHS 2019-20

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
Birth order					
1	50.4	47.8	1.8	100.0	1,569
2	61.6	33.8	4.6	100.0	1,137
3	67.2	25.9	6.9	100.0	923
4+	62.0	24.1	13.9	100.0	2,196
Mother's age at birth					
<20	44.1	53.2	2.7	100.0	1,224
20-24	59.3	36.1	4.6	100.0	1,489
25-29	66.9	28.0	5.1	100.0	1,291
30-34	68.0	20.8	11.2	100.0	916
35-39	62.2	19.1	18.7	100.0	616
40-44	63.2	16.1	20.7	100.0	261
45-49	(59.5)	(2.3)	(38.1)	100.0	27
Total	59.6	32.6	7.7	100.0	5,824

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	3.1	3.4
Greater Monrovia	2.6	2.9
Other urban	3.7	4.0
Rural	4.8	5.5
Region		
North Western	4.2	5.2
South Central	3.1	3.4
South Eastern A	4.7	5.1
South Eastern B	4.1	4.5
North Central	4.5	5.0
County		
Bomi	3.4	4.2
Bong	4.2	4.8
Gbarpolu	5.0	6.1
Grand Bassa	5.3	5.9
Grand Cape Mount	4.9	5.9
Grand Gedeh	4.5	4.9
Grand Kru	4.9	5.4
Lofa	3.8	4.1
Margibi	3.3	3.8
Maryland	3.8	4.2
Montserrado	2.7	3.0
Nimba	5.2	5.7
River Cess	4.8	5.3
River Gee	3.6	4.0
Sinoe	5.0	5.4
Education		
No education	4.7	5.3
Elementary	4.6	5.1
Junior high	3.8	4.4
Senior high	2.4	2.6
Higher	1.9	2.0
Wealth quintile		
Lowest	5.4	6.2
Second	4.7	5.3
Middle	3.7	4.2
Fourth	3.0	3.3
Highest	2.6	2.8
Total	3.7	4.2

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING

Key Findings

- **Current contraceptive use:** 24% of married women and 45% of sexually active unmarried women are currently using a modern method of contraception. Injectables, implants, and pills are the most commonly used methods.
- **Trends in contraceptive use:** Use of modern methods increased from 19% in 2013 to 24% in 2019-20.
- **Demand for family planning:** 58% of currently married women have a demand for family planning, an increase from 51% in 2013.
- **Unmet need for family planning:** One-third of married women have an unmet need for family planning, 21% for spacing and 13% for limiting.
- **Contraceptive discontinuation:** Two of every five times (41%) that women began using a contraceptive method in the 5 years before the survey, they discontinued the method within 12 months. The most common reason for discontinuation was side effects/health concerns.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on knowledge of contraceptive methods, use and sources of contraceptive methods, informed choice of methods, unmet need for family planning, and rates and reasons for discontinuing contraceptives. It also examines the potential demand for family planning and how much contact nonusers have with family planning providers.

In Liberia, efforts have been undertaken to ensure that those in need are able to make informed and timely family planning choices. To that end, key messages regarding the availability and accessibility of family planning services have been developed and disseminated using mass media, as well as through health education sessions and community forums (MOH&SW 2010).

Additionally, steps have been taken to improve the counseling and provision of family planning services from providers. For instance, the Family Planning Services Provision Curriculum was developed to train providers in offering comprehensive, quality family planning services, without undue interference or bias. Furthermore, job aids that enhance the providers' counseling skills, such as the eligibility wheel and referral pathway cards, have been made available.

Liberia, with two-thirds of the population below age 25, is accelerating the integration of family planning services at all levels of the health care delivery system. To that end, a market approach is being implemented to improve access for marginalized women and girls. Specifically, the government is configuring supply chain systems are to be more efficient and effective in delivering safe health care commodities with the goal of increasing uptake of family planning methods (FP2020 2020).

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

Almost all women and men age 15-49 in Liberia know at least one modern method of contraception. The pill, injectables, implants, and male condoms are the most well-known methods (**Table 7.1**). Fewer than half of women and men know about female sterilization, and only 19% of all women and 28% of all men know about male sterilization. Forty percent of women know about emergency contraception. About three quarters of women and men (76%) know a traditional method of contraception; withdrawal is the best-known traditional method. Overall, women know an average of 7.9 contraceptive methods, while men know an average of 7.1 methods. For more information on contraceptive knowledge by method and by background characteristics, see **Tables 7.1** and **7.2**.

Contraceptive prevalence rate

Percentage of women who use any contraceptive method.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

The contraceptive prevalence rate (CPR) is 25% among current married women age 15-49. Most currently married women using contraception use a modern method (24%), while 1% use a traditional method. Contraceptive use is higher among sexually active unmarried women: 45% use a modern method of contraception (**Table 7.3**).

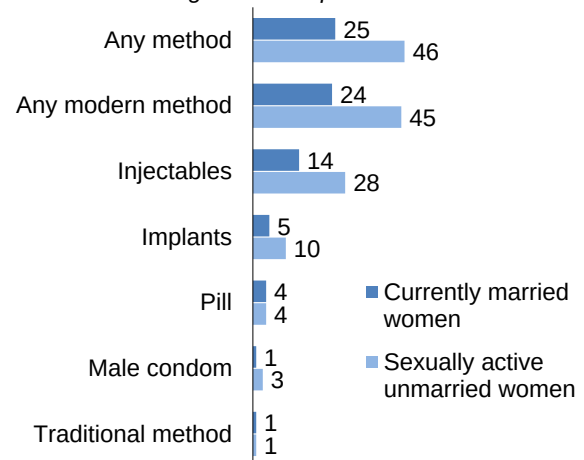
Modern methods

Include male and female sterilization, injectables, intrauterine devices (IUDs), contraceptive pills, implants, female and male condoms, the standard days method, the lactational amenorrhea method, and emergency contraception.

The most commonly used contraceptive methods among married women are injectables (14%), implants (5%), and the pill (4%) (**Figure 7.1**). Sexually active unmarried women also most commonly use injectables (28%), implants (10%) and the pill (4%); 3% of sexually active unmarried women use male condoms (**Table 7.4**).

Figure 7.1 Contraceptive use

Percentage of women age 15-49 currently using a contraceptive method



Trends: Contraceptive use among married women has increased steadily over time; only 6% of married women were using a modern method of contraception in 1986, as compared with 24% in 2019-20 (**Figure 7.2**). Use of traditional methods has remained steady at about 1%.

Patterns by background characteristics

- Modern method use is highest among married women with a junior high education (32%) and lowest among women with no education (20%) (**Figure 7.3**).
- By county, modern method use among married women ranges from 17% in Margibi to 45% in Maryland (**Figure 7.4**).
- Contraceptive use is highest among women with five or more living children (27%) and lowest among those with no living children (11%) (**Table 7.4**).

Figure 7.4 Modern contraceptive use by county

Percentage of currently married women age 15-49

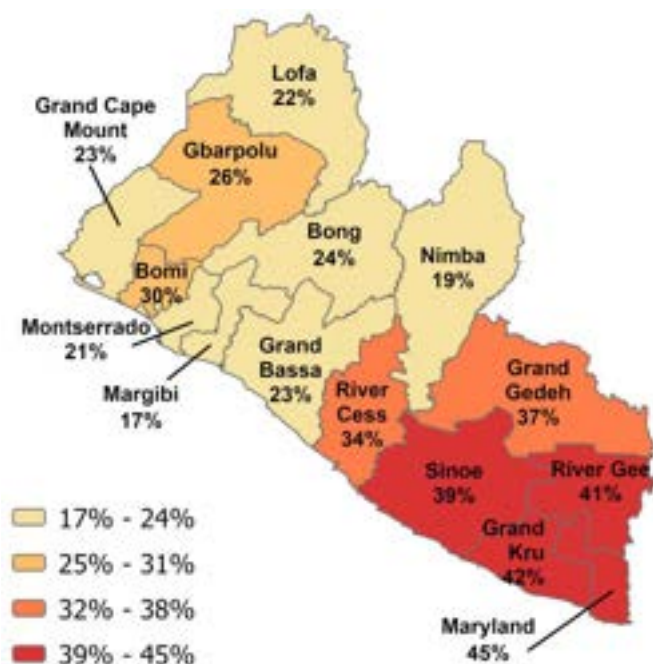


Figure 7.2 Trends in contraceptive use

Percentage of currently married women currently using a contraceptive method

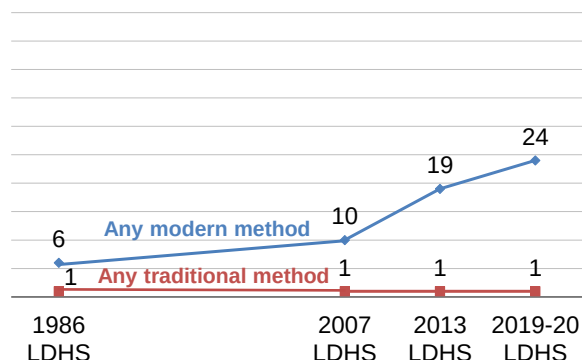
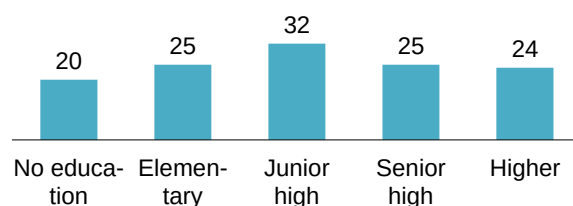


Figure 7.3 Use of modern methods by education

Percentage of currently married women age 15-49



Knowledge of the Fertile Period

Among women using the rhythm method, only 11% correctly identified the fertile period to be halfway between two menstrual periods. More than half of women using the rhythm method incorrectly identified the fertile period as being right after a woman's menstrual period has ended (57%). However, these results should be interpreted with caution given that they are based on a small number of unweighted cases (**Table 7.5**). Among all women, 12% had correct knowledge of the fertile period (**Table 7.6**).

7.2 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives

The place where the modern method currently being used was obtained the last time it was acquired.

Sample: Women age 15-49 currently using a modern contraceptive method

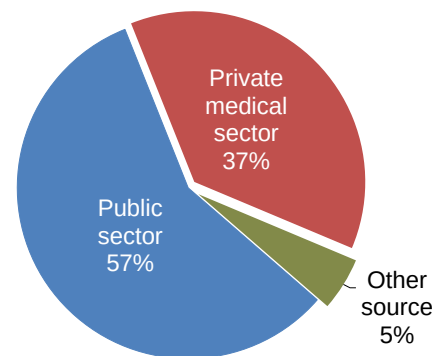
The public sector provides 57% of modern contraceptives in Liberia, to users, while the private sector provides 37% (**Figure 7.5**). The primary source varies by method; the majority of implants (81%) and injectables (56%) are provided by the public sector, while the majority of male condoms (71%) are provided by the private sector. Similar percentages of pill users obtained their method from public and private sources (45% and 43%, respectively) (**Table 7.7**).

Within the public sector, government hospitals and health clinics are the most common sources for injectables, implants, and pills. Private pharmacies are the largest supplier of male condoms (68%) and also provide significant percentages of pills (36%) and injectables (23%). Other sources, such as shops/markets, friends, and relatives, provide 11% of pills and 18% of condoms.

Among pill users, 23% use the social marketing brand Microlut, 74% use Microgynon, 2% use Planned Parenthood of Liberia pills, and 1% use other brands (**Table 7.8**).

Figure 7.5 Source of modern contraceptive methods

Percent distribution of current users of modern methods age 15-49 by most recent source of method



Note: Figures may not add up to 100% due to rounding.

7.3 INFORMED CHOICE

Informed choice

Informed choice indicates that women were informed about their method's side effects, about what to do if they experience side effects, and about other methods they could use.

Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Almost 7 in 10 (69%) modern method users were informed about side effects or problems with their method. This information was most frequently provided to women using implants (84%) and least frequently provided to pill users (61%). Slightly fewer women were informed about what to do if they experienced side effects (63%) or informed by a health or family planning worker of other methods that could be used (67%). Overall, 55% of modern method users were provided with all three types of information (**Table 7.9**).

Women visiting public sector facilities were more likely to receive all three types of information than women visiting private facilities (63% versus 43%).

7.4 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months.

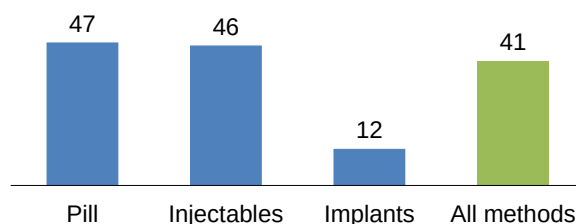
Sample: Episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

Overall, the 12-month contraceptive discontinuation rate was 41% for the 5 years before the survey (**Table 7.10**). The contraceptive discontinuation rate was highest for pills (47%) and injectables (46%); only 12% of implant users discontinued their method within 12 months (**Figure 7.6**).

The most common reason for discontinuation was side effects/health concerns (46%), followed by desire to become pregnant (18%) (**Table 7.11**). Users of implants and injectables were particularly likely to cite concerns about side effects and health (61% and 55%, respectively).

Figure 7.6 Contraceptive discontinuation rates

Percentage of contraceptive episodes discontinued within 12 months among women age 15-49



7.5 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrheic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrheic and their last birth in the last 2 years was mistimed or unwanted.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

Demand for family planning:	Unmet need for family planning + current contraceptive use (any method)
Proportion of demand satisfied:	$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$
Proportion of demand satisfied by modern methods:	$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$

Almost 6 in 10 (58%) married women have a demand for family planning; 37% want to space births and 22% want to limit births. Twenty-five percent of family planning demand is being satisfied. However, 33% of women have an unmet need for family planning (21% for spacing and 13% for limiting) (**Table 7.12.1**). If all currently married women who say they want to space or limit their children were to use a family planning method, the contraceptive prevalence rate would increase from 25% to 58%.

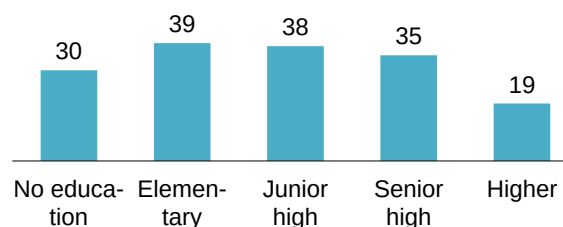
Trends: Total demand for family planning has increased over time, from 47% in 2007 to 58% in 2019-20. After a decline from 2007 to 2013, unmet need has since increased slightly (from 31% in 2013 to 33% in 2019-20). Currently, 41% of the demand for family planning is satisfied by modern methods, up from 22% in 2007.

Patterns by background characteristics

- Unmet need generally decreases with age. Almost half (47%) of women age 15-19 have an unmet need for family planning, primarily for spacing. Comparatively, only 16% of women age 45-49 have an unmet need, primarily for limiting (**Table 7.12.1**).
- Unmet need for family planning is lowest among women with a higher education (19%) and highest among those with only an elementary or junior high education (39% and 38%, respectively) (**Figure 7.7**).
- Unmet need for family planning varies by county, from a low of 18% in Grand Kru to a high of 43% in Margibi.

Figure 7.7 Unmet need for family planning by education

Percentage of currently married women age 15-49 with unmet need



7.5.1 Decision Making about Family Planning

Among currently married women who are current users of family planning, 48% reported that they and their husband jointly decided to use family planning. Thirty-eight percent of women said that it was mainly their own decision, while 13% said that it was mainly their husband's decision. Among women who are nonusers, more than half (52%) reported that they mainly made the decision not to use family planning on their own; 31% made the decision jointly with their husband (**Table 7.13**).

7.5.2 Future Use of Contraception

Among currently married women who are not currently using contraception, 57% say they do not intend to use contraception in the future. However, 38% of nonusers do intend to use a method in the future, and 6% are unsure. Intention to use family planning in the future is lowest among women with no living children (22%) and then quickly climbs to over 35% among women with one or more children (**Table 7.14**).

7.5.3 Exposure to Family Planning Messages in the Media

Women and men interviewed in the 2019-20 LDHS were asked about family planning messages they may have heard or seen in the media (radio, television, newspaper/magazine, or mobile phone). The radio is the most frequent source of exposure to family planning messages among both women (32%) and men (44%). Other media channels were infrequently cited. In all, 67% of women and 51% of men did not hear or see family planning messages on any of the four specified media sources in the months before the survey (**Table 7.15**).

7.6 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey with a fieldworker or during a visit to a health facility.

Sample: Women age 15-49 who are not currently using any contraceptive methods

Among women age 15-49 who are not using contraception, almost two-thirds (65%) did not discuss family planning with a fieldworker or at a health facility in the year before the survey. Twenty-three percent of women visited a health facility but did not discuss family planning during the visit, while 32% of women who visited a health facility discussed family planning. Only 7% were visited by a fieldworker who discussed family planning (**Table 7.16**).

Patterns by background characteristics

- Contact of nonusers with family planning providers is higher in rural areas than urban areas: 43% of women in rural areas discussed family planning with a fieldworker or provider, as compared with 30% of women in urban areas.
- Contact between nonusers and family planning providers ranges from 23% in Margibi to 63% in Maryland and River Gee.
- Nonusers with a higher education and those from the wealthiest households have the least contact with family providers. Only 23% of women with a higher education discussed family planning with a provider in the year before the survey, as compared with over 30% of women from all other educational groups. Similarly, 24% of women from the wealthiest households had contact with a family planning provider, compared with 43% of women from the poorest households.

LIST OF TABLES

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Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents and sexually active unmarried respondents age 15-49 who have heard of any contraceptive method, according to specific method, Liberia DHS 2019-20

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried women ¹	All men	Currently married men	Sexually active unmarried men ¹
Any method	98.0	98.7	99.6	97.3	99.9	99.8
Any modern method	98.0	98.7	99.6	97.3	99.9	99.8
Female sterilization	42.9	45.0	44.0	42.7	53.3	43.0
Male sterilization	18.9	19.2	19.7	27.5	34.2	28.2
Pill	95.9	97.1	98.1	84.1	92.5	86.2
IUD	29.0	31.1	27.7	25.5	29.3	30.5
Injectables	95.8	96.5	98.1	83.7	90.6	90.7
Implants	95.2	96.3	97.0	81.6	89.7	87.1
Male condom	95.1	96.4	96.8	96.3	99.4	99.4
Female condom	64.0	65.4	71.1	66.0	75.5	70.3
Emergency contraception	40.2	40.5	48.0	28.1	34.7	34.9
Standard days method (SDM)	36.8	39.4	36.2	27.4	36.7	28.6
Lactational amenorrhea (LAM)	41.7	48.4	37.0	18.2	24.3	15.7
Other modern method	1.3	1.6	1.5	3.8	2.7	8.3
Any traditional method	76.4	78.9	84.8	75.8	86.4	88.4
Rhythm	58.5	59.8	65.9	52.7	62.3	61.5
Withdrawal	67.5	69.6	76.9	71.5	83.6	85.4
Other traditional method	2.7	3.3	1.6	3.0	4.7	1.6
Mean number of methods known by respondents 15-49	7.9	8.1	8.2	7.1	8.1	7.7
Number of respondents	8,065	4,216	1,402	3,821	1,906	718
Mean number of methods known by respondents 15-59	na	na	na	7.2	8.1	7.7
Number of respondents	na	na	na	4,249	2,264	734

na = Not applicable

¹ Had last sexual intercourse within 30 days preceding the survey

Table 7.2 Knowledge of contraceptive methods according to background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, Liberia DHS 2019-20

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method ¹	Number	Heard of any method	Heard of any modern method ¹	Number
Age						
15-19	98.6	98.6	204	*	*	12
20-24	97.7	97.7	625	100.0	100.0	141
25-29	99.0	99.0	788	99.9	99.9	308
30-34	98.4	98.4	819	99.8	99.8	367
35-39	99.1	99.1	785	100.0	100.0	429
40-44	99.2	99.2	545	99.7	99.7	357
45-49	99.0	99.0	449	100.0	100.0	293
Residence						
Urban	98.7	98.7	2,268	100.0	100.0	1,004
Greater Monrovia	98.5	98.5	1,150	100.0	100.0	583
Other urban	99.0	99.0	1,118	100.0	100.0	422
Rural	98.7	98.7	1,947	99.8	99.8	901
Region						
North Western	97.8	97.8	400	99.5	99.5	175
South Central	98.8	98.8	1,801	100.0	100.0	878
South Eastern A	99.5	99.5	296	99.9	99.9	148
South Eastern B	99.7	99.7	254	99.6	99.6	109
North Central	98.6	98.6	1,464	99.9	99.9	596
County						
Bomi	100.0	100.0	148	100.0	100.0	63
Bong	99.0	99.0	411	100.0	100.0	169
Gbarpolu	100.0	100.0	80	100.0	100.0	37
Grand Bassa	100.0	100.0	253	100.0	100.0	111
Grand Cape Mount	94.8	94.8	172	98.7	98.7	75
Grand Gedeh	98.8	98.8	116	99.7	99.7	55
Grand Kru	99.2	99.2	79	99.2	99.2	37
Lofa	99.3	99.3	380	100.0	100.0	154
Margibi	97.8	97.8	239	100.0	100.0	106
Maryland	100.0	100.0	120	100.0	100.0	47
Montserrado	98.7	98.7	1,309	100.0	100.0	662
Nimba	97.9	97.9	673	99.8	99.8	273
River Cess	100.0	100.0	66	100.0	100.0	27
River Gee	100.0	100.0	56	99.3	99.3	25
Sinoe	100.0	100.0	114	100.0	100.0	66
Education						
No education	97.4	97.4	1,814	99.4	99.4	343
Elementary	99.8	99.8	935	99.9	99.9	349
Junior high	99.1	99.1	586	100.0	100.0	298
Senior high	100.0	100.0	697	100.0	100.0	687
Higher	100.0	100.0	184	100.0	100.0	229
Wealth quintile						
Lowest	98.3	98.3	930	99.9	99.9	417
Second	98.6	98.6	903	100.0	100.0	397
Middle	99.5	99.5	808	99.8	99.8	335
Fourth	98.8	98.8	783	99.7	99.7	362
Highest	98.6	98.6	792	100.0	100.0	395
Total 15-49	98.7	98.7	4,216	99.9	99.9	1,906
50-59	na	na	na	99.0	99.0	358
Total 15-59	na	na	na	99.7	99.7	2,264

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods

Table 7.3 Current use of contraception according to age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Liberia DHS 2019-20

Age	Modern method												Any traditional method	Traditional method			Total	Number of women
	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Implants	Male condom	Emergency contraception	SDM	LAM	Other		Rhythm	Withdrawal	Not currently using		
ALL WOMEN																		
15-19	18.6	18.1	0.0	0.8	0.0	12.2	2.5	2.3	0.0	0.0	0.2	0.0	0.4	0.3	0.2	81.4	100.0	1,657
20-24	35.1	34.0	0.0	1.7	0.0	22.5	7.1	1.9	0.3	0.3	0.2	0.0	1.1	0.6	0.5	64.9	100.0	1,506
25-29	33.8	32.0	0.0	4.1	0.1	19.7	6.5	1.3	0.0	0.0	0.1	0.2	1.8	0.5	1.3	66.2	100.0	1,375
30-34	29.0	27.7	0.0	4.7	0.1	15.4	6.7	0.9	0.0	0.0	0.0	0.0	1.3	1.1	0.1	71.0	100.0	1,112
35-39	25.5	25.1	0.0	3.9	0.0	13.6	5.0	1.9	0.1	0.4	0.0	0.2	0.4	0.1	0.3	74.5	100.0	1,020
40-44	19.6	18.9	0.7	5.7	0.0	8.4	3.6	0.5	0.0	0.0	0.0	0.0	0.7	0.7	0.0	80.4	100.0	769
45-49	13.5	12.7	0.9	2.8	0.7	6.1	1.9	0.0	0.0	0.2	0.0	0.0	0.8	0.8	0.1	86.5	100.0	626
Total	26.2	25.3	0.1	3.1	0.1	15.2	5.0	1.5	0.1	0.1	0.1	0.1	0.9	0.5	0.4	73.8	100.0	8,065
CURRENTLY MARRIED WOMEN																		
15-19	9.2	9.2	0.0	0.8	0.0	7.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.8	100.0	204
20-24	28.3	27.1	0.0	1.5	0.0	18.6	5.0	1.4	0.0	0.2	0.4	0.0	1.2	0.1	1.1	71.7	100.0	625
25-29	30.8	28.1	0.0	4.6	0.1	16.9	4.8	1.2	0.0	0.0	0.1	0.4	2.6	0.4	2.3	69.2	100.0	788
30-34	28.4	27.2	0.0	5.3	0.1	15.2	5.9	0.6	0.0	0.0	0.0	0.0	1.2	1.0	0.2	71.6	100.0	819
35-39	24.6	24.6	0.1	3.8	0.0	13.6	5.7	1.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	75.4	100.0	785
40-44	22.6	21.7	1.0	6.0	0.0	10.4	3.7	0.6	0.0	0.0	0.0	0.0	0.9	0.9	0.0	77.4	100.0	545
45-49	14.4	13.9	0.7	3.8	1.0	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.1	85.6	100.0	449
Total	24.9	23.9	0.2	4.1	0.1	13.7	4.6	0.8	0.0	0.0	0.1	0.1	1.1	0.5	0.6	75.1	100.0	4,216
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																		
15-19	43.3	42.3	0.0	2.2	0.1	29.3	6.4	4.4	0.0	0.0	0.0	0.0	1.0	0.3	0.7	56.7	100.0	400
20-24	50.7	49.6	0.0	2.7	0.0	32.2	12.0	1.5	1.2	0.0	0.0	0.0	1.1	0.8	0.2	49.3	100.0	434
25+	44.5	43.1	0.0	5.4	0.1	23.9	10.8	2.8	0.0	0.2	0.0	0.0	1.4	0.9	0.5	55.5	100.0	568
Total	46.0	44.9	0.0	3.6	0.0	28.0	9.9	2.9	0.4	0.1	0.0	0.0	1.2	0.7	0.5	54.0	100.0	1,402

Note: If more than one method is used, only the most effective method is considered in this tabulation.

SDM = Standard days method

LAM = Lactational amenorrhea method

¹ Women who have had sexual intercourse within 30 days preceding the survey

Table 7.4 Current use of contraception according to background characteristics

Percent distribution of currently married and sexually active unmarried women age 15-49 by contraceptive method currently used, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Modern method												Any traditional method	Traditional method			Total	Number of women
	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Implants	Male condom	Emergency contraception	SDM	LAM	Other		Rhythm	Withdrawal	Not currently using		
CURRENTLY MARRIED WOMEN																		
Number of living children																		
0	12.6	10.7	0.0	0.3	0.0	8.1	1.1	1.2	0.0	0.0	0.0	0.0	1.9	0.4	1.5	87.4	100.0	249
1-2	25.0	23.7	0.1	2.3	0.0	14.2	5.5	0.9	0.0	0.1	0.2	0.3	1.4	0.4	0.9	75.0	100.0	1,503
3-4	24.9	23.7	0.2	6.0	0.4	12.2	3.9	1.0	0.1	0.0	0.0	0.0	1.1	0.6	0.5	75.1	100.0	1,369
5+	27.8	27.3	0.5	4.9	0.0	16.3	5.2	0.4	0.0	0.0	0.0	0.0	0.4	0.3	0.2	72.2	100.0	1,094
Residence																		
Urban	23.9	22.4	0.1	3.3	0.2	12.8	4.4	1.3	0.0	0.0	0.1	0.2	1.5	0.6	0.9	76.1	100.0	2,268
Greater Monrovia	22.7	20.7	0.0	3.1	0.4	10.1	4.8	1.6	0.1	0.0	0.2	0.2	2.1	0.8	1.3	77.3	100.0	1,150
Other urban	25.1	24.2	0.1	3.5	0.0	15.5	3.9	1.0	0.0	0.0	0.0	0.3	1.0	0.4	0.5	74.9	100.0	1,118
Rural	26.2	25.6	0.4	4.9	0.1	14.9	4.9	0.3	0.0	0.1	0.0	0.0	0.6	0.3	0.3	73.8	100.0	1,947
Region																		
North Western	26.9	26.3	0.0	5.3	0.2	16.5	3.8	0.5	0.0	0.0	0.0	0.0	0.6	0.6	0.0	73.1	100.0	400
South Central	22.2	20.7	0.0	3.3	0.3	11.3	4.2	1.2	0.1	0.0	0.2	0.1	1.5	0.6	0.9	77.8	100.0	1,801
South Eastern A	37.6	36.9	0.2	3.6	0.0	24.6	7.9	0.5	0.0	0.0	0.0	0.0	0.7	0.5	0.2	62.4	100.0	296
South Eastern B	43.3	43.2	0.2	4.8	0.0	24.2	13.2	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.1	56.7	100.0	254
North Central	22.1	21.2	0.5	4.6	0.1	11.9	3.2	0.6	0.0	0.1	0.0	0.2	0.9	0.3	0.6	77.9	100.0	1,464
County																		
Bomi	30.9	30.0	0.0	5.2	0.2	21.3	2.8	0.4	0.0	0.0	0.0	0.0	1.0	1.0	0.0	69.1	100.0	148
Bong	24.4	24.1	1.3	5.6	0.0	11.5	5.0	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.3	75.6	100.0	411
Gbarpolu	26.4	26.2	0.0	5.7	0.0	13.0	7.4	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	73.6	100.0	80
Grand Bassa	23.7	23.3	0.0	6.8	0.0	13.9	2.0	0.7	0.0	0.0	0.0	0.0	0.4	0.2	0.2	76.3	100.0	253
Grand Cape Mount	23.7	23.1	0.0	5.3	0.2	13.9	3.0	0.8	0.0	0.0	0.0	0.0	0.6	0.6	0.0	76.3	100.0	172
Grand Gedeh	38.0	37.0	0.1	3.4	0.0	27.6	4.5	1.4	0.0	0.0	0.0	0.0	1.0	1.0	0.0	62.0	100.0	116
Grand Kru	42.5	42.2	0.3	4.4	0.0	24.5	11.6	1.3	0.0	0.0	0.0	0.0	0.4	0.0	0.4	57.5	100.0	79
Lofa	22.7	21.7	0.0	6.7	0.2	11.7	2.8	0.0	0.0	0.3	0.0	0.0	1.0	1.0	0.0	77.3	100.0	380
Margibi	17.8	17.0	0.0	2.1	0.0	12.3	2.1	0.5	0.0	0.0	0.0	0.0	0.8	0.8	0.0	82.2	100.0	239
Maryland	45.1	45.1	0.2	5.0	0.0	23.3	15.9	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	54.9	100.0	120
Montserrado	22.7	20.8	0.0	2.9	0.4	10.7	5.0	1.4	0.1	0.0	0.3	0.2	1.9	0.7	1.2	77.3	100.0	1,309
Nimba	20.3	19.0	0.4	2.8	0.0	12.3	2.3	0.9	0.0	0.0	0.0	0.4	1.2	0.0	1.2	79.7	100.0	673
River Cess	35.1	33.7	0.6	6.4	0.0	22.3	4.4	0.0	0.0	0.0	0.0	0.0	1.5	0.7	0.8	64.9	100.0	66
River Gee	40.6	40.6	0.2	5.0	0.0	25.7	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.4	100.0	56
Sinoe	38.6	38.6	0.0	2.2	0.0	23.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.4	100.0	114
Education																		
No education	20.9	20.2	0.5	4.7	0.1	11.1	3.8	0.1	0.0	0.0	0.0	0.0	0.6	0.2	0.4	79.1	100.0	1,814
Elementary	25.1	24.8	0.1	4.6	0.0	14.8	4.7	0.7	0.0	0.0	0.0	0.0	0.2	0.1	0.1	74.9	100.0	935
Junior high	33.0	31.6	0.0	3.0	0.1	19.5	7.6	1.2	0.0	0.0	0.1	0.0	1.5	0.2	1.2	67.0	100.0	586
Senior high	28.0	25.4	0.0	3.1	0.0	15.4	4.7	1.8	0.2	0.1	0.0	0.0	2.6	1.1	1.6	72.0	100.0	697
Higher	27.3	24.4	0.0	1.6	2.7	9.7	2.7	3.7	0.0	0.0	1.4	2.7	2.8	2.8	0.0	72.7	100.0	184
Wealth quintile																		
Lowest	24.1	23.5	0.6	5.3	0.0	13.0	4.4	0.2	0.0	0.0	0.0	0.0	0.6	0.3	0.3	75.9	100.0	930
Second	26.4	25.2	0.2	4.0	0.1	15.9	4.2	0.5	0.0	0.1	0.1	0.0	1.3	0.4	0.9	73.6	100.0	903
Middle	23.9	23.2	0.2	5.1	0.0	14.0	3.7	0.2	0.0	0.0	0.0	0.0	0.7	0.0	0.7	76.1	100.0	808
Fourth	30.7	29.0	0.0	2.8	0.0	17.7	6.5	1.6	0.0	0.0	0.0	0.4	1.7	0.9	0.8	69.3	100.0	783
Highest	19.5	18.4	0.0	2.8	0.6	7.9	4.4	1.9	0.1	0.0	0.3	0.3	1.2	0.7	0.5	80.5	100.0	792
Total	24.9	23.9	0.2	4.1	0.1	13.7	4.6	0.8	0.0	0.0	0.1	0.1	1.1	0.5	0.6	75.1	100.0	4,216
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																		
Residence																		
Urban	46.4	45.1	0.0	3.4	0.0	27.0	10.5	3.7	0.5	0.0	0.0	0.0	1.3	0.8	0.5	53.6	100.0	1,037
Greater Monrovia	45.4	44.3	0.0	2.4	0.0	25.8	10.4	4.9	0.8	0.0	0.0	0.0	1.1	0.4	0.8	54.6	100.0	695
Other urban	48.4	46.7	0.0	5.5	0.0	29.4	10.7	1.2	0.0	0.0	0.0	0.0	1.7	1.6	0.1	51.6	100.0	342
Rural	45.0	44.3	0.0	4.2	0.1	30.9	8.3	0.5	0.0	0.3	0.0	0.0	0.8	0.5	0.2	55.0	100.0	364
Total	46.0	44.9	0.0	3.6	0.0	28.0	9.9	2.9	0.4	0.1	0.0	0.0	1.2	0.7	0.5	54.0	100.0	1,402

Note: If more than one method is used, only the most effective method is considered in this tabulation.

SDM = Standard days method

LAM = Lactational amenorrhea method

¹ Women who have had sexual intercourse within 30 days preceding the survey

Table 7.5 Knowledge of fertile period

Percent distribution of rhythm users and all women age 15-49 by knowledge of the fertile period during the ovulatory cycle, Liberia DHS 2019-20

Perceived fertile period	Users of rhythm method	All women
Just before her menstrual period begins	(6.7)	5.9
During her menstrual period	(0.0)	4.0
Right after her menstrual period has ended	(56.7)	49.1
Halfway between two menstrual periods	(10.5)	11.5
Other	(0.0)	0.8
No specific time	(3.6)	9.8
Don't know	(22.4)	18.8
Missing	(0.0)	0.0
Total	(100.0)	100.0
Number of women	43	8,065

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 7.6 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, Liberia DHS 2019-20

Age	Percentage with correct knowledge of the fertile period	Number of women
15-19	7.0	1,657
20-24	12.9	1,506
25-29	13.7	1,375
30-34	13.4	1,112
35-39	11.0	1,020
40-44	12.2	769
45-49	12.4	626
Total	11.5	8,065

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.7 Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Liberia DHS 2019-20

Source	Injectables	Implants	Pill	Male condom	Total
Public sector	56.1	80.9	45.2	10.6	56.6
Government hospital	18.9	32.0	12.2	7.3	20.1
Government health center	4.7	6.0	2.6	0.3	4.4
Government health clinic	30.5	42.1	27.4	2.7	30.3
Mobile clinic	1.6	0.7	2.7	0.4	1.5
Other	0.4	0.2	0.3	0.0	0.3
Private medical sector	39.9	15.7	43.4	71.1	37.4
Private hospital/center/clinic	9.2	7.3	3.5	1.1	7.7
Pharmacy	22.5	0.3	36.1	67.7	22.4
Private doctor	3.4	1.2	1.2	0.0	2.6
Planned Parenthood					
Association of Liberia	2.5	5.9	0.2	2.3	2.9
Mobile clinic	2.2	1.0	2.4	0.0	1.8
Other	0.1	0.0	0.0	0.0	0.1
Other source	3.5	2.4	11.0	17.8	5.3
Shop/market	1.6	0.1	7.8	5.3	2.2
Friend/relative	1.9	2.3	3.2	12.5	3.1
Other	0.4	1.0	0.4	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0
Number of women	1,225	404	249	117	2,034

Note: Total includes 39 cases of other modern methods that are not listed separately, but excludes lactational amenorrhea method (LAM).

Table 7.8 Use of social marketing brand pills

Percentage of pill users age 15-49 using a specific social marketing brand, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage using Microlut	Percentage using Microgynon	Percentage using Planned Parenthood of Liberia brand	Other	Number of women
Age					
15-19	*	*	*	*	13
20-24	(14.8)	(84.5)	(0.7)	(0.0)	25
25-29	10.0	88.9	1.1	0.0	57
30-34	29.6	69.9	0.5	0.0	52
35-39	48.5	49.5	2.0	0.0	40
40-44	8.0	89.1	0.0	2.8	44
45-49	*	*	*	*	17
Residence					
Urban	22.4	75.7	1.9	0.0	125
Greater Monrovia	*	*	*	*	64
Other urban	26.3	69.9	3.8	0.0	61
Rural	24.1	72.6	2.3	1.0	123
Region					
North Western	31.3	66.4	2.4	0.0	30
South Central	20.7	78.6	0.0	0.7	92
South Eastern A	(10.9)	(81.8)	(3.1)	(4.2)	14
South Eastern B	29.4	66.4	4.2	0.0	19
North Central	23.9	72.6	3.5	0.0	92
County					
Bomi	*	*	*	*	11
Bong	(28.2)	(63.8)	(8.0)	(0.0)	32
Gbarpolu	*	*	*	*	5
Grand Bassa	(25.4)	(71.3)	(0.0)	(3.3)	20
Grand Cape Mount	*	*	*	*	13
Grand Gedeh	*	*	*	*	5
Grand Kru	*	*	*	*	5
Lofa	(8.6)	(91.4)	(0.0)	(0.0)	33
Margibi	*	*	*	*	6
Maryland	(39.9)	(60.1)	(0.0)	(0.0)	10
Montserrado	(19.8)	(80.2)	(0.0)	(0.0)	66
Nimba	*	*	*	*	28
River Cess	*	*	*	*	6
River Gee	*	*	*	*	4
Sinoe	*	*	*	*	4
Education					
No education	27.7	66.9	4.8	0.6	101
Elementary	22.2	77.5	0.3	0.0	56
Junior high	(28.4)	(68.9)	(0.6)	(2.1)	29
Senior high	(16.5)	(83.5)	(0.0)	(0.0)	55
Higher	*	*	*	*	7
Wealth quintile					
Lowest	16.3	77.5	4.1	2.1	59
Second	27.7	70.9	1.4	0.0	45
Middle	26.9	69.9	3.2	0.0	67
Fourth	(11.7)	(88.3)	(0.0)	(0.0)	35
Highest	(32.2)	(67.8)	(0.0)	(0.0)	42
Total	23.3	74.2	2.1	0.5	248

Note: Table excludes pill users who do not know the brand name. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.9 Informed choice

Among current users of selected modern methods age 15-49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, and percentage who were informed of all three, according to method and initial source, Liberia DHS 2019-20

Method/source	Among women who started last episode of modern contraceptive method within the 5 years preceding the survey:				Number of women
	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if they experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Percentage who were informed of all three (method information index)	
Method					
Female sterilization	*	*	*	*	2
IUD	*	*	*	*	7
Injectables	65.5	59.9	64.6	51.7	1,124
Implants	84.1	79.2	75.7	65.0	381
Pill	61.3	53.7	63.3	50.0	227
Initial source of method¹					
Public Sector	77.6	72.8	74.1	63.1	1,076
Government hospital	81.8	76.9	78.4	68.4	360
Government health center	74.1	65.0	64.4	55.6	105
Government health clinic	75.2	71.4	73.1	61.1	587
Mobile clinic	(86.4)	(82.4)	(88.0)	(75.0)	20
Other	*	*	*	*	4
Private medical sector	56.8	49.8	56.9	42.5	567
Private hospital/center/clinic	66.4	61.5	69.4	59.3	154
Pharmacy	47.5	38.4	47.1	29.3	300
Private doctor	(52.8)	(52.8)	(42.1)	(37.4)	34
Planned Parenthood					
Association of Liberia	(85.7)	(85.7)	(93.3)	(79.5)	53
Mobile clinic	(54.5)	(33.6)	(40.4)	(28.0)	25
Other	*	*	*	*	0
Other source	47.9	39.7	47.1	30.2	94
Other	*	*	*	*	4
Total	69.1	63.4	66.9	54.5	1,741

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Source at start of current episode of use

Table 7.10 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Liberia DHS 2019-20

Method	Reason for discontinuation								Switched to another method ⁴	Number of episodes of use ⁵
	Method failure	Desire to become pregnant	Other fertility-related reasons ¹	Side effects/health concerns	Wanted more effective method	Other method-related reasons ²	Other reasons	Any reason ³		
Injectables	0.9	6.7	1.7	26.2	1.2	4.7	4.8	46.3	1.1	2,196
Implants	0.2	2.1	0.0	8.4	0.0	0.6	1.1	12.4	0.9	492
Pill	2.2	7.7	1.1	19.8	5.7	6.3	4.2	47.0	3.5	538
Other ⁶	(3.3)	(7.9)	(5.2)	(1.6)	(10.4)	(3.1)	(2.9)	(34.4)	(5.2)	393
All methods	1.3	6.4	1.8	20.2	2.7	4.2	4.0	40.5	1.8	3,619

Note: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation

² Includes lack of access/too far, costs too much, and inconvenient to use

³ Reasons for discontinuation are mutually exclusive and add to the total given in this column.

⁴ A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.

⁵ All episodes of use that occurred within the 5 years preceding the survey are included. Episodes of use include both episodes that were discontinued during the period of observation and episodes that were not discontinued during the period of observation.

⁶ Includes female sterilization, IUD, female condom, male condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), rhythm method, withdrawal, other modern method, and other traditional method

Table 7.11 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Liberia DHS 2019-20

Reason	Injectables	Implants	Pill	Other ¹	All methods
Became pregnant while using	3.4	0.6	6.0	2.8	4.3
Wanted to become pregnant	16.4	15.4	19.1	37.3	18.4
Husband/partner disapproved	1.7	6.5	2.6	5.9	2.5
Wanted more effective method	2.3	0.0	12.2	26.8	6.3
Health concerns/side effects	54.5	60.7	36.0	2.5	46.4
Lack of access/too far	3.8	0.0	4.9	2.6	3.5
Costs too much	2.8	0.2	0.6	1.1	2.0
Inconvenient to use	2.8	3.3	8.0	4.1	3.8
Up to God/fatalistic	0.0	0.0	0.2	0.0	0.0
Difficult to get pregnant/ menopausal	0.2	0.0	1.1	4.2	0.8
Infrequent sex/husband away	3.5	0.2	0.5	10.0	3.7
Marital dissolution/separation	0.0	0.0	1.8	0.0	0.4
Other	7.5	13.1	6.9	2.5	7.3
Don't know	1.2	0.0	0.0	0.0	0.7
Total	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	1,320	169	366	129	2,067

¹ Includes IUD, female condom, male condom, standard days method (SDM), lactational amenorrhea method (LAM), rhythm method, withdrawal, and other modern method

Table 7.12.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning ¹			Number of women	Percentage of demand satisfied ²	Percentage of demand satisfied by modern methods ³
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	42.5	4.7	47.2	9.2	0.0	9.2	51.6	4.7	56.4	204	16.3	16.3
20-24	30.2	5.6	35.8	24.9	3.3	28.3	55.1	8.9	64.1	625	44.1	42.3
25-29	31.3	5.7	37.0	24.8	6.0	30.8	56.1	11.7	67.7	788	45.4	41.5
30-34	20.4	12.5	32.9	20.5	7.9	28.4	40.9	20.4	61.3	819	46.4	44.4
35-39	13.5	20.8	34.3	10.8	13.8	24.6	24.3	34.6	58.9	785	41.8	41.7
40-44	10.7	23.5	34.2	6.9	15.8	22.6	17.6	39.3	56.9	545	39.8	38.2
45-49	2.8	13.5	16.3	2.4	12.0	14.4	5.2	25.5	30.7	449	46.8	45.2
Residence												
Urban	22.0	12.3	34.3	16.0	7.9	23.9	37.9	20.2	58.2	2,268	41.1	38.5
Greater Monrovia	20.4	14.3	34.7	15.1	7.6	22.7	35.6	21.9	57.4	1,150	39.6	36.0
Other urban	23.5	10.2	33.8	16.8	8.3	25.1	40.4	18.5	58.9	1,118	42.6	41.0
Rural	18.9	13.6	32.5	15.8	10.3	26.2	34.7	23.9	58.6	1,947	44.6	43.6
Region												
North Western	17.7	15.2	32.9	13.8	13.1	26.9	31.5	28.3	59.8	400	45.0	44.0
South Central	20.7	15.4	36.1	14.6	7.6	22.2	35.3	23.0	58.3	1,801	38.0	35.4
South Eastern A	15.3	6.5	21.8	27.9	9.7	37.6	43.1	16.2	59.4	296	63.3	62.1
South Eastern B	12.9	6.6	19.5	28.2	15.1	43.3	41.1	21.7	62.8	254	69.0	68.8
North Central	23.5	11.6	35.1	13.6	8.5	22.1	37.1	20.0	57.1	1,464	38.6	37.0
County												
Bomi	14.8	14.7	29.5	15.6	15.3	30.9	30.5	30.0	60.5	148	51.2	49.6
Bong	21.6	11.3	32.9	16.6	7.8	24.4	38.1	19.2	57.3	411	42.6	42.1
Gbarpolu	18.1	13.0	31.1	13.6	12.8	26.4	31.7	25.8	57.5	80	45.9	45.5
Grand Bassa	18.7	17.7	36.3	14.2	9.6	23.7	32.8	27.2	60.1	253	39.5	38.8
Grand Cape Mount	20.0	16.6	36.5	12.3	11.4	23.7	32.2	28.0	60.2	172	39.3	38.4
Grand Gedeh	16.9	3.9	20.9	32.5	5.5	38.0	49.4	9.5	58.9	116	64.5	62.8
Grand Kru	13.4	4.6	18.0	28.5	14.0	42.5	41.9	18.6	60.5	79	70.2	69.6
Lofa	19.2	9.2	28.4	12.1	10.6	22.7	31.3	19.8	51.1	380	44.4	42.5
Margibi	25.7	16.9	42.6	12.2	5.6	17.8	37.9	22.5	60.4	239	29.4	28.1
Maryland	12.8	7.3	20.1	29.0	16.1	45.1	41.8	23.4	65.2	120	69.1	69.1
Montserrado	20.2	14.7	34.9	15.1	7.6	22.7	35.3	22.3	57.6	1,309	39.4	36.1
Nimba	27.1	13.1	40.2	12.6	7.7	20.3	39.7	20.7	60.4	673	33.5	31.5
River Cess	12.5	11.0	23.5	16.9	18.3	35.1	29.4	29.3	58.7	66	59.9	57.4
River Gee	12.3	7.8	20.1	26.1	14.5	40.6	38.4	22.3	60.7	56	66.9	66.9
Sinoe	15.1	6.5	21.6	29.6	9.1	38.6	44.7	15.6	60.2	114	64.1	64.1
Education												
No education	14.4	15.7	30.2	11.6	9.3	20.9	26.0	25.0	51.0	1,814	40.9	39.7
Elementary	26.2	12.6	38.7	15.9	9.2	25.1	42.0	21.8	63.8	935	39.3	38.9
Junior high	26.4	11.1	37.5	19.2	13.8	33.0	45.6	24.9	70.5	586	46.8	44.8
Senior high	26.2	9.0	35.2	23.6	4.4	28.0	49.8	13.3	63.2	697	44.3	40.1
Higher	11.7	7.6	19.3	19.4	7.9	27.3	31.1	15.5	46.6	184	58.5	52.4
Wealth quintile												
Lowest	20.7	12.7	33.4	13.7	10.4	24.1	34.4	23.1	57.5	930	42.0	40.9
Second	17.9	16.1	33.9	16.1	10.4	26.4	33.9	26.4	60.4	903	43.8	41.7
Middle	23.2	10.8	34.0	14.2	9.8	23.9	37.4	20.5	57.9	808	41.3	40.0
Fourth	20.8	13.6	34.4	23.8	6.9	30.7	44.7	20.5	65.1	783	47.2	44.6
Highest	20.3	11.1	31.5	12.3	7.2	19.5	32.7	18.3	51.0	792	38.3	36.0
Total	20.5	12.9	33.4	15.9	9.0	24.9	36.5	21.9	58.4	4,216	42.7	40.9

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25-49 unweighted cases.

¹ Total demand is the sum of unmet need and met need.

² Percentage of demand satisfied is met need divided by total demand.

³ Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.

Table 7.12.2 Need and demand for family planning for all women and for sexually active unmarried women

Percentage of all women and sexually active unmarried women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning ¹			Number of women	Percentage of demand satisfied ²	Percentage of demand satisfied by modern methods ³
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
ALL WOMEN												
Age												
15-19	22.1	0.8	23.0	18.4	0.1	18.6	40.6	1.0	41.5	1,657	44.7	43.6
20-24	27.9	2.8	30.7	33.1	2.0	35.1	61.1	4.8	65.8	1,506	53.3	51.6
25-29	24.0	5.1	29.0	29.1	4.7	33.8	53.1	9.7	62.8	1,375	53.8	51.0
30-34	18.3	10.3	28.6	21.8	7.2	29.0	40.1	17.5	57.6	1,112	50.3	48.1
35-39	12.0	16.7	28.8	12.3	13.2	25.5	24.3	29.9	54.2	1,020	47.0	46.3
40-44	8.7	18.8	27.4	6.2	13.3	19.6	14.9	32.1	47.0	769	41.6	40.3
45-49	2.7	11.9	14.6	2.6	10.9	13.5	5.2	22.9	28.1	626	48.0	45.0
Residence												
Urban	18.7	6.6	25.3	21.7	4.8	26.5	40.5	11.4	51.9	5,023	51.1	48.8
Greater Monrovia	17.3	7.2	24.5	22.4	4.1	26.5	39.7	11.3	51.0	2,866	52.0	49.5
Other urban	20.7	5.8	26.5	20.8	5.7	26.5	41.5	11.5	53.0	2,157	50.0	47.9
Rural	19.2	9.8	29.1	17.9	7.9	25.8	37.2	17.7	54.9	3,042	47.0	46.2
Region												
North Western	17.7	10.5	28.2	17.4	10.8	28.2	35.1	21.3	56.4	621	50.0	49.1
South Central	18.0	8.1	26.1	20.5	4.5	25.0	38.5	12.6	51.1	4,105	48.9	46.8
South Eastern A	16.8	4.9	21.7	29.5	7.4	36.9	46.2	12.3	58.5	458	62.9	62.1
South Eastern B	13.6	4.6	18.2	35.7	11.1	46.8	49.3	15.7	65.0	441	72.0	71.2
North Central	22.2	7.8	29.9	16.2	6.0	22.1	38.3	13.7	52.0	2,439	42.5	40.6
County												
Bomi	15.4	9.8	25.1	19.0	13.4	32.4	34.3	23.2	57.5	249	56.3	55.2
Bong	20.8	7.0	27.8	20.2	5.5	25.7	40.9	12.6	53.5	796	48.0	46.5
Gbarpolu	19.6	11.0	30.6	16.3	10.0	26.3	35.8	21.0	56.9	112	46.3	46.0
Grand Bassa	17.5	11.1	28.6	16.7	6.7	23.4	34.1	17.8	51.9	467	45.0	44.2
Grand Cape Mount	19.2	11.0	30.2	16.3	8.7	25.0	35.5	19.7	55.1	260	45.3	44.3
Grand Gedeh	16.4	3.3	19.7	34.9	4.4	39.3	51.3	7.7	59.0	172	66.6	65.5
Grand Kru	14.2	4.3	18.5	33.4	9.7	43.1	47.6	14.0	61.6	136	70.0	69.3
Lofa	20.2	5.6	25.8	13.3	7.1	20.4	33.6	12.6	46.2	658	44.1	41.5
Margibi	23.2	9.8	33.0	12.6	4.7	17.3	35.8	14.5	50.3	441	34.4	32.8
Maryland	14.4	4.7	19.1	36.6	12.5	49.2	51.0	17.2	68.3	215	72.0	71.2
Montserrado	17.4	7.4	24.8	22.1	4.2	26.3	39.5	11.6	51.1	3,197	51.5	49.1
Nimba	24.6	9.8	34.4	14.8	5.6	20.4	39.4	15.4	54.8	985	37.2	35.4
River Cess	15.4	8.9	24.3	20.4	14.2	34.6	35.9	23.0	58.9	104	58.7	57.0
River Gee	10.9	4.8	15.7	37.0	9.7	46.7	47.8	14.5	62.3	91	74.9	74.1
Sinoe	17.8	4.3	22.1	29.5	6.4	35.9	47.3	10.7	58.0	182	61.9	61.9
Education												
No education	13.9	12.4	26.4	12.2	8.3	20.5	26.2	20.7	46.9	2,474	43.7	42.6
Elementary	22.0	7.4	29.4	18.8	5.7	24.6	40.8	13.1	54.0	1,911	45.5	44.7
Junior high	23.6	5.1	28.7	22.8	6.5	29.3	46.4	11.7	58.0	1,445	50.6	48.4
Senior high	20.5	5.0	25.5	29.8	2.7	32.5	50.3	7.7	58.0	1,761	56.1	53.5
Higher	12.7	4.1	16.8	25.4	5.0	30.4	38.1	9.1	47.2	474	64.4	59.5
Wealth quintile												
Lowest	20.9	9.9	30.8	15.0	8.2	23.2	35.9	18.2	54.0	1,379	43.0	41.3
Second	18.3	11.0	29.4	18.4	7.7	26.1	36.7	18.7	55.5	1,431	47.0	45.5
Middle	20.2	6.6	26.9	20.4	7.2	27.7	40.7	13.9	54.5	1,517	50.7	49.6
Fourth	19.6	7.0	26.6	25.2	3.8	29.1	44.8	10.9	55.7	1,829	52.2	50.0
Highest	16.3	5.5	21.8	20.7	4.1	24.7	37.0	9.6	46.6	1,910	53.1	50.9
Total	18.9	7.8	26.7	20.3	6.0	26.2	39.2	13.8	53.0	8,065	49.5	47.8

Continued...

Table 7.12.2—Continued

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning ¹			Number of women	Percentage of demand satisfied ²	Percentage of demand satisfied by modern methods ³
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
SEXUALLY ACTIVE UNMARRIED WOMEN ⁴												
Age												
15-19	48.2	0.3	48.5	42.7	0.5	43.3	90.9	0.8	91.8	400	47.2	46.1
20-24	39.9	0.5	40.4	49.6	1.1	50.7	89.5	1.6	91.1	434	55.6	54.5
25-29	23.0	6.0	28.9	45.0	4.7	49.8	68.0	10.7	78.7	269	63.2	61.6
30-34	19.6	8.7	28.3	38.2	5.6	43.8	57.8	14.3	72.1	124	60.8	59.2
35-39	15.6	5.6	21.3	38.8	13.4	52.2	54.5	19.0	73.5	76	71.0	66.2
40-44	(11.0)	(20.3)	(31.4)	(13.1)	(13.4)	(26.5)	(24.2)	(33.7)	(57.8)	64	(45.8)	(45.8)
45-49	(12.0)	(33.6)	(45.6)	(3.9)	(17.6)	(21.5)	(15.9)	(51.2)	(67.1)	34	(32.0)	(30.1)
Residence												
Urban	33.6	4.1	37.7	43.2	3.2	46.4	76.8	7.3	84.1	1,037	55.2	53.6
Greater Monrovia	31.9	5.3	37.2	43.0	2.4	45.4	74.9	7.7	82.6	695	55.0	53.6
Other urban	37.2	1.5	38.7	43.5	4.9	48.4	80.7	6.4	87.1	342	55.5	53.6
Rural	34.6	4.6	39.3	40.1	4.9	45.0	74.8	9.5	84.3	364	53.4	52.5
Region												
North Western	30.8	4.2	35.0	45.5	7.9	53.4	76.2	12.2	88.4	67	60.4	59.7
South Central	33.0	5.2	38.2	41.5	2.9	44.5	74.5	8.1	82.6	872	53.8	52.5
South Eastern A	30.6	3.4	33.9	48.5	3.9	52.5	79.1	7.3	86.4	72	60.7	60.6
South Eastern B	22.2	1.9	24.1	60.5	5.0	65.5	82.7	6.9	89.6	91	73.1	71.3
North Central	41.6	2.4	43.9	37.3	4.3	41.6	78.8	6.7	85.5	300	48.6	46.8
County												
Bomi	21.2	7.3	28.5	49.4	17.7	67.0	70.5	25.0	95.5	28	70.2	69.6
Bong	35.4	1.8	37.2	43.2	6.9	50.1	78.6	8.7	87.3	110	57.3	57.3
Gbarpolu	(42.2)	(4.1)	(46.3)	(27.5)	(3.1)	(30.6)	(69.7)	(7.2)	(76.9)	13	(39.7)	(39.7)
Grand Bassa	32.0	2.9	34.9	35.9	6.1	42.0	67.8	9.0	76.9	62	54.6	52.6
Grand Cape Mount	35.2	1.0	36.1	50.5	0.0	50.5	85.7	1.0	86.6	26	58.3	57.1
Grand Gedeh	(22.4)	(4.3)	(26.7)	(58.2)	(1.9)	(60.1)	(80.5)	(6.3)	(86.8)	25	(69.2)	(69.2)
Grand Kru	19.4	4.8	24.3	56.5	2.7	59.2	75.9	7.5	83.4	30	70.9	69.8
Lofa	53.4	0.9	54.3	32.2	4.5	36.7	85.7	5.4	91.1	83	40.3	36.6
Margibi	39.2	4.9	44.1	32.4	3.7	36.1	71.6	8.6	80.2	63	45.0	43.6
Maryland	27.5	0.8	28.2	56.9	8.1	65.0	84.3	8.9	93.2	44	69.7	68.1
Montserrado	32.6	5.4	37.9	42.7	2.6	45.4	75.3	8.0	83.3	747	54.5	53.2
Nimba	38.6	4.1	42.7	35.1	1.5	36.6	73.7	5.5	79.3	107	46.2	43.9
River Cess	29.7	5.6	35.3	42.8	11.3	54.1	72.5	17.0	89.4	17	60.5	59.8
River Gee	13.1	0.0	13.1	76.9	0.6	77.5	90.1	0.6	90.7	17	85.5	82.4
Sinoe	37.8	1.3	39.1	43.8	1.5	45.3	81.6	2.8	84.4	30	53.7	53.7
Education												
No education	30.0	6.9	36.9	22.6	10.4	33.0	52.6	17.3	69.9	183	47.2	46.1
Elementary	35.9	4.9	40.8	43.1	4.8	47.9	79.0	9.7	88.7	283	54.0	53.2
Junior high	40.3	2.3	42.6	43.9	2.1	45.9	84.2	4.4	88.6	349	51.9	50.0
Senior high	30.4	4.2	34.6	47.5	2.4	49.9	77.9	6.6	84.5	476	59.1	58.0
Higher	30.0	4.2	34.2	46.4	0.0	46.4	76.4	4.2	80.6	111	57.6	54.8
Wealth quintile												
Lowest	36.1	4.8	40.9	32.0	5.4	37.4	68.1	10.2	78.3	135	47.8	45.3
Second	36.6	4.6	41.2	38.7	4.7	43.4	75.3	9.3	84.6	180	51.3	50.7
Middle	28.1	4.0	32.2	51.5	6.1	57.6	79.7	10.1	89.8	242	64.2	62.7
Fourth	35.5	4.0	39.4	41.0	3.1	44.0	76.4	7.0	83.4	430	52.8	51.5
Highest	33.7	4.3	38.0	43.5	1.8	45.4	77.3	6.1	83.4	414	54.4	52.9
Total	33.9	4.2	38.1	42.4	3.7	46.0	76.3	7.9	84.2	1,402	54.7	53.3

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25-49 unweighted cases.

¹ Total demand is the sum of unmet need and met need.

² Percentage of demand satisfied is met need divided by total demand.

³ Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.

⁴ Women who have had sexual intercourse within 30 days preceding the survey

Table 7.13 Decision making about family planning

Among currently married women age 15-49 who are current users of family planning, percent distribution by who makes the decision to use family planning, and among currently married women who are not currently using family planning, percent distribution by who makes the decision not to use family planning, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among currently married women who are current users of family planning					Number of women	Among currently married women who are not currently using family planning					Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total		Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	
Age												
15-19	(44.9)	(35.5)	(19.7)	(0.0)	(100.0)	19	54.4	27.1	16.4	2.1	100.0	140
20-24	42.6	39.6	17.6	0.2	100.0	177	50.5	30.9	17.4	1.2	100.0	367
25-29	40.9	49.4	9.2	0.5	100.0	242	47.5	35.0	16.8	0.6	100.0	449
30-34	41.9	44.6	13.5	0.0	100.0	233	51.6	29.4	18.2	0.8	100.0	498
35-39	31.5	57.0	11.2	0.3	100.0	193	56.9	29.8	11.4	1.9	100.0	534
40-44	31.2	51.8	16.2	0.8	100.0	123	52.9	28.1	17.2	1.9	100.0	402
45-49	32.8	53.2	11.1	2.8	100.0	65	48.7	33.3	13.4	4.7	100.0	383
Number of living children												
0	(48.9)	(16.1)	(34.9)	(0.0)	(100.0)	31	51.3	31.0	13.7	4.0	100.0	166
1-2	47.6	42.5	9.8	0.1	100.0	376	56.0	27.8	15.3	0.8	100.0	961
3-4	34.9	49.6	14.7	0.8	100.0	340	50.8	33.2	14.4	1.7	100.0	904
5+	28.8	57.5	13.1	0.6	100.0	304	47.5	31.8	18.1	2.6	100.0	744
Residence												
Urban	40.7	45.0	14.2	0.1	100.0	542	52.4	30.5	16.4	0.8	100.0	1,520
Greater Monrovia	42.1	41.1	16.8	0.0	100.0	261	55.0	28.4	15.7	0.9	100.0	790
Other urban	39.4	48.6	11.8	0.1	100.0	281	49.6	32.8	17.1	0.6	100.0	730
Rural	35.3	51.9	11.9	0.9	100.0	509	51.0	31.2	14.8	3.0	100.0	1,254
Region												
North Western	35.1	49.2	15.2	0.4	100.0	108	53.5	25.0	16.9	4.6	100.0	254
South Central	38.8	45.3	15.5	0.3	100.0	400	51.2	33.8	13.9	1.1	100.0	1,245
South Eastern A	32.0	64.0	3.9	0.1	100.0	111	46.8	45.9	5.1	2.2	100.0	158
South Eastern B	41.6	38.5	19.3	0.6	100.0	110	54.1	28.7	13.2	4.0	100.0	116
North Central	39.1	49.8	10.4	0.8	100.0	323	52.4	26.4	19.5	1.6	100.0	1,001
County												
Bomi	36.3	52.1	10.6	1.0	100.0	46	55.6	23.9	16.8	3.8	100.0	92
Bong	52.5	37.6	8.3	1.6	100.0	100	58.4	23.5	13.6	4.6	100.0	273
Gbarpolu	25.2	62.8	12.0	0.0	100.0	21	50.0	31.1	13.7	5.2	100.0	50
Grand Bassa	23.0	67.9	7.0	2.1	100.0	60	40.4	49.3	8.1	2.2	100.0	167
Grand Cape Mount	38.9	39.0	22.1	0.0	100.0	41	53.4	23.2	18.4	5.0	100.0	112
Grand Gedeh	34.3	61.0	4.4	0.4	100.0	44	40.9	48.5	7.5	3.1	100.0	62
Grand Kru	56.9	27.3	15.8	0.0	100.0	34	63.5	14.4	19.0	3.0	100.0	34
Lofa	44.0	45.7	10.3	0.0	100.0	86	47.8	30.1	22.1	0.0	100.0	265
Margibi	41.6	35.2	23.3	0.0	100.0	42	41.2	45.1	12.7	1.0	100.0	174
Maryland	30.9	42.6	26.0	0.5	100.0	54	47.4	33.4	13.7	5.5	100.0	55
Montserrado	41.6	42.2	16.1	0.0	100.0	297	55.2	28.8	15.1	0.9	100.0	903
Nimba	26.2	61.3	11.9	0.7	100.0	136	51.6	26.1	21.6	0.7	100.0	463
River Cess	25.2	70.7	4.1	0.0	100.0	23	64.1	27.2	8.1	0.6	100.0	33
River Gee	44.6	45.3	8.4	1.7	100.0	23	55.7	37.4	4.8	2.1	100.0	27
Sinoe	33.2	63.4	3.4	0.0	100.0	44	43.5	53.3	0.9	2.2	100.0	62
Education												
No education	37.9	46.9	14.0	1.2	100.0	379	47.5	30.7	18.8	3.0	100.0	1,311
Elementary	32.5	55.9	11.5	0.1	100.0	234	53.0	31.2	14.2	1.6	100.0	577
Junior high	33.4	49.8	16.7	0.2	100.0	193	52.8	32.7	14.5	0.1	100.0	318
Senior high	48.6	41.2	10.2	0.0	100.0	195	60.8	30.6	8.4	0.2	100.0	446
Higher	(43.3)	(46.4)	(10.2)	(0.0)	(100.0)	50	55.7	26.4	17.9	0.0	100.0	123
Wealth quintile												
Lowest	34.7	48.4	15.1	1.8	100.0	225	49.2	31.8	16.2	2.8	100.0	602
Second	36.6	53.0	10.2	0.3	100.0	239	51.3	31.8	14.5	2.4	100.0	578
Middle	41.8	50.1	8.1	0.0	100.0	193	51.2	28.7	18.7	1.4	100.0	532
Fourth	38.4	43.6	17.8	0.1	100.0	241	50.5	31.8	15.8	1.9	100.0	484
Highest	40.2	46.4	13.4	0.0	100.0	155	56.3	29.9	13.5	0.3	100.0	578
Total	38.1	48.4	13.1	0.5	100.0	1,052	51.7	30.8	15.7	1.8	100.0	2,774

Note: Table excludes women who are currently pregnant. Figures in parentheses are based on 25-49 unweighted cases.

Table 7.14 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Liberia DHS 2019-20

Intention to use in the future	Number of living children ¹					Total
	0	1	2	3	4+	
Intends to use	21.7	39.0	39.0	36.3	38.7	37.5
Unsure	3.1	3.7	7.2	3.9	6.6	5.6
Does not intend to use	75.2	57.3	53.8	59.9	54.7	57.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	166	493	611	581	1,313	3,164

¹ Includes current pregnancy

Table 7.15 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women						Men					
	Radio	Television	News-paper/magazine	Mobile phone	None of these four media sources	Number of women	Radio	Television	News-paper/magazine	Mobile phone	None of these four media sources	Number of men
Age												
15-19	23.9	1.6	2.0	2.2	73.8	1,657	22.5	2.1	4.5	2.2	74.8	876
20-24	31.4	1.8	2.2	4.9	66.4	1,506	40.2	7.0	9.7	9.2	51.3	658
25-29	33.8	1.4	0.9	2.7	65.2	1,375	52.8	11.7	13.8	7.0	40.9	558
30-34	31.6	2.0	2.3	3.9	67.3	1,112	44.1	8.7	10.6	10.7	49.5	494
35-39	37.1	2.8	1.7	3.7	62.5	1,020	57.2	6.2	12.9	11.9	38.5	487
40-44	36.3	3.3	1.7	4.0	63.4	769	56.8	7.7	12.2	9.6	39.5	418
45-49	31.4	2.4	1.3	4.6	67.1	626	55.2	5.3	17.5	11.5	38.6	330
Residence												
Urban	31.8	2.6	2.3	5.1	66.3	5,023	44.0	9.4	14.3	9.9	49.1	2,313
Greater Monrovia	29.4	3.0	2.2	5.9	68.3	2,866	44.6	13.6	16.7	10.9	46.6	1,368
Other urban	35.0	2.2	2.4	4.0	63.5	2,157	43.1	3.2	10.9	8.4	52.7	944
Rural	30.9	1.0	0.9	1.1	68.5	3,042	43.4	2.4	4.9	5.3	53.7	1,508
Region												
North Western	38.1	1.4	0.5	2.4	60.6	621	35.1	0.6	1.4	2.2	63.9	301
South Central	28.2	2.6	2.0	4.4	70.0	4,105	47.3	10.9	15.8	11.0	45.1	1,932
South Eastern A	32.2	1.6	1.4	2.9	66.9	458	43.1	2.9	6.9	6.0	54.1	254
South Eastern B	33.7	1.7	1.0	5.2	64.6	441	31.8	2.8	2.6	4.2	64.9	226
North Central	34.8	1.4	2.0	2.4	64.4	2,439	42.6	2.3	6.5	5.7	54.0	1,107
County												
Bomi	39.3	2.2	0.7	1.6	58.7	249	43.3	0.6	1.8	4.2	55.1	118
Bong	42.5	2.8	4.7	3.0	56.7	796	42.8	1.3	1.2	6.9	55.8	324
Gbarpolu	50.7	0.5	0.7	0.1	48.4	112	53.7	0.0	2.6	1.0	46.0	53
Grand Bassa	35.5	1.6	0.3	1.6	63.9	467	63.2	3.6	11.7	9.9	33.4	197
Grand Cape Mount	31.5	1.0	0.3	4.2	67.6	260	20.1	0.9	0.6	0.9	79.1	130
Grand Gedeh	40.4	2.0	2.2	4.4	58.9	172	47.4	3.8	4.8	6.3	52.1	92
Grand Kru	14.1	0.0	0.3	0.5	85.8	136	32.1	6.5	5.8	4.3	62.3	67
Lofa	27.0	0.5	0.3	1.5	71.8	658	34.5	4.4	10.0	6.3	56.7	287
Margibi	21.9	2.2	2.7	0.5	77.3	441	49.3	4.6	14.6	11.3	44.1	209
Maryland	43.2	2.8	1.1	9.6	53.8	215	29.8	0.9	1.0	2.8	68.2	110
Montserrado	28.1	2.7	2.1	5.3	69.9	3,197	44.9	12.7	16.5	11.2	46.7	1,525
Nimba	33.7	0.9	0.9	2.5	65.6	985	47.2	1.8	7.9	4.6	51.3	496
River Cess	25.9	0.9	0.5	1.4	73.4	104	33.7	3.9	8.2	5.7	64.2	52
River Gee	40.3	1.7	1.7	2.0	58.6	91	35.8	1.9	1.8	7.2	61.3	50
Sinoe	28.1	1.7	1.0	2.3	70.6	182	43.8	1.7	8.0	6.0	51.0	110
Education												
No education	26.9	1.2	0.1	1.4	72.7	2,474	37.0	3.4	1.1	2.0	62.7	498
Elementary	31.2	1.7	0.8	1.5	68.1	1,911	33.8	2.7	1.1	1.9	63.8	877
Junior high	31.9	1.6	1.8	3.2	67.2	1,445	43.7	3.8	9.4	5.1	51.4	738
Senior high	35.7	3.3	3.8	7.1	61.2	1,761	48.7	10.5	15.4	13.9	43.7	1,303
Higher	40.0	4.3	6.8	11.6	55.8	474	57.8	11.5	29.5	15.5	30.7	405
Wealth quintile												
Lowest	29.1	0.6	0.4	0.8	70.6	1,379	40.3	0.9	2.9	2.0	58.5	657
Second	31.1	0.6	0.6	1.8	68.0	1,431	44.2	3.2	5.5	5.0	52.2	663
Middle	32.2	1.5	1.7	2.7	66.9	1,517	44.2	4.8	9.3	6.9	50.6	743
Fourth	30.8	3.0	2.4	3.2	67.3	1,829	46.1	9.7	15.6	8.3	48.0	838
Highest	33.6	3.6	3.2	8.1	63.8	1,910	43.4	11.8	16.2	15.3	47.5	920
Total 15-49	31.5	2.0	1.8	3.6	67.1	8,065	43.8	6.6	10.6	8.1	50.9	3,821
50-59	na	na	na	na	na	na	53.4	8.5	10.4	9.4	42.8	428
Total 15-59	na	na	na	na	na	na	44.7	6.8	10.6	8.2	50.1	4,249

na = Not applicable

Table 7.16 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, percentage who during the past 12 months were visited by a fieldworker who discussed family planning, percentage who visited a health facility and discussed family planning, percentage who visited a health facility but did not discuss family planning, and percentage who did not discuss family planning either with a fieldworker or at a health facility, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of women who were visited by a fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with a fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	3.7	18.7	21.0	79.3	1,349
20-24	7.4	36.0	24.9	60.7	978
25-29	6.8	36.8	24.8	60.8	911
30-34	5.2	39.0	26.5	58.6	790
35-39	11.2	37.8	23.9	58.9	760
40-44	10.5	34.6	21.1	61.6	618
45-49	6.3	28.1	17.2	69.4	542
Residence					
Urban	5.4	27.3	25.1	70.2	3,691
Greater Monrovia	3.5	22.0	27.9	76.0	2,106
Other urban	7.9	34.4	21.5	62.7	1,585
Rural	9.3	39.7	19.5	57.2	2,257
Region					
North Western	10.6	40.1	21.3	57.2	446
South Central	3.8	24.0	26.1	74.2	3,078
South Eastern A	13.8	41.3	18.3	52.7	289
South Eastern B	14.0	53.0	15.2	43.6	235
North Central	9.1	39.0	20.0	57.4	1,899
County					
Bomi	4.1	31.3	17.9	67.3	168
Bong	4.4	42.3	22.9	56.3	592
Gbarpolu	21.5	46.1	13.8	49.5	82
Grand Bassa	3.9	39.7	24.5	58.5	358
Grand Cape Mount	11.6	45.2	27.3	51.8	195
Grand Gedeh	25.9	39.0	19.2	48.6	105
Grand Kru	5.8	40.0	13.2	56.8	77
Lofa	8.0	43.4	19.5	54.0	524
Margibi	5.7	21.5	19.9	77.2	365
Maryland	19.2	59.8	19.4	37.0	109
Montserrado	3.4	22.0	27.3	76.1	2,356
Nimba	13.5	33.6	18.2	60.6	784
River Cess	10.2	42.5	12.5	53.4	68
River Gee	15.1	58.2	9.0	37.4	49
Sinoe	5.2	42.7	20.9	56.0	117
Education					
No education	8.2	33.6	20.6	63.3	1,967
Elementary	8.5	35.7	20.2	61.2	1,441
Junior high	5.1	31.1	20.4	66.6	1,021
Senior high	5.6	28.0	25.5	69.3	1,189
Higher	2.3	22.9	48.4	76.5	330
Wealth quintile					
Lowest	9.1	40.7	20.3	56.6	1,059
Second	10.3	37.3	21.2	58.4	1,058
Middle	8.4	36.0	16.7	61.0	1,097
Fourth	4.7	28.3	23.7	69.4	1,298
Highest	3.6	21.8	30.4	76.3	1,437
Total	6.9	32.0	23.0	65.3	5,948

INFANT AND CHILD MORTALITY

Key Findings

- **Current levels:** Over the 5 years prior to the 2019-20 LDHS, infant, child, and under-5 mortality rates were 63, 33, and 93 deaths per 1,000 live births, respectively.
- **Trends:** Child mortality has declined since the 2013 LDHS. However, under-5 mortality has remained relatively stagnant, and infant mortality has increased.
- **High-risk fertility patterns:** Fifty-four percent of births in the 5 years preceding the survey were classified as being in an avoidable risk category. Nineteen percent of births fell into a multiple high-risk category, and 35% fell into a single high-risk category. Twenty-nine percent of births were not in any high-risk category.

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviors that increase mortality risks for infants and children. The information was collected as part of a retrospective birth history in which female respondents listed all of the children to whom they had given birth, along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. In addition to accidental misreporting by mothers in their birth histories, potential data quality problems include:

- The selective omission from birth histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.
- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.

- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality risks of mothers and those of their children.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, **Tables C.3-C.6**.

8.1 INFANT AND CHILD MORTALITY

Neonatal mortality: The probability of dying within the first month of life.

Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).

Infant mortality: The probability of dying between birth and the first birthday.

Child mortality: The probability of dying between the first and the fifth birthday.

Under-5 mortality: The probability of dying between birth and the fifth birthday.

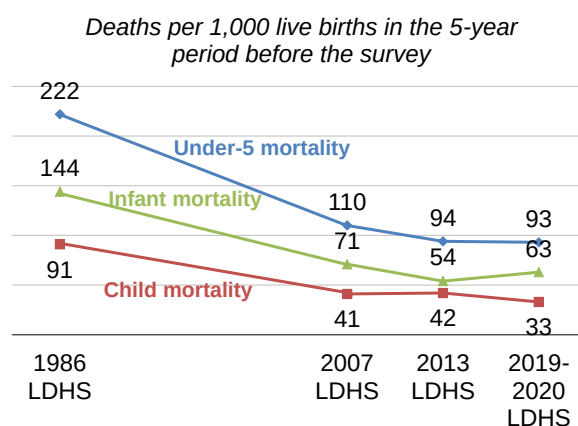
The 2019 LDHS results (**Table 8.1**) show that the under-5 mortality rate was 93 deaths per 1,000 live births in the 5 years preceding the survey, while child mortality was 33 deaths per 1,000 live births and infant mortality was 63 deaths per 1,000 live births. The neonatal mortality rate was 37 deaths per 1,000 live births, and the postneonatal mortality rate was 25 deaths per 1,000.

Trends: While there were substantial reductions in child and infant mortality rates between 1986 and 2007, progress has since somewhat stalled. Infant mortality increased from 54 deaths per 1,000 live births in 2013 to 63 deaths per 1,000 live births in 2019-20. Over the same period, child mortality decreased from 42 to 33 deaths per 1,000 live births, while under-5 mortality remained generally unchanged (94 and 93 deaths per 1,000 live births, respectively) (**Figure 8.1**).

Patterns by background characteristics

- Infant and under-5 mortality rates are higher among boys than among girls, while child mortality rates are slightly lower among boys (**Table 8.2**). Neonatal mortality is higher among boys (45 deaths per 1,000 live births) than girls (30 deaths per 1,000 live births).
- Infant, child, and under-5 mortality rates are lower in urban areas (57, 30, and 85 deaths per 1,000 live births, respectively) than in rural areas (69, 36, and 102 deaths per 1,000 live births) (**Table 8.2**).

Figure 8.1 Trends in early childhood mortality rates



- Early childhood mortality rates in the 10-year period prior to the survey indicate substantial regional differences. For example, under-5 mortality ranges from 83 deaths per 1,000 live births in North Central to 123 deaths per 1,000 live births in North Western (Figure 8.2).

8.2 BIODEMOGRAPHIC RISK FACTORS

The risk of childhood death is influenced by specific biodemographic factors related to inherent congenital characteristics of children themselves or their mothers. The age of the mother at birth and other factors such as birth order, previous birth interval, and birth size all have implications for a child's survivability (Maniruzzaman et al. 2018).

Relationships between early childhood mortality and biodemographic and sociodemographic characteristics are presented in **Table 8.3**. Information from 10 years prior to the survey was pooled to increase the sample size for more detailed breakdowns.

Patterns by background characteristics

- Across all background characteristics, infant and under-5 mortality rates are highest when the previous birth interval is less than 2 years (137 and 175 deaths per 1,000 live births, respectively).
- Neonatal, infant, and under-5 mortality are highest among births of order 7 or higher (67, 98, and 127 deaths per 1,000 live births, respectively) (**Table 8.3**).

8.3 PERINATAL MORTALITY

Perinatal mortality rate

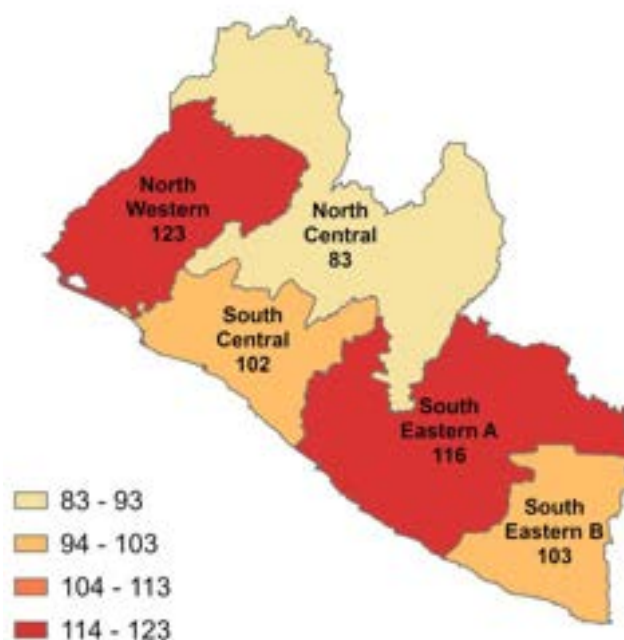
Perinatal deaths comprise stillbirths (pregnancy losses occurring after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey

Distinguishing between stillbirths and early neonatal deaths can be difficult. It depends on observing and then remembering sometimes faint signs of life after delivery. Furthermore, the causes of stillbirths and early neonatal deaths are closely linked. Considering one independently of the other can underestimate the true level of mortality around the time of delivery. For this reason, stillbirths and early neonatal deaths are presented

Figure 8.2 Under-5 mortality by region

Deaths per 1,000 live births for the 10-year period before the survey



separately and then combined into the perinatal mortality rate for the 5-year period prior to the survey in **Table 8.4**. The results show that the perinatal mortality rate is 42 deaths per 1,000 pregnancies of 7 or more months.

Patterns by background characteristics

- The perinatal mortality rate is higher among mothers age 40-49 (66 deaths per 1,000 pregnancies) than among mothers in the other age groups (40-43 deaths per 1,000 pregnancies).
- Perinatal mortality decreases as pregnancy intervals increase, from 78 deaths per 1,000 pregnancies among women who became pregnant less than 15 months after a previous pregnancy to 32 deaths per 1,000 pregnancies among those who became pregnant 39 months or more after a previous pregnancy.
- Numbers of stillbirths and early neonatal deaths are much higher among mothers with no education (27 and 57 per 1,000 pregnancies, respectively) than among mothers with a higher education (3 and 1 per 1,000 pregnancies, respectively).

8.4 HIGH-RISK FERTILITY BEHAVIOR

The survival of infants and children depends in part on the demographic and biological characteristics of their mothers. In **Table 8.5**, births in the 5 years preceding the survey are categorized into generally recognized risk categories based on mother's age, the length of the preceding birth interval, and child's birth order. Of all births in the past 5 years, 29% do not fall in any high-risk category. Fifty-four percent of births are classified in an avoidable high-risk category; 35% of births are in only one high-risk category, and 19% are in multiple high-risk categories.

The second column of the table presents risk ratios, which show the relationship between risk factors and actual child mortality. A risk ratio greater than one means that exposure to a certain factor increases risk, while a risk ratio less than one means that exposure decreases that risk. The risk of early childhood death is highest for births in which the mother was older than age 34, the preceding birth interval was less than 24 months, and the birth order was greater than three. The risk of death for these births is about four times the risk for births in the non-high-risk category. In terms of avoidable risk, births in which the preceding birth interval was less than 24 months are at twice the risk of births not in any high-risk category.

LIST OF TABLES

For more information on infant and child mortality, see the following tables:

- **Table 8.1** Early childhood mortality rates
- **Table 8.2** Five-year early childhood mortality rates according to background characteristics
- **Table 8.3** Ten-year early childhood mortality rates according to additional characteristics
- **Table 8.4** Perinatal mortality
- **Table 8.5** High-risk fertility behavior

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Liberia DHS 2019-20

Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
0-4	37	25	63	33	93
5-9	36	34	70	36	103
10-14	36	42	78	39	114

¹ Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Child's sex					
Male	45	22	67	31	96
Female	30	28	58	35	91
Residence					
Urban	36	20	57	30	85
Greater Monrovia	(40)	(15)	(55)	(28)	(82)
Other urban	33	26	59	32	88
Rural	39	30	69	36	102
Total	37	25	63	33	93

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death.

¹ Computed as the difference between the infant and neonatal mortality rates

Table 8.3 Ten-year early childhood mortality rates according to additional characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, Liberia DHS 2019-20

Characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality (±q₀)	Child mortality (±q₁)	Under-5 mortality (±q₀)
Mother's age at birth					
<20	42	32	74	38	109
20-29	29	29	57	37	92
30-39	44	27	71	25	95
40-49	62	(36)	(98)	*	*
Birth order					
1	39	29	68	31	97
2-3	23	32	55	33	86
4-6	43	26	69	39	105
7+	67	31	98	33	127
Previous birth interval²					
<2 years	81	55	137	44	175
2 years	31	27	58	41	96
3 years	24	22	47	36	81
4+ years	22	21	43	24	66
Birth size³					
Small/very small	68	30	98	na	na
Average or larger	29	25	54	na	na
Region					
North Western	36	50	86	40	123
South Central	41	26	67	37	102
South Eastern A	45	37	83	36	116
South Eastern B	43	26	69	36	103
North Central	30	26	56	29	83
County					
Bomi	18	35	53	32	84
Bong	32	22	53	28	80
Gbarpolu	46	32	78	45	119
Grand Bassa	41	31	72	56	124
Grand Cape Mount	45	71	116	44	155
Grand Gedeh	32	32	64	37	99
Grand Kru	27	38	65	47	108
Lofa	35	24	58	34	91
Margibi	36	29	65	50	111
Maryland	50	23	72	33	102
Montserrado	42	25	66	30	95
Nimba	27	30	57	26	82
River Cess	30	28	58	(36)	(91)
River Gee	57	15	72	23	93
Sinoe	65	47	112	36	144
Mother's education					
No education	35	34	69	39	105
Elementary	45	36	82	38	116
Junior high	44	15	60	42	99
Senior high	26	18	44	12	55
Higher	*	*	*	*	*
Wealth quintile					
Lowest	34	33	67	38	102
Second	39	28	67	38	103
Middle	37	35	73	36	106
Fourth	43	26	70	43	110
Highest	31	21	52	9	61

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death. An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed.

na = Not available

¹ Computed as the difference between the infant and neonatal mortality rates

² Excludes first-order births

³ Rates for the 5-year period before the survey

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Number of stillbirths ¹	Number of early neonatal deaths ²	Perinatal mortality rate ³	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	10	37	41	1,129
20-29	32	68	40	2,526
30-39	16	43	43	1,369
40-49	4	14	66	261
Previous pregnancy interval in months⁴				
First pregnancy	12	41	40	1,305
<15	13	28	78	530
15-26	11	34	45	990
27-38	5	22	39	691
39+	20	36	32	1,769
Residence				
Urban	33	86	42	2,814
Greater Monrovia	14	48	43	1,415
Other urban	19	38	41	1,399
Rural	28	75	42	2,470
Region				
North Western	6	10	34	465
South Central	29	80	47	2,305
South Eastern A	5	12	51	337
South Eastern B	5	13	64	294
North Central	16	45	33	1,883
County				
Bomi	3	1	25	153
Bong	2	15	29	567
Gbarpolu	1	3	41	96
Grand Bassa	7	14	56	386
Grand Cape Mount	2	6	37	217
Grand Gedeh	2	4	51	121
Grand Kru	2	3	46	106
Lofa	5	15	49	410
Margibi	2	12	52	282
Maryland	2	8		136
Montserrado	19	54	44	1,637
Nimba	9	16	28	906
River Cess	1	2	28	81
River Gee	2	2	74	53
Sinoe	2	7	66	135
Mother's education				
No education	27	57	44	1,888
Elementary	10	40	37	1,355
Junior high	17	42	63	931
Senior high	6	22	31	910
Higher	3	1	15	201
Wealth quintile				
Lowest	14	33	37	1,269
Second	16	42	50	1,164
Middle	15	15	30	994
Fourth	13	50	62	1,011
Highest	4	21	29	847
Total	61	161	42	5,285

¹ Stillbirths are fetal deaths in pregnancies lasting 7 or more months.

² Early neonatal deaths are deaths at age 0-6 days among live-born children.

³ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000

⁴ Category cutoffs correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months assuming a pregnancy duration of 9 months.

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Liberia DHS 2019-20

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women ¹
	Percentage of births	Risk ratio	
Not in any high-risk category	28.9	1.00	18.5 ^a
Unavoidable risk category			
First-order births between age 18 and age 34	17.6	1.12	3.7
In any avoidable high-risk category	53.5	1.34	77.8
Single high-risk category			
Mother's age <18 only	9.8	1.31	0.4
Mother's age >34 only	1.8	0.90	5.6
Birth interval <24 months only	3.8	1.32	7.3
Birth order >3 only	19.3	0.97	16.8
Subtotal	34.7	1.10	30.1
Multiple high-risk category			
Age <18 and birth interval <24 months ²	0.5	(1.89)	0.4
Age >34 and birth interval <24 months	0.1	*	0.2
Age >34 and birth order >3	11.9	1.31	33.7
Age >34 and birth interval <24 months and birth order >3	1.7	4.24	5.0
Birth interval <24 months and birth order >3	4.6	2.00	8.4
Subtotal	18.8	1.77	47.7
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category			
Mother's age <18	10.3	1.34	0.8
Mother's age >34	15.5	1.60	44.4
Birth interval <24 months	10.8	2.11	21.3
Birth order >3	37.5	1.36	63.9
Number of births/women	5,263	na	4,216

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Ratios in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a ratio is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

² Includes the category age <18 and birth order >3

^a Includes sterilized women

Key Findings

- **Prenatal care:** 87% of women age 15-49 who had a birth in the 5 years before the survey had four or more prenatal care visits, and 71% received prenatal care during the first trimester for their most recent pregnancy.
- **Protection against neonatal tetanus:** 83% of women's most recent live births were protected against neonatal tetanus, a decline from 88% in 2013.
- **Delivery:** 80% of births in the 5 years before the survey were delivered in a health facility, and 84% were delivered with the assistance of a skilled provider.
- **Postnatal care:** 80% of women with a birth in the 2 years before the survey and 76% of their newborns received a postnatal check within 2 days of delivery.
- **Cord care:** 6% of births in the 2 years before the survey had chlorhexidine applied to the stump of the umbilical cord.
- **Problems in accessing health care:** 45% of women age 15-49 have at least one problem in accessing health care; getting money for treatment is the most common problem.

Health care services during pregnancy, childbirth and after delivery are important for the survival and well-being of both the mother and the infant. The 2019-20 LDHS obtained information on key indicators of maternal and newborn care in Liberia. These findings will help policymakers and program implementers in assessing current policies and programs as well as in decision making to improve maternal and newborn services in the country.

To ensure that standardized quality maternal health care is provided, the MOH develops and provides policy documents that aid service providers at all levels. Specifically, the Reproductive Health Policy offers standards, guidelines, protocols, and job aids for quick reference during the provision of preconception care, prenatal care, labor and delivery, and newborn care. It also establishes the categories of care providers (MOH 2015a; MOH 2015b; MOH 2015c).

9.1 PRENATAL CARE COVERAGE AND CONTENT

9.1.1 Skilled Providers

Prenatal care from a skilled provider

Pregnancy care received from skilled providers, such as doctors, nurses/midwives, and physician's assistants.

Sample: Women age 15-49 who had a live birth in the 5 years before the survey

Access to timely and quality prenatal services during pregnancy can help prevent maternal deaths and newborn complications. Prenatal visits allow providers to identify and manage infections and potential obstetric complications as well as to provide women with preventive injections, medications, supplements, and important information about pregnancy complications, breastfeeding, and family planning. Almost all (98%) women with a live birth in the 5 years before the survey received at least some prenatal care from a skilled provider for their most recent birth. Nurses/midwives are the most common prenatal care provider, seen by more than three quarters of women (78%); 19% of women saw doctors for their prenatal care (**Table 9.1**). At least 94% of women in all counties and of all levels of education and household wealth received prenatal care from a skilled provider.

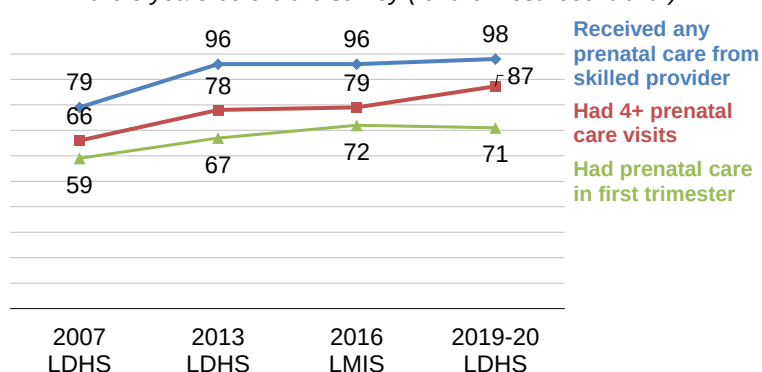
Trends: Coverage of prenatal care from a skilled provider has been above 95% since 2013 and is almost universal as of 2019-20 (**Figure 9.1**).

9.1.2 Timing and Number of Prenatal Care Visits

Almost 9 in 10 women (87%) attended at least the four recommended prenatal care visits for their most recent birth in the 5 years before the survey (**Table 9.2**). Seven in 10 (71%) pregnant women had their first prenatal care visit in the first trimester of pregnancy, as recommended. Rural women are somewhat less likely than urban women to have at least four prenatal care visits (85% versus 89%).

Figure 9.1 Trends in prenatal care coverage

Percentage of women age 15-49 who had a live birth in the 5 years before the survey (for the most recent birth)



Trends: The percentage of women who had at least four prenatal care visits rose from 78% in 2013 to 87% in 2019-20, while the percentage who received care in the first trimester increased from 67% to 71% (**Figure 9.1**).

9.1.3 Reasons for Lack of Prenatal Care

The 2019-20 LDHS asked women who did not attend any prenatal care or attended less than the recommended four prenatal care visits their reason for not attending recommended prenatal care. The most common reason women gave for not attending prenatal care visits was that they had no money to pay for transportation (35%), followed by no transportation (19%) and no time (12%) (**Table 9.3**).

9.2 COMPONENTS OF PRENATAL CARE VISITS

Among women who received prenatal care for their most recent birth, almost all had their blood pressure measured (96%), a urine sample taken (93%), and a blood sample taken (96%) (**Table 9.4** and **Figure 9.2**). Ninety-four percent took iron tablets or syrup, and 64% took intestinal parasite drugs.

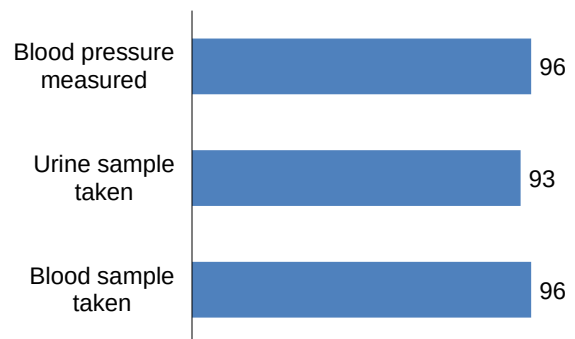
Trends: The proportion of women who had a urine sample taken increased from 85% in 2013 to 93% in 2019-20. The other components of prenatal care have remained more or less unchanged since 2013.

Patterns by background characteristics

- There are only minimal differences by background characteristics in the percentages of women who took iron tablets and had their blood pressure measured.
- Women living in rural areas were less likely to have had a urine sample taken than women in urban areas (88% versus 96%).
- By county, urine samples were least likely to be taken in Gbarpolu (67%) and most likely to be taken in River Cess (98%).
- The percentage of women who took intestinal drugs ranges from a low of 40% in River Cess to a high of 77% in Grand Kru.

Figure 9.2 Components of prenatal care

Among women who received prenatal care for their most recent birth, the percentage with selected services



9.3 PROTECTION AGAINST NEONATAL TETANUS

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Neonatal tetanus, a leading cause of death among neonates in lower-income countries, is often due to failure to observe hygienic procedures during delivery. Almost 8 in 10 (79%) women with a live birth in the 5 years before the survey received two or more tetanus toxoid injections to protect their last live birth against neonatal tetanus. In all, 83% of women's most recent live births were protected against neonatal tetanus (**Table 9.5**).

Trends: After increasing from 77% in 2007 to 88% in 2013, tetanus toxoid coverage has since slightly decreased to 83% in 2019-20.

Patterns by background characteristics

- Protection against neonatal tetanus ranges from a low of 70% each in River Cess and Gbarpolu to a high of 92% in Lofa.
- The proportions of births protected against neonatal tetanus are similar across education and wealth categories, dropping below 80% only among women from the poorest households (79%).

9.4 DELIVERY SERVICES

9.4.1 Institutional Deliveries

Institutional deliveries

Deliveries that occur in a health facility.

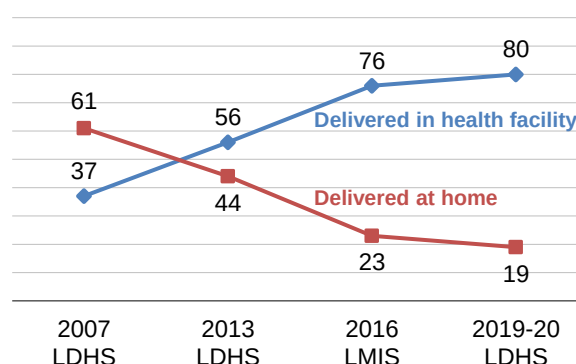
Sample: All live births in the 5 years before the survey

Health facility deliveries help reduce maternal and newborn mortality, as skilled providers are immediately available to manage obstetric and newborn complications that may arise during delivery. The 2019-20 LDHS results show that 80% of births in the 5 years before the survey were delivered in a health facility (Table 9.6). The majority of births were delivered in public facilities (66%), while 14% were delivered in private facilities. Nineteen percent of births were delivered at home.

Trends: Health facility births increased steadily from 37% in 2007 to 80% in 2019-20. Conversely, home births dropped during this period, from 61% to 19% (Figure 9.3).

Figure 9.3 Trends in place of birth

Percentage of live births in the 5 years before the survey

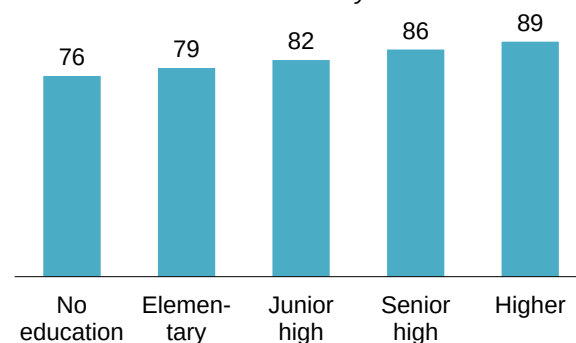


Patterns by background characteristics

- Health facility births are more common among women with four or more prenatal care visits (85%) than among women with one to three prenatal care visits (62%) and those with no visits (27%) (Table 9.6).
- Health facility births increase with increasing education. Seventy-six percent of women with no education delivered in a health facility, as compared with 89% of women with a higher education (Figure 9.4).
- Health facility births also generally increase with increasing household wealth, from 74% among women in the poorest households to 84% among those in the wealthiest households.

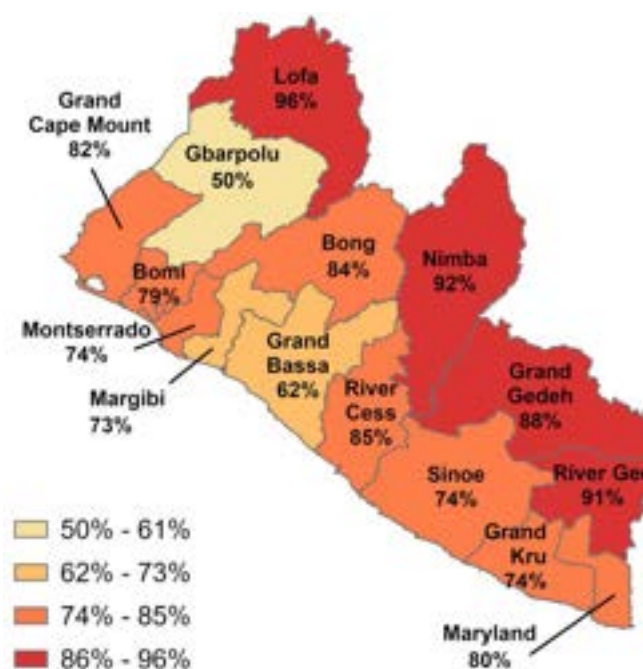
Figure 9.4 Health facility births by education

Percentage of live births in the 5 years before the survey that were delivered in a health facility



- Health facility births vary by county, ranging from 50% in Gbarpolu to 96% in Lofa (**Figure 9.5**).

Figure 9.5 Health facility births by county



9.4.2 Skilled Assistance during Delivery

Skilled assistance during delivery

Births delivered with the assistance of doctors, nurses/midwives, and physician's assistants.

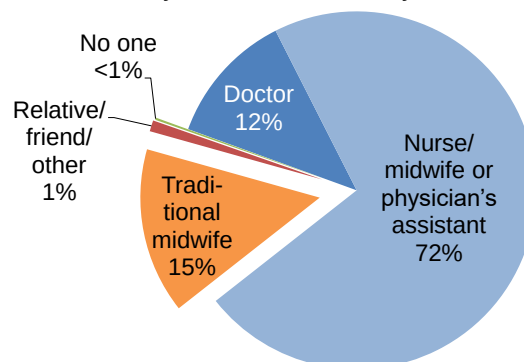
Sample: All live births in the 5 years before the survey

Assistance from a skilled birth attendant during delivery is a key intervention for reducing maternal and neonatal mortality. In Liberia, 84% of births are delivered by a skilled provider (72% by nurses/midwives and 12% by doctors). Fifteen percent of births are delivered by traditional midwives (**Table 9.7** and **Figure 9.6**).

Trends: Skilled assistance at delivery increased steadily and substantially from 46% of births in 2007 to 84% of births in 2019-20. Births delivered by nurses/midwives rose from 41% to 72% over that period, while births delivered by doctors increased from 4% to 12%. Meanwhile, births delivered by traditional midwives decreased from 48% to 15%.

Figure 9.6 Assistance during delivery

Percent distribution of births in the 5 years before the survey



Patterns by background characteristics

- Skilled attendance at delivery is higher in urban areas (89%) than rural areas (79%).
- Only 28% of births that occur outside of health facilities are assisted by a skilled provider.

- Skilled attendance at delivery generally increases with increasing household wealth. Seventy-six percent of births to mothers in the poorest households are assisted by skilled providers, as compared with 94% of births to mothers in the wealthiest households.
- Skilled attendance at delivery is least common in Gbarpolu (51%) and most common in Lofa (97%).

9.4.3 Skin-to-skin Contact Immediately after Birth

Research shows that skin-to-skin contact of the baby and mother (the baby placed naked on the mother's chest) immediately after birth is beneficial for the newborn and also encourages breastfeeding. In Liberia, one in two newborns (51%) had skin-to-skin contact with their mother immediately after birth (**Table 9.7**).

Patterns by background characteristics

- Skin-to-skin contact immediately after birth is more likely among newborns delivered in a health facility (56%) than among those delivered elsewhere (32%). In addition, skin-to-skin contact varies by the type of health facility in which the delivery takes place. Fifty-eight percent of infants delivered in a public facility had immediate skin-to-skin contact, as compared with 45% of those delivered in a private facility.
- The percentage of newborns with immediate skin-to-skin contact is highest in Grand Gedeh (72%) and lowest in Gbarpolu (37%).

9.4.4 Delivery by Cesarean

Access to cesarean sections can reduce maternal and neonatal mortality and complications of labor. The World Health Organization (WHO) advises that cesarean sections be done only when medically necessary and does not recommend a target rate for countries to achieve at the population level. Research conducted by WHO has shown that increases in countries' cesarean section rates up to 10% are associated with a decline in maternal and neonatal mortality. However, increases in cesarean section rates beyond 10% are not associated with reductions in maternal and newborn mortality rates (WHO 2015a). Five percent of births in the 5 years preceding the survey were delivered by cesarean section. Of these births, 2% were planned before the onset of labor, while 3% were decided after the onset of labor (**Table 9.8**).

Trends: The proportion of births delivered by cesarean section has increased only slightly over time, from 4% in 2007 and 2013 to 5% in 2019-20.

Patterns by background characteristics

- Cesarean-section deliveries are more common among women with a higher education (16%) than among women at other educational levels (4%-6%).
- Cesarean-section deliveries generally increase with increasing household wealth, from 3% among women from the poorest households to 8% among women from the wealthiest households.
- Cesarean-section deliveries are most common in Bong and Lofa (8% each) and least common in Gbarpolu and Grand Kru (1% each).

Duration of Stay in Health Facility after Birth

Seventeen percent of women with a vaginal birth stayed in the health facility for fewer than 6 hours after giving birth, and 85% stayed for fewer than 3 days. Ninety-three percent of women with a cesarean section stayed in the hospital for 3 or more days (**Table 9.9**).

9.5 POSTNATAL CARE

9.5.1 Postnatal Health Check for Mothers

Globally, approximately half of maternal deaths occur within the first 24 hours after delivery. The WHO guidelines recommend that women receive a postnatal health care check within the first 24 hours after delivery irrespective of the place of birth. In line with this global consideration, policy guidance provided by the MOH demands that every mother and her newborn are provided comprehensive postnatal care for the mother and newborn, including the first vaccines for the newborn within 24 hours after birth. The Postpartum and Newborn Protocols clearly describe the care to be provided, procedures, and specific time of care during this critical period (MOH 2015c; MOH 2015d).

In Liberia, 80% of women age 15-49 who gave birth in the 2 years before the survey received a postnatal check within 2 days of their most recent birth, and most of these women (69%) were seen within 4 hours of birth (**Table 9.10**).

Trends: The percentage of women who received a postnatal check within 2 days of birth increased from 71% in 2013 to 80% in 2019-20. Over the same period, the percentage who received postnatal care within 4 hours of birth rose from 56% to 69%.

Patterns by background characteristics

- The timeline for receipt of postnatal care is highly associated with place of delivery. Eighty-four percent of women who delivered in a health facility received postnatal care within 2 days of birth, as compared with 56% of women who delivered elsewhere.
- The percentage of women who received postnatal care during the first 2 days after birth ranges from a low of 66% in Gbarpolu to a high of 94% in River Cess.

Type of Provider

Seventy-two percent of women received a postnatal checkup from a doctor, nurse, or midwife, while 7% received postnatal care from a traditional midwife (**Table 9.11**). Women giving birth outside of a health facility (37%) and women in Gbarpolu (24%) and Grand Bassa (20%) were most likely to receive a postnatal check from a traditional midwife.

9.5.2 Postnatal Health Check for Newborns

Proper care for newborns is essential to reduce neonatal problems and death. According to WHO, postnatal care services for newborns should start immediately after birth since most neonatal deaths occur within the first 48 hours of life (WHO 2015b). Three quarters (76%) of newborns received a postnatal checkup within 2 days of birth, and 66% received a checkup within 4 hours. Eighteen percent of newborns did not receive a postnatal check (**Table 9.12**).

Patterns by background characteristics

- Newborns delivered in a health facility were much more likely to receive a postnatal health check (83%) than those delivered elsewhere (39%).
- Postnatal care for newborns varies by county. Ninety percent of newborns in River Cess received a postnatal checkup within 2 days of birth, as compared with 63% each in Gbarpolu and Grand Kru.

Type of Provider

Seventy-one percent of newborns received postnatal checkups from doctors, nurses, or midwives, while 4% were checked by a traditional midwife (**Table 9.13**).

Content of Postnatal Care for Newborns

The content of postnatal care is also important. About half of newborns had their cord examined (55%) and temperature measured (48%). Only about one-third of newborns were weighed (35%). More than half of mothers received counseling on danger signs (53%) and breastfeeding (59%) and were observed during breastfeeding (55%). A total of 64% of newborns had at least two signal functions performed within 2 days of birth (**Table 9.14**).

Patterns by background characteristics

- The percentage of newborns with at least two signal functions performed during the 2 days after birth is higher in rural areas than in urban areas (68% versus 60%).
- By county, the percentage of newborns with at least two signal functions performed ranges from a low of 52% in Bomi and Gbarpolu to a high of 83% in Grand Bassa.
- The percentage of newborns with at least two signal functions performed declines sharply with increasing wealth, from 71% among those from households in the lowest wealth quintile to 55% among those from households in the highest quintile.

9.5.3 Cord Cutting

Women whose most recent births in the 2 years preceding the survey took place outside a health facility were asked about what was used for cutting the umbilical cord. The recommendation is that a new, unused instrument be used or, if an old instrument is used, that it first be boiled to disinfect it.

The 2019-20 LDHS results show that for 66% of births that took place outside a health facility, a new metal instrument was used to cut the cord; for 2% a previously used metal instrument was used (about half of which were boiled), and for 33% some other instrument was used. Use of a clean metal instrument is higher in rural than urban areas (76% versus 53%) and declines with increasing education and wealth (**Table 9.15**).

9.5.4 Cord Care

Proper care of the stump of the umbilical cord to prevent severe bacterial infections is important in reducing neonatal mortality. In 2013, Liberia began including chlorhexidine, a powerful antiseptic, in its national health policy.

In the 2019-20 LDHS, women with a birth in the 2 years prior to the survey, irrespective of where the birth took place, were asked what was applied to the stump of the umbilical cord, if anything. Overall, 6% of women with a birth in the past 2 years said that chlorhexidine was applied to the cord stump, while 37% said that another antiseptic was applied. Twenty-four percent of women said that nothing was applied and 33% said that other substances such as mustard oil, ash, or animal dung were applied. Overall, two-thirds (67%) of newborns had no harmful substance applied to the cord (**Table 9.16**).

Patterns by background characteristics

- Use of chlorhexidine depends on place of delivery. Seven percent of births in public health facilities had chlorhexidine applied to the cord, as compared with only 2% each of births in private facilities and elsewhere.
- The percentage of births with nothing harmful applied to the cord ranges from a low of 58% each in Bomi and Margibi to a high of 79% each in River Gee and Maryland. Similarly, use of chlorhexidine varies greatly by county, from a low of 1% of births in Montserrado to a high of 27% in River Gee and 24% in Grand Kru.

9.6 PROBLEMS IN ACCESSING HEALTH CARE

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go for treatment
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15-49

Almost half (45%) of women age 15-49 report that they have at least one problem in accessing health care when they are sick. The most commonly reported problem is getting money for treatment (36%), followed by distance to a health facility (28%) (**Table 9.17**).

Patterns by background characteristics

- Women living in rural areas are more likely to report at least one problem in accessing health care than those living in urban areas (59% versus 36%).
- The percentage of women reporting one or more problems in accessing health care declines sharply with increasing education and wealth.
- By county, the percentage of women reporting one or more problems in accessing health care is lowest in River Gee (25%) and highest in Gbarpolu (75%).

LIST OF TABLES

For more information on maternal health care, see the following tables:

- **Table 9.1** Prenatal care
- **Table 9.2** Number of prenatal care visits and timing of first visit
- **Table 9.3** Reasons for not attending recommended number of prenatal care visits
- **Table 9.4** Components of prenatal care
- **Table 9.5** Tetanus toxoid injections
- **Table 9.6** Place of delivery
- **Table 9.7** Assistance during delivery and skin-to-skin contact of newborn
- **Table 9.8** Cesarean section

- **Table 9.9** Duration of stay in health facility after birth
- **Table 9.10** Timing of first postnatal check for the mother
- **Table 9.11** Type of provider of first postnatal check for the mother
- **Table 9.12** Timing of first postnatal check for the newborn
- **Table 9.13** Type of provider of first postnatal check for the newborn
- **Table 9.14** Content of postnatal care for newborns
- **Table 9.15** Cord cutting
- **Table 9.16** Cord care
- **Table 9.17** Problems in accessing health care

Table 9.1 Prenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by prenatal care provider during the pregnancy for the most recent birth and percentage receiving prenatal care from a skilled provider for the most recent birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Prenatal care provider					No prenatal care	Total	Percentage receiving prenatal care from a skilled provider ¹	Number of women
	Doctor	Nurse/midwife	Physician's assistant	Traditional midwife	Other				
Age at birth									
<20	14.9	81.9	1.8	0.3	0.0	1.1	100.0	98.6	801
20-34	20.0	77.3	0.6	0.4	0.1	1.7	100.0	97.8	2,530
35-49	19.1	77.3	0.6	0.7	0.0	2.4	100.0	96.9	695
Birth order									
1	18.6	78.9	1.3	0.2	0.0	0.9	100.0	98.8	1,097
2-3	21.6	75.9	0.5	0.3	0.0	1.6	100.0	98.1	1,419
4-5	17.7	79.5	0.7	0.3	0.1	1.7	100.0	97.9	845
6+	14.7	80.2	0.7	1.0	0.1	3.3	100.0	95.6	666
Residence									
Urban	23.3	74.3	0.6	0.3	0.0	1.5	100.0	98.2	2,269
Greater Monrovia	29.0	69.1	0.0	0.0	0.0	1.9	100.0	98.1	1,184
Other urban	17.2	79.8	1.3	0.5	0.0	1.1	100.0	98.4	1,084
Rural	13.0	83.3	1.1	0.6	0.1	1.9	100.0	97.4	1,757
Region									
North Western	12.6	83.4	2.3	0.2	0.0	1.4	100.0	98.3	331
South Central	24.4	72.5	0.2	0.5	0.0	2.3	100.0	97.1	1,825
South Eastern A	12.5	81.6	1.8	0.6	0.5	3.1	100.0	95.8	248
South Eastern B	15.8	80.9	0.5	0.5	0.0	2.4	100.0	97.2	222
North Central	14.6	83.4	1.1	0.2	0.0	0.7	100.0	99.1	1,400
County									
Bomi	9.0	86.0	3.0	0.6	0.0	1.3	100.0	98.1	119
Bong	9.0	89.1	0.3	0.0	0.0	1.6	100.0	98.4	443
Gbarpolu	12.7	82.1	3.3	0.1	0.0	1.8	100.0	98.1	67
Grand Bassa	11.9	83.0	0.9	2.2	0.0	2.1	100.0	95.7	264
Grand Cape Mount	15.5	81.8	1.3	0.0	0.0	1.4	100.0	98.6	145
Grand Gedeh	5.6	89.2	0.7	0.4	1.3	2.7	100.0	95.6	90
Grand Kru	24.3	70.8	0.0	1.3	0.0	3.7	100.0	95.0	80
Lofa	6.6	92.0	1.4	0.0	0.0	0.0	100.0	100.0	317
Margibi	24.1	69.2	0.9	1.6	0.0	4.2	100.0	94.2	217
Maryland	12.0	85.4	1.0	0.0	0.0	1.6	100.0	98.4	100
Montserrado	26.9	70.9	0.0	0.0	0.1	2.0	100.0	97.9	1,343
Nimba	22.4	75.2	1.6	0.5	0.0	0.3	100.0	99.2	640
River Cess	11.1	83.3	3.5	0.9	0.0	1.1	100.0	98.0	58
River Gee	8.8	89.3	0.2	0.0	0.0	1.7	100.0	98.3	42
Sinoe	19.4	73.6	1.8	0.5	0.0	4.7	100.0	94.8	100
Education									
No education	15.8	80.2	0.9	0.5	0.1	2.6	100.0	96.8	1,366
Elementary	16.5	81.3	0.6	0.4	0.1	1.1	100.0	98.4	984
Junior high	16.9	79.1	1.6	0.2	0.0	2.2	100.0	97.6	725
Senior high	25.1	73.0	0.6	0.5	0.0	0.8	100.0	98.7	782
Higher	35.9	63.8	0.1	0.1	0.0	0.0	100.0	99.9	170
Wealth quintile									
Lowest	12.8	82.6	1.0	0.7	0.2	2.7	100.0	96.4	855
Second	14.2	83.2	0.8	0.6	0.0	1.1	100.0	98.3	849
Middle	16.5	78.2	2.0	0.0	0.0	3.2	100.0	96.8	785
Fourth	21.8	76.2	0.2	0.4	0.0	1.3	100.0	98.3	816
Highest	30.5	69.2	0.0	0.2	0.0	0.1	100.0	99.7	721
Total	18.8	78.2	0.8	0.4	0.0	1.7	100.0	97.8	4,026

Note: If more than one source of prenatal care was mentioned, only the provider with the highest qualifications is considered in this tabulation.

¹ Skilled provider includes doctor, nurse, midwife, and physician's assistant.

Table 9.2 Number of prenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of prenatal care visits for the most recent live birth and by the timing of the first visit, and among women with prenatal care, median months pregnant at first visit, according to residence, Liberia DHS 2019-20

Number of prenatal care visits and timing of first visit	Residence		Total
	Urban	Rural	
Number of prenatal care visits			
None	1.5	1.9	1.7
1	0.7	1.9	1.2
2-3	6.6	9.8	8.0
4+	89.3	84.6	87.3
Don't know/missing	1.9	1.8	1.8
Total	100.0	100.0	100.0
Number of months pregnant at time of first prenatal care visit			
No prenatal care	1.5	1.9	1.7
<4	71.0	70.8	70.9
4-5	22.5	20.5	21.7
6-7	3.5	5.2	4.3
8+	1.0	1.3	1.1
Don't know/missing	0.4	0.1	0.3
Total	100.0	100.0	100.0
Number of women	2,269	1,757	4,026
Median months pregnant at first visit (for those with prenatal care)	3.1	3.2	3.2
Number of women with prenatal care	2,234	1,723	3,957

Table 9.3 Reasons for not attending recommended number of prenatal care visits

Among women age 15-49 with a live birth in the 5 years preceding the survey who had less than the recommended four prenatal care visits for the most recent birth, percentage citing specific reasons for not attending the recommended number of visits, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among women with less than the 4 recommended prenatal care visits, reason for not attending the recommended number of visits									Number of women with 0-3 prenatal care visits for their most recent birth
	Fear of sexual assault	Fear of other violence on the road	No transportation	No money to pay for transportation	No time	Husband or partner did not give permission	Other male family member did not give permission	Female family member did not give permission	Other	
Age										
15-19	3.1	3.6	14.0	36.5	10.0	6.3	1.2	2.5	39.2	50
20-24	3.9	1.6	18.1	27.2	6.9	0.2	3.3	0.4	56.3	112
25-29	2.4	5.2	27.6	42.1	14.6	0.0	0.3	0.0	43.0	100
30-39	0.5	3.2	19.1	34.7	13.0	0.2	0.0	0.0	42.6	121
40-49	1.4	4.8	12.9	33.1	19.2	1.2	0.3	0.0	52.5	55
Birth order										
1	1.7	3.2	18.3	26.4	7.1	3.1	0.6	1.2	49.0	102
2-3	3.0	3.3	22.7	41.6	11.9	0.1	2.3	0.3	45.3	161
4-5	2.1	4.1	19.5	39.3	16.3	0.3	0.4	0.0	40.9	83
6+	1.6	3.6	14.9	26.8	14.9	0.7	0.2	0.0	53.5	92
Number of prenatal care visits										
None	1.1	3.2	37.0	37.7	7.2	1.0	0.0	0.0	42.3	69
1	0.4	3.2	8.4	32.1	20.2	0.0	1.9	2.0	39.3	48
2-3	2.7	3.6	17.3	34.2	12.1	1.1	1.2	0.2	49.2	321
Residence										
Urban	2.4	2.0	20.3	34.8	8.5	1.5	1.9	0.0	49.2	199
Greater Monrovia	(3.6)	(0.8)	(24.5)	(39.1)	(6.2)	(1.7)	(2.8)	(0.0)	(49.1)	133
Other urban	0.0	4.4	12.0	26.2	12.9	1.3	0.0	0.0	49.5	67
Rural	2.0	4.7	18.7	34.3	15.4	0.5	0.4	0.7	45.2	239
Region										
North Western	2.2	4.7	19.2	32.0	8.3	0.5	0.0	0.0	55.3	36
South Central	2.4	3.1	19.7	36.2	10.0	1.3	1.9	0.2	49.0	223
South Eastern A	1.6	7.4	24.2	15.7	20.7	0.0	0.0	0.0	49.0	30
South Eastern B	6.1	2.7	25.0	38.0	20.3	0.8	1.3	1.9	44.0	36
North Central	0.7	3.1	16.0	35.8	13.2	0.8	0.0	0.5	41.1	113
County										
Bomi	*	*	*	*	*	*	*	*	*	6
Bong	0.0	3.0	18.2	42.4	4.2	0.0	0.0	0.0	45.9	50
Gbarpolu	(1.8)	(6.0)	(22.4)	(44.2)	(1.8)	(1.0)	(0.0)	(0.0)	(62.7)	19
Grand Bassa	1.2	9.1	4.4	25.0	24.7	0.0	0.0	1.0	49.5	46
Grand Cape Mount	*	*	*	*	*	*	*	*	*	11
Grand Gedeh	*	*	*	*	*	*	*	*	*	10
Grand Kru	10.6	2.6	38.2	50.7	29.3	1.3	1.5	3.3	31.0	21
Lofa	*	*	*	*	*	*	*	*	*	25
Margibi	(0.0)	(4.3)	(12.1)	(47.8)	(11.3)	(2.7)	(2.4)	(0.0)	(44.8)	25
Maryland	(0.0)	(2.2)	(6.6)	(25.7)	(6.6)	(0.3)	(0.0)	(0.0)	(55.4)	12
Montserrado	3.1	1.1	25.4	37.7	5.4	1.5	2.4	0.0	49.5	153
Nimba	(0.0)	(5.2)	(23.4)	(24.0)	(18.4)	(0.0)	(0.0)	(1.4)	(32.4)	38
River Cess	(0.0)	(17.1)	(22.5)	(10.2)	(14.1)	(0.0)	(0.0)	(0.0)	(47.5)	5
River Gee	*	*	*	*	*	*	*	*	*	3
Sinoe	(3.1)	(4.4)	(36.5)	(12.9)	(22.6)	(0.0)	(0.0)	(0.0)	(39.5)	16
Education										
No education	1.2	4.2	21.2	36.6	15.3	0.5	0.6	0.0	43.2	174
Elementary	1.7	3.5	20.5	38.1	11.4	1.9	0.0	1.4	40.2	119
Junior high	1.0	3.2	21.2	26.8	9.4	0.0	0.0	0.0	57.5	70
Senior high	(7.6)	(1.7)	(14.0)	(36.5)	(10.1)	(1.8)	(5.9)	(0.0)	(51.1)	63
Higher	*	*	*	*	*	*	*	*	*	11
Wealth quintile										
Lowest	1.0	3.5	19.9	33.1	12.2	0.2	0.0	0.8	48.4	138
Second	1.5	6.8	15.1	38.8	17.5	0.2	0.8	0.0	39.6	91
Middle	2.4	3.1	32.8	45.1	12.4	1.0	0.4	0.6	39.8	90
Fourth	(0.0)	(0.0)	(11.0)	(30.0)	(4.3)	(0.1)	(0.0)	(0.0)	(59.5)	71
Highest	*	*	*	*	*	*	*	*	*	49
Total	2.2	3.5	19.4	34.5	12.3	1.0	1.1	0.4	47.0	438

Note: Women can report more than one reason for not having at least 4 prenatal visits. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 9.4 Components of prenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent live birth, and among women receiving prenatal care for the most recent live birth in the 5 years preceding the survey, percentage receiving specific prenatal services, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among women with a live birth in the past 5 years, percentage who during the pregnancy of their most recent live birth:			Among women who received prenatal care for their most recent birth in the past 5 years, percentage with selected services			
	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past 5 years	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with prenatal care for their most recent birth
Age at birth							
<20	95.5	62.4	801	93.4	91.0	94.6	792
20-34	93.3	62.6	2,530	97.0	92.8	96.8	2,487
35-49	93.8	69.6	695	97.8	93.2	96.5	678
Birth order							
1	95.9	63.0	1,097	95.1	92.8	95.7	1,087
2-3	94.2	63.9	1,419	96.1	93.4	96.6	1,396
4-5	91.8	63.8	845	98.3	92.6	97.2	831
6+	92.0	64.8	666	96.8	89.8	95.6	643
Residence							
Urban	93.9	65.3	2,269	97.0	95.9	97.2	2,234
Greater Monrovia	96.8	65.7	1,184	97.1	97.4	97.8	1,162
Other urban	90.7	64.8	1,084	97.0	94.4	96.6	1,072
Rural	93.7	61.8	1,757	95.6	88.0	95.1	1,723
Region							
North Western	96.6	64.7	331	94.4	86.6	95.4	327
South Central	96.6	64.7	1,825	95.8	93.7	95.8	1,783
South Eastern A	97.1	59.2	248	98.8	95.5	98.0	240
South Eastern B	94.7	73.0	222	96.7	90.4	96.3	217
North Central	88.8	61.7	1,400	97.2	92.2	96.9	1,391
County							
Bomi	98.4	63.6	119	94.1	90.1	96.2	118
Bong	95.0	66.3	443	97.9	90.0	97.7	436
Gbarpolu	94.2	56.1	67	90.8	67.1	90.5	66
Grand Bassa	98.2	50.7	264	92.1	85.9	91.3	258
Grand Cape Mount	96.1	69.6	145	96.4	92.7	97.0	143
Grand Gedeh	96.5	69.7	90	98.7	95.3	99.6	87
Grand Kru	89.9	76.9	80	94.8	90.8	93.3	77
Lofa	88.2	51.2	317	98.2	90.1	97.0	317
Margibi	94.0	60.3	217	92.3	86.7	92.1	208
Maryland	97.7	72.9	100	96.8	88.9	97.0	98
Montserrado	96.7	68.2	1,343	97.0	96.3	97.2	1,316
Nimba	84.8	63.6	640	96.2	94.7	96.4	638
River Cess	98.4	39.7	58	98.7	98.2	98.5	58
River Gee	97.0	65.7	42	100.0	93.1	100.0	42
Sinoe	97.0	61.2	100	99.0	94.1	96.3	95
Education							
No education	91.8	62.6	1,366	96.3	91.2	95.4	1,330
Elementary	94.3	62.0	984	95.5	89.5	95.7	973
Junior high	93.3	65.6	725	97.7	94.2	98.2	709
Senior high	96.4	67.4	782	96.6	95.4	97.0	775
Higher	97.3	58.8	170	96.1	99.9	96.0	170
Wealth quintile							
Lowest	92.5	61.4	855	95.9	86.2	94.1	831
Second	89.0	63.0	849	96.0	90.9	96.2	840
Middle	93.6	61.0	785	96.8	92.7	97.1	760
Fourth	96.9	66.1	816	96.3	94.9	96.5	806
Highest	97.8	67.9	721	97.1	98.7	97.9	720
Total	93.8	63.8	4,026	96.4	92.5	96.3	3,957

Table 9.5 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose most recent live birth was protected against neonatal tetanus, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage receiving two or more injections during the pregnancy for the most recent live birth	Percentage whose most recent live birth was protected against neonatal tetanus ¹	Number of mothers
Age at birth			
<20	80.3	82.0	801
20-34	79.0	83.2	2,530
35-49	78.8	82.0	695
Birth order			
1	80.2	82.0	1,097
2-3	78.7	82.1	1,419
4-5	81.3	86.1	845
6+	76.1	81.1	666
Residence			
Urban	80.1	83.2	2,269
Greater Monrovia	79.4	82.7	1,184
Other urban	80.7	83.8	1,084
Rural	78.1	82.2	1,757
Region			
North Western	79.8	84.2	331
South Central	78.6	82.0	1,825
South Eastern A	71.4	77.4	248
South Eastern B	80.5	83.9	222
North Central	81.1	84.2	1,400
County			
Bomi	84.6	88.8	119
Bong	77.3	80.7	443
Gbarpolu	65.5	70.4	67
Grand Bassa	69.0	74.3	264
Grand Cape Mount	82.4	86.8	145
Grand Gedeh	75.1	85.9	90
Grand Kru	70.8	71.5	80
Lofa	90.5	91.5	317
Margibi	79.1	81.7	217
Maryland	85.0	90.9	100
Montserrado	80.4	83.5	1,343
Nimba	79.0	83.0	640
River Cess	66.9	69.5	58
River Gee	87.9	90.9	42
Sinoe	70.6	74.3	100
Education			
No education	78.2	81.7	1,366
Elementary	78.5	82.8	984
Junior high	79.2	83.1	725
Senior high	81.9	84.6	782
Higher	79.1	81.6	170
Wealth quintile			
Lowest	75.3	79.2	855
Second	80.6	84.3	849
Middle	77.9	81.7	785
Fourth	83.0	85.3	816
Highest	79.4	83.4	721
Total	79.2	82.8	4,026

¹ Includes mothers with two injections during the pregnancy of their most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent live birth

Table 9.6 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Health facility				Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector	Home	Other			
Mother's age at birth							
<20	68.8	11.8	18.7	0.7	100.0	80.6	1,129
20-34	64.3	15.3	19.7	0.8	100.0	79.6	3,320
35-49	65.9	14.0	19.4	0.8	100.0	79.8	815
Birth order							
1	66.0	16.9	16.8	0.3	100.0	82.9	1,423
2-3	63.9	16.6	18.6	1.0	100.0	80.4	1,866
4-5	67.1	11.3	20.7	0.9	100.0	78.4	1,134
6+	66.2	9.1	23.9	0.8	100.0	75.3	839
Prenatal care visits¹							
None	21.3	6.1	72.6	0.0	100.0	27.4	69
1-3	50.5	11.9	37.0	0.7	100.0	62.3	369
4+	69.0	15.8	14.5	0.7	100.0	84.8	3,514
Don't know/missing	78.4	9.4	11.2	1.0	100.0	87.8	73
Residence							
Urban	61.8	21.6	16.2	0.4	100.0	83.4	2,805
Greater Monrovia	44.9	31.5	23.2	0.4	100.0	76.4	1,416
Other urban	79.0	11.5	9.1	0.4	100.0	90.5	1,388
Rural	69.7	6.1	23.1	1.1	100.0	75.8	2,458
Region							
North Western	71.0	3.1	24.4	1.5	100.0	74.1	464
South Central	47.4	24.6	27.2	0.8	100.0	72.0	2,296
South Eastern A	77.6	3.8	17.6	0.9	100.0	81.4	333
South Eastern B	77.1	2.5	19.5	0.9	100.0	79.6	290
North Central	82.3	8.3	9.0	0.5	100.0	90.5	1,880
County							
Bomi	73.3	5.4	19.4	1.9	100.0	78.7	152
Bong	78.4	5.4	15.3	1.0	100.0	83.7	568
Gbarpolu	46.5	3.6	47.6	2.3	100.0	50.1	95
Grand Bassa	51.2	10.8	36.5	1.4	100.0	62.1	382
Grand Cape Mount	80.1	1.3	17.7	0.8	100.0	81.5	217
Grand Gedeh	86.7	0.9	11.6	0.8	100.0	87.6	120
Grand Kru	73.4	0.1	26.0	0.5	100.0	73.5	104
Lofa	90.1	6.1	3.1	0.7	100.0	96.2	408
Margibi	55.9	16.7	26.8	0.6	100.0	72.6	281
Maryland	75.5	4.5	19.2	0.8	100.0	80.0	134
Montserrado	45.0	29.2	25.1	0.7	100.0	74.2	1,633
Nimba	81.2	11.1	7.7	0.1	100.0	92.3	904
River Cess	76.7	8.6	14.3	0.4	100.0	85.3	80
River Gee	88.5	2.4	7.4	1.7	100.0	90.9	52
Sinoe	69.9	3.6	25.1	1.3	100.0	73.5	132
Mother's education							
No education	69.2	7.0	22.9	1.0	100.0	76.1	1,875
Elementary	68.9	9.6	20.3	1.2	100.0	78.5	1,350
Junior high	66.1	15.6	18.3	0.0	100.0	81.7	929
Senior high	57.2	28.3	14.5	0.0	100.0	85.5	912
Higher	42.9	46.1	9.2	1.8	100.0	89.0	198
Wealth quintile							
Lowest	68.2	5.7	24.8	1.2	100.0	73.9	1,258
Second	76.0	6.5	16.7	0.7	100.0	82.5	1,159
Middle	70.7	10.9	17.6	0.9	100.0	81.6	989
Fourth	59.0	19.5	21.2	0.3	100.0	78.5	1,004
Highest	48.8	35.6	15.2	0.5	100.0	84.4	854
Total	65.5	14.3	19.4	0.7	100.0	79.8	5,263

¹ Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Assistance during delivery and skin-to-skin contact of newborn

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage with skin-to-skin contact immediately after birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Person providing assistance during delivery						Total	Percentage delivered by a skilled provider ¹	Percentage with skin-to-skin contact immediately after birth	Number of births
	Doctor	Nurse/midwife	Physician's assistant	Traditional midwife	Relative/friend/other	No one				
Mother's age at birth										
<20	9.6	74.6	0.2	14.3	1.1	0.2	100.0	84.4	48.2	1,129
20-34	13.3	71.0	0.3	14.5	0.6	0.2	100.0	84.7	50.9	3,320
35-49	10.3	72.4	0.4	16.0	0.7	0.2	100.0	83.1	54.6	815
Birth order										
1	12.6	74.0	0.1	12.5	0.8	0.0	100.0	86.7	47.9	1,423
2-3	13.5	73.1	0.1	12.5	0.5	0.3	100.0	86.7	52.1	1,866
4-5	12.7	68.4	0.7	17.4	0.5	0.3	100.0	81.8	50.6	1,134
6+	6.9	71.2	0.6	19.7	1.4	0.2	100.0	78.7	53.7	839
Prenatal care visits²										
None	4.7	23.4	0.9	53.6	14.9	2.5	100.0	29.0	26.0	69
1-3	12.9	55.5	0.4	30.2	0.5	0.6	100.0	68.8	39.8	369
4+	12.3	76.3	0.3	10.5	0.4	0.1	100.0	89.0	53.0	3,514
Don't know/missing	12.3	79.3	0.9	4.6	2.4	0.4	100.0	92.5	42.6	73
Place of delivery										
Health facility	14.9	83.4	0.3	1.3	0.0	0.0	100.0	98.6	55.8	4,202
Public facility	13.6	84.5	0.3	1.5	0.1	0.0	100.0	98.5	58.2	3,447
Private facility	21.0	78.1	0.2	0.8	0.0	0.0	100.0	99.2	45.0	755
Elsewhere	0.6	27.1	0.3	67.6	3.4	1.0	100.0	28.0	31.5	1,061
Residence										
Urban	15.6	73.4	0.2	9.9	0.7	0.2	100.0	89.2	49.5	2,805
Greater Monrovia	16.5	70.1	0.2	12.0	0.8	0.4	100.0	86.8	45.1	1,416
Other urban	14.8	76.7	0.3	7.7	0.5	0.0	100.0	91.7	54.1	1,388
Rural	7.9	70.5	0.4	20.2	0.8	0.2	100.0	78.9	52.5	2,458
Region										
North Western	7.3	70.6	0.3	21.5	0.4	0.0	100.0	78.1	56.5	464
South Central	12.4	67.5	0.2	18.7	0.8	0.3	100.0	80.2	46.5	2,296
South Eastern A	7.4	75.2	1.1	15.0	1.3	0.0	100.0	83.6	56.4	333
South Eastern B	13.0	67.8	0.4	13.8	3.5	1.5	100.0	81.2	54.8	290
North Central	13.4	78.0	0.3	8.2	0.1	0.0	100.0	91.7	53.3	1,880
County										
Bomi	6.7	77.3	0.0	16.0	0.0	0.0	100.0	84.0	58.9	152
Bong	9.9	76.6	0.3	13.0	0.3	0.0	100.0	86.8	55.3	568
Gbarpolu	4.5	46.6	0.0	48.9	0.0	0.0	100.0	51.1	36.6	95
Grand Bassa	3.0	68.3	0.0	28.2	0.6	0.0	100.0	71.2	62.6	382
Grand Cape Mount	8.9	76.3	0.7	13.2	0.9	0.0	100.0	85.9	63.5	217
Grand Gedeh	6.7	81.8	0.9	8.0	2.7	0.0	100.0	89.3	71.9	120
Grand Kru	19.0	52.7	0.4	26.5	1.0	0.4	100.0	72.1	55.2	104
Lofa	6.0	91.3	0.0	2.5	0.2	0.0	100.0	97.3	56.8	408
Margibi	12.8	61.5	0.8	23.0	1.9	0.0	100.0	75.1	39.6	281
Maryland	10.4	72.9	0.3	7.1	6.6	2.6	100.0	83.6	48.4	134
Montserrado	14.6	68.4	0.2	15.8	0.7	0.4	100.0	83.2	44.0	1,633
Nimba	19.0	72.9	0.4	7.8	0.0	0.0	100.0	92.2	50.5	904
River Cess	6.8	75.8	2.8	14.5	0.1	0.0	100.0	85.3	55.1	80
River Gee	7.5	84.6	0.8	5.9	0.6	0.6	100.0	92.9	70.6	52
Sinoe	8.4	68.8	0.2	21.8	0.9	0.0	100.0	77.4	43.2	132
Mother's education										
No education	10.6	70.4	0.4	17.4	1.0	0.3	100.0	81.4	53.9	1,875
Elementary	10.7	72.6	0.2	15.4	0.7	0.3	100.0	83.6	50.6	1,350
Junior high	12.5	72.5	0.4	13.8	0.8	0.0	100.0	85.3	49.0	929
Senior high	14.1	75.1	0.4	10.1	0.3	0.0	100.0	89.6	47.1	912
Higher	22.8	67.3	0.0	9.3	0.0	0.5	100.0	90.1	51.5	198
Wealth quintile										
Lowest	8.3	67.9	0.3	22.3	1.1	0.2	100.0	76.4	52.4	1,258
Second	10.3	73.5	0.4	14.9	0.7	0.1	100.0	84.2	52.6	1,159
Middle	11.5	74.0	0.5	13.4	0.6	0.0	100.0	86.0	52.3	989
Fourth	14.3	70.1	0.4	14.1	0.6	0.5	100.0	84.8	47.5	1,004
Highest	17.9	76.0	0.0	5.5	0.5	0.1	100.0	93.9	48.7	854
Total	12.0	72.0	0.3	14.7	0.7	0.2	100.0	84.4	50.9	5,263

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

¹ Skilled provider includes doctor, nurse, midwife, and physician's assistant.

² Includes only the most recent birth in the 5 years preceding the survey

Table 9.8 Cesarean section

Percentage of live births in the 5 years preceding the survey delivered by cesarean section (C-section), percentage delivered by C-section planned before the onset of labor pains, and percentage delivered by C-section decided on after the onset of labor pains, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Before onset of labor pains	After onset of labor pains	
Mother's age at birth				
<20	3.7	1.0	2.7	1,129
20-34	6.3	2.3	4.0	3,320
35-49	3.5	1.6	2.0	815
Birth order				
1	5.7	1.5	4.2	1,423
2-3	5.6	2.6	3.0	1,866
4-5	6.2	1.9	4.4	1,134
6+	2.7	1.0	1.7	839
Prenatal care visits¹				
None	0.5	0.5	0.0	69
1-3	3.9	1.3	2.6	369
4+	5.8	2.1	3.7	3,514
Don't know/missing	3.8	2.4	1.4	73
Place of delivery				
Health facility	6.6	2.4	4.3	4,202
Public facility	6.3	2.0	4.3	3,447
Private facility	7.9	3.9	4.0	755
Residence				
Urban	6.4	2.4	4.0	2,805
Greater Monrovia	5.6	2.3	3.4	1,416
Other urban	7.3	2.6	4.6	1,388
Rural	4.0	1.2	2.7	2,458
Region				
North Western	2.6	0.7	1.9	464
South Central	4.9	1.7	3.2	2,296
South Eastern A	3.8	1.5	2.3	333
South Eastern B	2.6	0.7	1.8	290
North Central	7.0	2.6	4.4	1,880
County				
Bomi	2.8	1.2	1.7	152
Bong	7.7	2.2	5.5	568
Gbarpolu	1.4	0.8	0.6	95
Grand Bassa	3.1	0.3	2.8	382
Grand Cape Mount	3.0	0.3	2.7	217
Grand Gedeh	5.0	2.7	2.3	120
Grand Kru	1.3	0.0	1.3	104
Lofa	7.6	3.4	4.2	408
Margibi	6.3	2.3	4.0	281
Maryland	3.7	1.2	2.6	134
Montserrado	5.1	2.0	3.2	1,633
Nimba	6.4	2.5	3.9	904
River Cess	3.2	0.6	2.5	80
River Gee	2.0	1.1	0.9	52
Sinoe	3.2	1.0	2.2	132
Mother's education				
No education	4.3	1.3	3.0	1,875
Elementary	5.2	2.0	3.2	1,350
Junior high	4.1	1.7	2.4	929
Senior high	6.3	2.3	4.1	912
Higher	16.3	6.2	10.2	198
Wealth quintile				
Lowest	3.0	0.8	2.2	1,258
Second	5.3	2.0	3.3	1,159
Middle	6.0	2.4	3.6	989
Fourth	5.4	1.3	4.1	1,004
Highest	7.7	3.4	4.3	854
Total	5.3	1.9	3.4	5,263

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in a health facility did not receive a C-section.

¹ Includes only the most recent birth in the 5 years preceding the survey

Table 9.9 Duration of stay in health facility after birth

Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, Liberia DHS 2019-20

Type of delivery	<6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Missing	Total	Number of women
Vaginal birth	17.4	7.5	4.4	55.9	14.2	0.5	100.0	3,073
Cesarean section	1.8	0.1	0.0	5.0	92.9	0.1	100.0	220

Table 9.10 Timing of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth in the 2 years preceding the survey who received a postnatal check in the first 2 days after giving birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Time after delivery of mother's first postnatal check ¹						No postnatal check ²	Total	Percentage of women with a postnatal check during the first 2 days after birth ¹	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/missing				
Age at birth										
<20	64.1	5.4	4.9	0.0	0.0	7.2	18.3	100.0	74.5	441
20-34	70.0	6.5	4.4	0.2	0.6	5.5	12.6	100.0	81.0	1,306
35-49	70.4	5.5	4.5	0.5	0.0	8.1	11.0	100.0	80.4	349
Birth order										
1	64.0	5.4	4.6	0.0	0.0	7.4	18.6	100.0	74.0	599
2-3	72.2	8.5	4.5	0.2	0.0	5.0	9.6	100.0	85.2	751
4-5	72.5	4.4	4.1	0.7	0.5	4.2	13.6	100.0	81.0	425
6+	65.1	4.4	5.2	0.2	2.0	9.8	13.4	100.0	74.6	321
Place of delivery										
Health facility	74.7	6.1	3.4	0.2	0.0	6.1	9.5	100.0	84.2	1,744
Elsewhere	39.9	6.3	10.1	0.5	2.4	7.0	33.8	100.0	56.3	352
Residence										
Urban	67.0	7.1	4.1	0.0	0.4	7.3	14.0	100.0	78.2	1,129
Greater Monrovia	63.6	8.6	2.4	0.0	0.9	5.7	18.7	100.0	74.7	574
Other urban	70.5	5.5	5.8	0.0	0.0	9.0	9.2	100.0	81.8	555
Rural	71.0	5.0	5.1	0.5	0.4	5.0	13.0	100.0	81.1	967
Region										
North Western	67.3	9.1	4.6	0.2	0.0	5.6	13.1	100.0	81.1	184
South Central	65.6	7.0	4.5	0.1	0.9	5.5	16.4	100.0	77.1	926
South Eastern A	79.3	4.4	3.6	0.3	0.0	4.7	7.8	100.0	87.2	140
South Eastern B	64.4	8.4	1.7	0.2	0.1	4.6	20.6	100.0	74.4	112
North Central	72.0	4.3	5.2	0.3	0.0	8.0	10.1	100.0	81.5	733
County										
Bomi	77.5	1.0	8.4	0.0	0.0	0.9	12.3	100.0	86.9	58
Bong	65.0	7.4	10.9	0.0	0.0	6.9	9.8	100.0	83.3	231
Gbarpolu	49.9	10.2	5.9	1.0	0.0	8.0	25.1	100.0	65.9	37
Grand Bassa	61.9	5.9	10.1	0.0	1.7	8.5	11.9	100.0	77.9	151
Grand Cape Mount	67.8	14.0	1.7	0.0	0.0	7.7	8.8	100.0	83.5	90
Grand Gedeh	71.1	8.5	4.5	0.0	0.0	5.6	10.3	100.0	84.1	53
Grand Kru	63.1	3.5	0.0	0.0	0.3	9.1	24.0	100.0	66.6	43
Lofa	79.3	4.1	2.6	0.5	0.0	8.3	5.2	100.0	86.0	172
Margibi	78.2	5.2	4.0	1.1	0.0	2.4	9.2	100.0	87.3	119
Maryland	62.7	12.2	1.8	0.6	0.0	2.6	20.1	100.0	76.7	48
Montserrado	64.2	7.5	3.4	0.0	0.9	5.3	18.7	100.0	75.1	656
Nimba	73.2	2.3	2.5	0.5	0.0	8.6	12.9	100.0	78.0	330
River Cess	89.1	0.7	4.2	0.0	0.0	0.4	5.7	100.0	93.9	32
River Gee	70.6	9.4	4.6	0.0	0.0	0.0	15.4	100.0	84.6	22
Sinoe	81.4	2.5	2.3	0.8	0.0	6.4	6.5	100.0	86.2	55
Education										
No education	68.6	4.3	5.2	0.3	0.4	6.2	14.9	100.0	78.2	683
Elementary	70.3	5.5	3.8	0.3	0.1	6.2	13.8	100.0	79.6	565
Junior high	71.8	6.2	3.9	0.0	1.3	5.9	11.0	100.0	81.9	381
Senior high	66.9	8.1	5.3	0.3	0.0	5.0	14.4	100.0	80.3	388
Higher	(55.8)	(16.1)	(3.8)	(0.0)	(0.0)	(15.9)	(8.5)	100.0	(75.6)	78
Wealth quintile										
Lowest	69.1	5.1	5.3	0.7	0.7	5.6	13.4	100.0	79.6	507
Second	71.2	4.2	5.3	0.3	0.0	6.5	12.4	100.0	80.8	444
Middle	69.2	6.9	3.0	0.0	0.0	7.1	13.8	100.0	79.1	394
Fourth	66.2	4.8	5.5	0.0	1.2	7.0	15.4	100.0	76.4	411
Highest	68.2	10.9	3.0	0.0	0.0	5.1	12.8	100.0	82.1	340
Total	68.8	6.1	4.6	0.2	0.4	6.3	13.6	100.0	79.5	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes women who received a check from a doctor, nurse, midwife, physician's assistant, or traditional midwife

² Includes women who received a check after 41 days

Table 9.11 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider for the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Type of health provider for mother's first postnatal check				No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor/nurse/midwife	Physician's assistant	Traditional midwife	Other			
Age at birth							
<20	68.5	0.3	5.7	0.0	25.5	100.0	441
20-34	72.7	0.9	7.4	0.0	19.0	100.0	1,306
35-49	70.9	0.8	8.7	0.0	19.6	100.0	349
Birth order							
1	68.1	0.7	5.1	0.0	26.0	100.0	599
2-3	78.3	0.9	6.0	0.0	14.8	100.0	751
4-5	70.8	0.0	10.2	0.0	19.0	100.0	425
6+	63.1	1.3	10.3	0.0	25.4	100.0	321
Place of delivery							
Health facility	82.1	0.8	1.4	0.0	15.8	100.0	1,744
Elsewhere	19.4	0.4	36.5	0.0	43.7	100.0	352
Residence							
Urban	73.4	0.4	4.4	0.0	21.8	100.0	1,129
Greater Monrovia	71.6	0.0	3.1	0.0	25.3	100.0	574
Other urban	75.3	0.9	5.7	0.0	18.2	100.0	555
Rural	69.4	1.1	10.6	0.0	18.9	100.0	967
Region							
North Western	66.7	1.2	13.2	0.0	18.9	100.0	184
South Central	67.5	0.2	9.3	0.0	22.9	100.0	926
South Eastern A	77.0	3.5	6.7	0.0	12.8	100.0	140
South Eastern B	67.2	1.4	5.8	0.0	25.6	100.0	112
North Central	77.5	0.6	3.5	0.0	18.5	100.0	733
County							
Bomi	76.3	0.0	10.6	0.0	13.1	100.0	58
Bong	79.5	0.3	3.6	0.0	16.7	100.0	231
Gbarpolu	40.4	1.7	23.8	0.0	34.1	100.0	37
Grand Bassa	57.3	0.6	20.0	0.0	22.1	100.0	151
Grand Cape Mount	71.2	1.8	10.5	0.0	16.5	100.0	90
Grand Gedeh	78.7	1.9	3.5	0.0	15.9	100.0	53
Grand Kru	59.7	0.0	6.9	0.0	33.4	100.0	43
Lofa	83.5	0.0	2.5	0.0	14.0	100.0	172
Margibi	70.7	0.9	15.7	0.0	12.7	100.0	119
Maryland	67.9	2.2	6.5	0.0	23.3	100.0	48
Montserrado	69.3	0.0	5.8	0.0	24.9	100.0	656
Nimba	72.9	1.2	3.8	0.0	22.0	100.0	330
River Cess	80.7	9.4	3.8	0.0	6.1	100.0	32
River Gee	79.9	2.4	2.3	0.0	15.4	100.0	22
Sinoe	73.1	1.6	11.5	0.0	13.8	100.0	55
Education							
No education	68.7	0.6	8.9	0.0	21.8	100.0	683
Elementary	71.0	0.9	7.7	0.0	20.4	100.0	565
Junior high	73.7	0.6	7.5	0.0	18.1	100.0	381
Senior high	74.5	1.0	4.9	0.0	19.7	100.0	388
Higher	(75.6)	(0.0)	(0.0)	(0.0)	(24.4)	100.0	78
Wealth quintile							
Lowest	68.6	0.6	10.4	0.0	20.4	100.0	507
Second	70.6	0.9	9.3	0.0	19.2	100.0	444
Middle	69.8	1.9	7.5	0.0	20.9	100.0	394
Fourth	70.9	0.3	5.3	0.0	23.6	100.0	411
Highest	80.0	0.0	2.0	0.0	17.9	100.0	340
Total	71.6	0.7	7.3	0.0	20.5	100.0	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 9.12 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Time after delivery of newborn's first postnatal check ¹							Total	Percentage of births with a postnatal check during the first 2 days after birth ¹	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing	No postnatal check ²			
Mother's age at birth										
<20	18.3	42.8	4.9	4.7	1.3	5.4	22.5	100.0	70.8	441
20-34	20.5	46.5	3.6	5.9	0.7	5.1	17.7	100.0	76.4	1,306
35-49	20.5	49.6	4.6	3.7	0.2	6.9	14.5	100.0	78.4	349
Birth order										
1	16.6	45.0	4.8	4.7	1.4	6.7	20.8	100.0	71.1	599
2-3	22.8	47.7	4.1	5.4	0.7	4.4	14.8	100.0	80.0	751
4-5	20.6	48.9	2.9	6.0	0.5	3.2	18.0	100.0	78.4	425
6+	19.0	41.3	4.2	5.1	0.1	8.9	21.4	100.0	69.6	321
Place of delivery										
Health facility	23.0	52.7	4.1	3.0	0.4	5.9	10.8	100.0	82.9	1,744
Elsewhere	5.1	14.0	3.6	16.4	2.8	3.4	54.8	100.0	39.1	352
Residence										
Urban	16.4	50.3	4.1	5.9	0.5	6.2	16.5	100.0	76.7	1,129
Greater Monrovia	13.3	49.2	4.4	6.7	0.7	4.3	21.5	100.0	73.6	574
Other urban	19.7	51.5	3.9	5.0	0.4	8.2	11.4	100.0	80.0	555
Rural	24.2	41.4	4.0	4.6	1.1	4.7	20.1	100.0	74.2	967
Region										
North Western	25.1	39.6	7.7	5.4	0.5	5.5	16.2	100.0	77.7	184
South Central	18.8	41.7	3.9	6.2	1.2	4.2	24.0	100.0	70.6	926
South Eastern A	26.5	47.7	4.3	4.7	0.2	3.5	13.1	100.0	83.2	140
South Eastern B	25.3	33.9	8.1	3.8	1.3	4.3	23.3	100.0	71.1	112
North Central	18.2	55.2	2.6	4.4	0.3	7.7	11.6	100.0	80.5	733
County										
Bomi	19.6	56.2	1.0	2.7	0.0	3.5	17.0	100.0	79.5	58
Bong	17.0	47.8	6.1	10.2	0.4	4.3	14.2	100.0	81.1	231
Gbarpolu	18.5	26.2	6.3	12.3	2.4	4.7	29.6	100.0	63.3	37
Grand Bassa	19.8	35.5	3.7	4.8	2.9	5.3	28.0	100.0	63.8	151
Grand Cape Mount	31.2	34.3	12.7	4.3	0.0	7.2	10.3	100.0	82.5	90
Grand Gedeh	30.3	38.9	7.9	5.1	0.0	3.2	14.6	100.0	82.2	53
Grand Kru	18.5	37.1	5.3	2.3	1.5	7.3	28.0	100.0	63.2	43
Lofa	32.8	45.7	1.5	2.6	0.6	9.3	7.6	100.0	82.6	172
Margibi	41.7	24.7	4.6	4.5	1.3	2.8	20.3	100.0	75.6	119
Maryland	28.7	29.0	10.5	4.3	1.1	3.0	23.4	100.0	72.5	48
Montserrado	14.5	46.2	3.8	6.8	0.8	4.2	23.7	100.0	71.2	656
Nimba	11.5	65.3	0.8	1.4	0.0	9.2	11.8	100.0	79.0	330
River Cess	41.5	42.9	1.4	3.8	0.0	0.4	10.0	100.0	89.7	32
River Gee	31.0	38.5	8.3	5.8	1.3	1.2	14.0	100.0	83.6	22
Sinoe	14.1	59.1	2.4	4.8	0.5	5.6	13.4	100.0	80.4	55
Mother's education										
No education	17.9	47.1	3.4	5.0	0.5	6.4	19.7	100.0	73.4	683
Elementary	18.2	48.5	2.9	4.1	0.8	4.6	20.9	100.0	73.7	565
Junior high	27.2	38.8	3.9	7.8	1.4	3.4	17.5	100.0	77.7	381
Senior high	21.5	45.9	7.6	5.1	0.7	5.2	14.0	100.0	80.1	388
Higher	(8.8)	(59.2)	(1.4)	(5.1)	(0.0)	(15.9)	(9.6)	100.0	(74.5)	78
Wealth quintile										
Lowest	21.3	43.7	4.0	4.8	1.1	4.4	20.7	100.0	73.9	507
Second	22.3	46.1	2.8	5.3	1.0	5.6	17.0	100.0	76.4	444
Middle	21.1	47.7	5.1	4.0	0.2	8.1	13.9	100.0	77.8	394
Fourth	20.0	37.9	4.0	8.6	1.3	4.9	23.2	100.0	70.5	411
Highest	14.1	58.4	4.6	3.3	0.0	4.7	14.9	100.0	80.4	340
Total	20.0	46.2	4.0	5.3	0.8	5.5	18.2	100.0	75.6	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes newborns who received a check from a doctor, nurse, midwife, physician's assistant, or traditional midwife

² Includes newborns who received a check after the first week of life

Table 9.13 Type of provider for the first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by type of provider for the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Type of health provider for newborn's first postnatal check			No postnatal check during the first 2 days after birth	Total	Number of births
	Doctor/nurse/midwife	Physician's assistant	Traditional midwife			
Mother's age at birth						
<20	66.2	0.4	4.0	29.2	100.0	441
20-34	72.9	0.4	3.1	23.6	100.0	1,306
35-49	70.6	0.8	6.6	21.6	100.0	349
Birth order						
1	67.7	0.6	2.8	28.9	100.0	599
2-3	76.9	0.1	2.9	20.0	100.0	751
4-5	73.5	0.3	4.5	21.6	100.0	425
6+	60.7	1.2	7.3	30.4	100.0	321
Place of delivery						
Health facility	81.4	0.5	1.0	17.1	100.0	1,744
Elsewhere	20.1	0.1	18.3	60.9	100.0	352
Residence						
Urban	73.6	0.2	2.9	23.3	100.0	1,129
Greater Monrovia	70.9	0.0	2.6	26.4	100.0	574
Other urban	76.4	0.5	3.2	20.0	100.0	555
Rural	68.2	0.8	5.0	25.8	100.0	967
Region						
North Western	69.5	0.3	7.9	22.3	100.0	184
South Central	65.8	0.3	4.3	29.4	100.0	926
South Eastern A	76.8	2.4	3.6	16.8	100.0	140
South Eastern B	67.7	1.1	2.3	28.9	100.0	112
North Central	77.7	0.2	2.6	19.5	100.0	733
County						
Bomi	74.3	0.0	5.2	20.5	100.0	58
Bong	78.3	0.3	2.5	18.9	100.0	231
Gbarpolu	44.1	1.8	17.4	36.7	100.0	37
Grand Bassa	54.3	1.2	7.3	36.2	100.0	151
Grand Cape Mount	76.7	0.0	5.8	17.5	100.0	90
Grand Gedeh	79.1	1.1	2.0	17.8	100.0	53
Grand Kru	60.7	0.0	2.4	36.8	100.0	43
Lofa	81.4	0.0	1.1	17.4	100.0	172
Margibi	70.5	0.9	4.2	24.4	100.0	119
Maryland	68.9	1.6	2.0	27.5	100.0	48
Montserrado	67.6	0.0	3.7	28.8	100.0	656
Nimba	75.4	0.3	3.3	21.0	100.0	330
River Cess	80.5	7.1	2.1	10.3	100.0	32
River Gee	78.6	2.0	2.9	16.4	100.0	22
Sinoe	72.4	1.1	6.1	19.6	100.0	55
Mother's education						
No education	68.1	0.6	4.5	26.6	100.0	683
Elementary	69.3	0.8	3.6	26.3	100.0	565
Junior high	72.3	0.3	5.0	22.3	100.0	381
Senior high	77.3	0.1	2.7	19.9	100.0	388
Higher	(74.5)	(0.0)	(0.0)	(25.5)	100.0	78
Wealth quintile						
Lowest	67.9	0.7	5.3	26.1	100.0	507
Second	70.9	0.6	4.8	23.6	100.0	444
Middle	71.5	0.4	5.4	22.2	100.0	394
Fourth	67.9	0.3	2.3	29.5	100.0	411
Highest	79.6	0.3	0.5	19.6	100.0	340
Total	71.1	0.5	3.9	24.4	100.0	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 9.14 Content of postnatal care for newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after birth and percentage with at least two signal functions performed during the first 2 days after birth, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among most recent live births in the 2 years preceding the survey, percentage for whom the selected function was performed during the first 2 days after birth:						Percentage with at least two signal functions performed during the first 2 days after birth	Number of births
	Cord examined	Temperature measured	Counseling on danger signs	Counseling on breastfeeding	Observation of breastfeeding	Weighed ¹		
Mother's age at birth								
<20	57.6	48.3	56.0	62.5	58.5	33.8	66.4	441
20-34	54.1	47.5	52.9	58.2	53.6	36.0	63.0	1,306
35-49	53.8	49.0	49.7	56.7	52.6	34.8	63.3	349
Birth order								
1	57.4	50.5	58.1	63.3	61.0	39.8	66.9	599
2-3	51.9	46.1	51.3	55.6	49.5	31.0	60.9	751
4-5	57.4	51.0	52.4	59.9	55.9	40.5	65.3	425
6+	53.1	43.4	48.7	56.8	52.2	30.6	62.7	321
Place of delivery								
Health facility	54.5	49.8	53.9	59.6	54.6	39.8	64.4	1,744
Elsewhere	56.1	38.7	49.1	55.1	53.8	13.5	60.5	352
Residence								
Urban	49.5	46.9	51.0	54.3	51.4	41.2	60.2	1,129
Greater Monrovia	42.9	35.2	44.0	45.2	41.9	43.3	49.7	574
Other urban	56.4	59.1	58.3	63.8	61.1	38.9	71.1	555
Rural	60.9	49.1	55.5	64.1	58.2	28.6	67.9	967
Region								
North Western	51.6	42.3	50.8	59.3	49.0	39.3	60.9	184
South Central	49.6	38.7	47.8	51.8	49.4	34.7	58.1	926
South Eastern A	60.3	50.0	55.3	63.5	56.4	32.4	66.8	140
South Eastern B	57.3	51.5	52.5	53.5	49.1	49.0	61.3	112
North Central	60.7	60.1	60.0	67.5	62.8	33.6	71.4	733
County								
Bomi	41.1	37.8	36.2	49.2	47.9	40.9	52.0	58
Bong	72.5	59.5	63.2	73.2	64.1	32.6	77.6	231
Gbarpolu	38.1	29.9	38.3	55.4	43.0	23.4	51.5	37
Grand Bassa	67.0	51.4	59.7	75.5	74.3	24.2	83.3	151
Grand Cape Mount	63.9	50.2	65.3	67.6	52.1	44.8	70.5	90
Grand Gedeh	64.3	47.4	54.7	71.6	65.2	50.5	74.8	53
Grand Kru	54.0	49.1	51.8	51.7	48.5	34.6	57.5	43
Lofa	64.1	64.3	68.3	70.6	67.7	43.3	72.6	172
Margibi	43.8	36.5	45.5	52.8	47.1	21.2	56.5	119
Maryland	50.1	47.9	43.4	42.8	37.2	59.0	55.3	48
Montserrado	46.6	36.2	45.5	46.2	44.1	39.6	52.6	656
Nimba	50.7	58.2	53.3	61.9	59.4	29.3	66.5	330
River Cess	52.6	38.0	48.6	52.4	52.4	35.1	53.1	32
River Gee	79.0	63.8	73.5	79.8	75.7	54.9	81.6	22
Sinoe	60.8	59.4	59.8	62.0	50.3	13.1	66.9	55
Mother's education								
No education	53.5	46.8	51.5	60.1	53.4	28.7	63.4	683
Elementary	57.8	49.1	53.6	60.7	54.5	32.1	66.4	565
Junior high	55.7	52.9	60.3	63.6	62.5	40.2	66.4	381
Senior high	51.4	43.9	48.4	49.0	47.7	44.2	58.1	388
Higher	(56.4)	(45.1)	(51.0)	(60.0)	(59.5)	(49.6)	(63.4)	78
Wealth quintile								
Lowest	63.1	54.8	59.3	65.7	60.8	29.0	71.3	507
Second	55.9	47.3	52.4	62.3	57.1	31.8	66.9	444
Middle	54.2	50.0	53.1	59.4	54.6	32.6	63.9	394
Fourth	46.4	44.6	47.4	52.2	48.8	38.6	58.4	411
Highest	51.7	40.0	51.3	51.6	48.7	48.9	54.8	340
Total	54.8	47.9	53.1	58.9	54.5	35.4	63.8	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth.

Table 9.15 Cord cutting

Among most recent births in the 2 years preceding the survey that were delivered outside a health facility, percent distribution by instrument used to cut the umbilical cord, and percentage with umbilical cord cut with a clean instrument, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Instrument used to cut the cord					Percentage with cord cut with clean instrument ²	Number of most recent live births delivered outside a facility in the past 2 years
	New metal instrument ¹	Used metal instrument, boiled ¹	Used metal instrument, not boiled ¹	Other instrument	Total		
Mother's age at birth							
<20	62.0	0.0	0.0	38.0	100.0	62.0	72
20-34	64.8	0.6	1.4	33.2	100.0	65.4	220
35-49	74.3	1.2	0.0	24.5	100.0	75.5	60
Birth order							
1	48.2	0.0	0.0	51.8	100.0	48.2	88
2-3	76.0	0.0	2.7	21.3	100.0	76.0	100
4-5	65.6	1.5	0.3	32.6	100.0	67.1	89
6+	73.4	0.9	0.0	25.7	100.0	74.3	76
Residence							
Urban	52.9	0.0	0.2	46.9	100.0	52.9	148
Greater Monrovia	(52.8)	(0.0)	(0.0)	(47.2)	100.0	(52.8)	101
Other urban	53.1	0.0	0.6	46.3	100.0	53.1	47
Rural	75.3	1.0	1.3	22.3	100.0	76.3	204
Region							
North Western	70.6	1.0	0.0	28.4	100.0	71.6	40
South Central	61.5	0.5	0.0	38.0	100.0	62.0	221
South Eastern A	74.4	0.0	1.3	24.3	100.0	74.4	23
South Eastern B	74.2	0.0	7.4	18.4	100.0	74.2	21
North Central	74.5	1.2	2.5	21.8	100.0	75.7	47
County							
Bomi	*	*	*	*	100.0	*	10
Bong	(80.6)	(0.0)	(0.0)	(19.4)	100.0	(80.6)	29
Gbarpolu	(87.3)	(2.4)	(0.0)	(10.3)	100.0	(89.7)	17
Grand Bassa	84.6	0.0	0.0	15.4	100.0	84.6	56
Grand Cape Mount	*	*	*	*	100.0	*	14
Grand Gedeh	*	*	*	*	100.0	*	7
Grand Kru	(60.3)	(0.0)	(7.6)	(32.1)	100.0	(60.3)	9
Lofa	*	*	*	*	100.0	*	2
Margibi	(53.5)	(3.7)	(0.0)	(42.8)	100.0	(57.2)	29
Maryland	(86.6)	(0.0)	(8.3)	(5.1)	100.0	(86.6)	10
Montserrado	53.7	0.0	0.0	46.3	100.0	53.7	136
Nimba	*	*	*	*	100.0	*	16
River Cess	*	*	*	*	100.0	*	3
River Gee	*	*	*	*	100.0	*	1
Sinoe	(80.1)	(0.0)	(0.0)	(19.9)	100.0	(80.1)	13
Mother's education							
No education	78.3	0.9	0.5	20.3	100.0	79.2	142
Elementary	67.5	0.7	1.0	30.8	100.0	68.2	103
Junior high	49.0	0.0	1.9	49.1	100.0	49.0	62
Senior high	*	*	*	*	100.0	*	40
Higher	*	*	*	*	100.0	*	4
Wealth quintile							
Lowest	81.7	1.2	2.3	14.7	100.0	83.0	118
Second	72.7	0.0	0.4	26.9	100.0	72.7	69
Middle	66.1	0.9	0.0	33.0	100.0	67.0	60
Fourth	(34.3)	(0.0)	(0.0)	(65.7)	100.0	(34.3)	78
Highest	*	*	*	*	100.0	*	26
Total	65.9	0.6	0.9	32.7	100.0	66.5	352

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Razor blade, knife, or scissors

² Clean instruments are new metal instruments and used metal instruments that were boiled.

Table 9.16 Cord care

Among most recent live births in the 2 years preceding the survey, percentage with different substances applied to the stump of the umbilical cord, and percentage with nothing harmful applied to the umbilical cord, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Substances applied to the cord				Percentage with nothing harmful applied to the cord ³	Number of births
	Nothing	Chlorhexidine	Other antiseptic ¹	Other substance ²		
Mother's age at birth						
<20	21.1	4.4	37.0	37.5	62.5	441
20-34	24.4	5.6	37.1	32.9	67.1	1,306
35-49	25.3	6.2	38.5	30.0	70.0	349
Place of delivery						
Health facility	23.5	6.2	37.6	32.7	67.3	1,744
Public facility	22.4	7.2	38.3	32.1	67.9	1,441
Private facility	28.4	1.7	34.3	35.7	64.3	303
Elsewhere	25.7	1.7	36.1	36.5	63.5	352
Birth order						
1	23.4	3.8	34.9	38.0	62.0	599
2-3	27.1	5.3	38.4	29.2	70.8	751
4-5	20.2	7.6	34.5	37.7	62.3	425
6+	21.9	6.1	43.2	28.8	71.2	321
Residence						
Urban	27.8	3.8	32.8	35.6	64.4	1,129
Greater Monrovia	34.8	0.7	30.2	34.3	65.7	574
Other urban	20.6	7.1	35.4	36.9	63.1	555
Rural	19.2	7.3	42.6	30.8	69.2	967
Region						
North Western	21.3	7.1	42.1	29.5	70.5	184
South Central	26.4	1.8	36.2	35.7	64.3	926
South Eastern A	12.7	12.0	49.9	25.4	74.6	140
South Eastern B	24.0	22.7	31.1	22.2	77.8	112
North Central	23.4	5.8	36.2	34.7	65.3	733
County						
Bomi	8.5	11.6	38.2	41.8	58.2	58
Bong	12.6	11.8	50.7	24.9	75.1	231
Gbarpolu	33.9	5.5	35.1	25.5	74.5	37
Grand Bassa	9.0	3.9	60.1	27.0	73.0	151
Grand Cape Mount	24.5	4.8	47.5	23.2	76.8	90
Grand Gedeh	19.8	17.2	40.4	22.6	77.4	53
Grand Kru	38.1	24.4	13.2	24.3	75.7	43
Lofa	31.2	1.6	31.5	35.7	64.3	172
Margibi	14.9	5.8	37.1	42.2	57.8	119
Maryland	19.0	19.3	41.0	20.8	79.2	48
Montserrado	32.4	0.6	30.5	36.5	63.5	656
Nimba	26.8	3.8	28.4	41.0	59.0	330
River Cess	7.6	1.4	65.2	25.8	74.2	32
River Gee	7.8	26.7	44.4	21.2	78.8	22
Sinoe	8.7	13.1	50.2	28.0	72.0	55
Mother's education						
No education	23.3	6.5	39.0	31.2	68.8	683
Elementary	19.3	6.9	36.5	37.3	62.7	565
Junior high	24.1	5.3	35.3	35.4	64.6	381
Senior high	31.2	2.6	38.0	28.2	71.8	388
Higher	(23.6)	(1.0)	(35.1)	(40.2)	(59.8)	78
Wealth quintile						
Lowest	20.4	7.2	38.8	33.6	66.4	507
Second	19.8	6.4	39.1	34.6	65.4	444
Middle	22.4	6.0	39.6	32.1	67.9	394
Fourth	27.0	5.6	32.9	34.6	65.4	411
Highest	32.1	0.9	35.5	31.6	68.4	340
Total	23.8	5.5	37.3	33.4	66.6	2,096

Note: Mothers can report more than one substance applied to the stump of the umbilical cord. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes alcohol, spirit, or gentian violet

² Includes mustard oil, ash, animal dung, or other substances

³ Either nothing applied to the cord or nothing other than chlorhexidine or another antiseptic applied

Table 9.17 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Age						
15-19	16.9	33.8	25.8	22.2	43.8	1,657
20-34	13.3	33.9	26.6	16.6	41.8	3,993
35-49	14.3	41.6	32.9	20.2	50.0	2,415
Number of living children						
0	14.5	32.6	23.7	18.4	42.1	1,916
1-2	12.4	33.4	25.1	16.2	41.1	3,023
3-4	15.8	40.1	33.1	20.2	48.0	1,832
5+	16.6	42.6	35.9	23.8	51.9	1,294
Marital status						
Never married	13.8	34.3	23.5	16.7	41.2	3,129
Married or living together	15.3	36.3	31.6	20.3	46.2	4,216
Divorced/separated/ widowed	10.9	43.7	29.6	19.5	50.4	721
Employed last 12 months						
Not employed	15.3	36.2	26.6	18.5	44.1	2,881
Employed for cash	9.3	30.6	23.2	15.1	39.0	3,414
Employed not for cash	22.6	47.0	40.9	26.6	56.4	1,770
Residence						
Urban	11.3	30.0	18.2	11.8	36.0	5,023
Greater Monrovia	8.6	26.1	14.7	9.1	30.8	2,866
Other urban	14.9	35.3	22.9	15.4	42.9	2,157
Rural	19.4	46.4	45.0	30.4	58.9	3,042
Region						
North Western	17.2	52.5	47.2	30.4	66.9	621
South Central	11.2	30.8	18.8	10.7	36.7	4,105
South Eastern A	8.2	26.9	28.8	16.0	38.6	458
South Eastern B	23.0	47.3	42.0	30.5	56.5	441
North Central	18.6	40.9	37.0	28.1	51.3	2,439
County						
Bomi	17.2	56.9	39.1	24.1	66.3	249
Bong	19.7	42.5	32.5	22.1	49.3	796
Gbarpolu	9.2	53.5	70.3	43.7	74.8	112
Grand Bassa	19.9	40.8	30.2	9.7	50.4	467
Grand Cape Mount	20.6	47.8	45.0	30.7	64.0	260
Grand Gedeh	6.8	29.1	24.5	8.2	37.8	172
Grand Kru	32.9	57.8	54.3	45.6	67.3	136
Lofa	17.8	51.2	49.1	37.9	63.0	658
Margibi	5.7	39.2	16.8	9.8	46.7	441
Maryland	22.9	53.5	43.7	29.3	62.9	215
Montserrado	10.7	28.1	17.4	10.9	33.4	3,197
Nimba	18.2	32.8	32.6	26.4	45.1	985
River Cess	20.0	51.8	47.1	38.6	60.5	104
River Gee	8.5	16.9	19.4	11.0	25.3	91
Sinoe	2.7	10.7	22.4	10.4	26.9	182
Education						
No education	17.7	43.4	37.4	25.4	51.7	2,474
Elementary	17.4	40.8	34.4	24.9	51.0	1,911
Junior high	14.2	31.8	23.5	15.0	40.4	1,445
Senior high	9.0	28.0	17.0	9.4	35.2	1,761
Higher	4.8	23.8	12.9	7.0	30.1	474
Wealth quintile						
Lowest	20.6	49.1	48.9	36.1	62.4	1,379
Second	18.3	44.0	40.8	27.4	55.2	1,431
Middle	16.6	40.1	29.9	18.9	48.4	1,517
Fourth	12.1	31.4	15.8	10.0	37.2	1,829
Highest	7.2	22.6	14.8	8.4	28.0	1,910
Total	14.3	36.2	28.3	18.8	44.7	8,065

Key Findings

- **Vaccinations:** 51% of children age 12-23 months and 44% of children age 24-35 months had received all basic vaccinations by the time of the survey. Six percent of children age 12-23 months and 7% of those age 24-35 months did not receive any vaccinations.
- **Symptoms of acute respiratory infection (ARI):** Advice or treatment was sought for 78% of children under age 5 who had symptoms of ARI in the 2 weeks before the survey.
- **Fever:** Advice or treatment was sought for 81% of children under age 5 who had a fever in the 2 weeks before the survey.
- **Diarrhea:** Advice or treatment was sought for 66% of children under age 5 who had diarrhea in the 2 weeks before the survey. Sixty-six percent of children with diarrhea received ORT, and 23% received zinc. Twelve percent of children with diarrhea received no treatment.

Information on child health and survival can help policymakers and program managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Liberia.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: symptoms of acute respiratory infection (ARI), fever, and diarrhea. Because appropriate sanitary practices can help prevent and reduce the severity of diarrheal disease, information is also provided on the disposal of children's fecal matter.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age.

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or the mother's report

A birth weight less than 2.5 kg is the most commonly used indicator of fetal growth. Low birth weight contributes to prenatal and neonatal mortality and morbidity, childhood stunting, impaired cognitive development, and chronic diseases later in life (Standing Committee on Nutrition 2014).

In the 2019-20 LDHS, information on birth weight was collected through either a written record or the mother's recall. The mother's estimate of the infant's size at birth was also obtained because birth weight is unknown for many infants. Although the mother's estimate of size at birth is subjective, it can be a useful proxy for the child's weight. Only 30% of births in the 5 years preceding the survey had a reported birth weight. Of the children with known birth weights, 10% weighed less than 2.5 kg at birth (**Table 10.1**). Mothers reported 6% of births as very small, 9% as smaller than average, and 86% as average or larger than average.

10.2 VACCINATION OF CHILDREN

Universal immunization of children against common vaccine-preventable diseases is crucial in reducing infant and child mortality. In Liberia, routine childhood vaccines include BCG (tuberculosis), DPT-HepB-Hib or pentavalent (diphtheria, tetanus, pertussis, hepatitis B, and *Haemophilus influenzae* type b), oral polio vaccine or OPV (poliomyelitis), inactivated polio vaccine or IPV (poliomyelitis), pneumococcal, rotavirus, measles, and yellow fever.

In Liberia, the BCG vaccine is usually given immediately after birth. A birth dose of the oral polio vaccine (polio 0) is given within 7 days after birth, while the first two doses of the pentavalent, pneumococcal, rotavirus, and oral polio vaccines (excluding polio 0) are given at approximately age 6 and 10 weeks. The third doses of the pentavalent, pneumococcal, and oral polio vaccines are given at 14 weeks, at which time IPV is also given. The measles and yellow fever vaccinations should be given at age 9 months.

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" vaccinations. Children are considered to have received all basic vaccinations if they have received the BCG vaccine, three doses each of DPT-containing and polio vaccines, and a single dose of the measles vaccine.

All basic vaccinations coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DPT-containing vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus
- Three doses of polio vaccine
- One dose of measles vaccine

Sample: Living children age 12-23 months

Information on vaccination coverage was obtained in two ways in the 2019-20 LDHS: from written vaccination records, including vaccination or "road to health cards," and from verbal reports. For each child born in the 3 years before the survey, mothers were asked to show the interviewer the vaccination card or other document used for recording the child's vaccinations. If the vaccination card or other document was available, the interviewer copied the dates of each vaccination received. If the mother was not able to present the vaccination card or other document for a child, she was asked to recall whether the child had received each of the routine vaccines on the national immunization schedule. If she indicated that the child had received any of the multi-dose vaccines, she was asked the number of doses the child received. Thus, the data presented below on vaccination coverage are based on both information taken from the health cards and information obtained from mothers' reports.

Fifty-one percent of children age 12-23 months and 44% of children age 24-35 months received all basic vaccinations, and 46% of those age 12-23 months and 39% of those age 24-35 months received all basic vaccinations by age 12 months (**Table 10.2**).

A second measure of vaccination coverage is the percentage of children age 12-23 months and 24-35 months who have received all age-appropriate vaccinations. The Liberian immunization program considers a child to have received all age-appropriate vaccinations if the child has received all basic vaccinations along with a birth dose of OPV, a dose of IPV, three doses of pneumococcal vaccine, two doses of rotavirus vaccine,¹ and the yellow fever vaccine.²

Thirty-nine percent of children age 12-23 months and 31% of children age 24-35 months have received all of the vaccinations appropriate for their age.³ Thirty-five percent of children age 12-23 months and 27% of those age 24-35 months received the vaccines appropriate for their age by age 12 months and by age 24 months, respectively, as recommended.

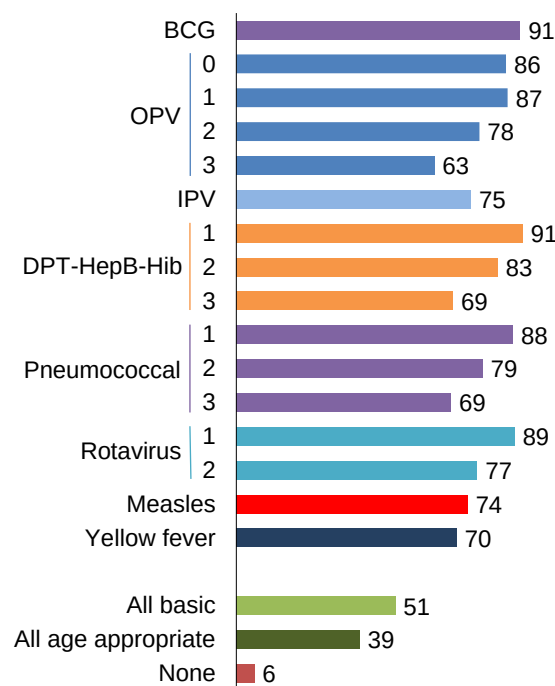
Figure 10.1 shows coverage of all age-appropriate vaccinations among children age 12-23 months. Coverage is highest for the BCG vaccine and the first dose of the DPT-HepB-Hib vaccine (91% each). In the case of multi-dose vaccines, coverage is highest for the first dose and falls in subsequent doses. Coverage rates for the first doses of the OPV (excluding the birth dose), DPT-HepB-Hib, pneumococcal, and rotavirus vaccines are 87%, 91%, 88%, and 89%, respectively. Sixty-three percent of children age 12-23 months received the third dose of OPV, 69% each received the third dose of DPT-HepB-Hib and the third dose of pneumococcal, and 77% received the second dose of rotavirus. This represents at least a 20-percentage-point difference between the first and third doses of OPV, DPT-HepB-Hib, and pneumococcal and a 12-percentage-point difference for rotavirus. Seventy-four percent of children age 12-23 months received the measles vaccine, and 70% received the yellow fever vaccine.

A similar pattern is observed among children age 24-35 months, although coverage for first doses tends to be slightly lower than that reported among children age 12-23 months (**Table 10.2**).

Overall, 6% of children age 12-23 months and 7% of those age 24-35 months were reported not to have received any vaccinations.

Figure 10.1 Childhood vaccinations

Percentage of children age 12-23 months vaccinated at any time before the survey



¹ Liberia is rolling out the third rotavirus dose; however, the nationwide roll out was not complete by the start of data collection. As a result, information on the third rotavirus dose was collected for programmatic purposes but was excluded from the tabulations.

² Following data collection, a skip error was identified that impacted yellow fever vaccination rates according to mothers' recall.

³ Because of the skip error that affected data collection for the yellow fever vaccination indicator, the "all age-appropriate vaccinations" indicator is missing some yellow fever vaccination data based on mothers' recall.

Vaccination Card Ownership and Availability

A vaccination card is an important tool for ensuring that a child receives all recommended vaccinations on schedule. Ninety-two percent of children age 12-23 months and 91% of children age 24-35 months have ever had a vaccination card. However, not all mothers were able to produce their child's vaccination card at the time of the interview; overall, 65% of children age 12-23 months and 51% of children age 24-35 months had vaccination cards available at the time of the interview (**Table 10.3**).

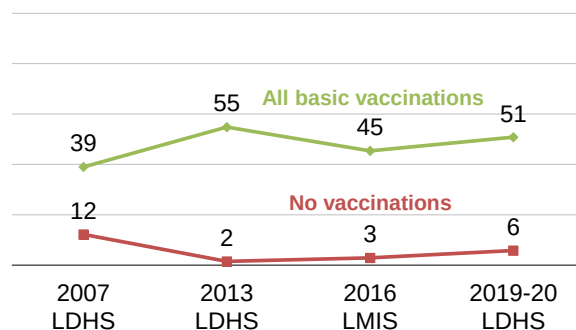
Trends: The percentage of children age 12-23 months in Liberia who have received all basic vaccination has fluctuated over time, increasing from 39% in 2007 to 55% in 2013, then declining to 45% in 2016, and subsequently rising to 51% in 2019-20 (**Figure 10.2**). Over the same period, the percentage of children who have received no vaccinations dropped from 12% in 2007 to a low of 2% in 2013 before rising to 6% in 2019-20.

Patterns by background characteristics

- Among children age 12-23 months, basic vaccination coverage is modestly higher among boys than among girls (52% versus 49%) (**Table 10.4**).
- Basic vaccination coverage is higher among children whose vaccination card was seen than among those whose card was not seen (73% versus 10%). None of the children whose vaccination card was seen were reported to have not received any vaccinations.

Figure 10.2 Trends in childhood vaccinations

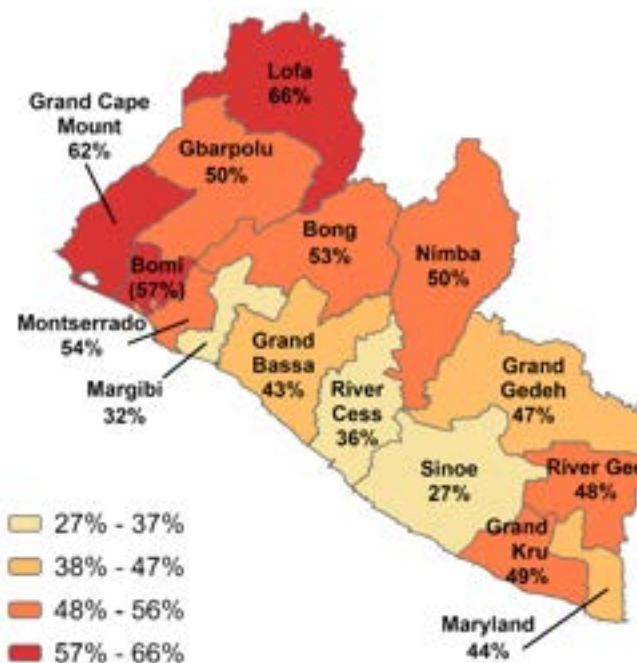
Percentage of children age 12-23 months who received all basic vaccinations at any time before the survey



- By county, basic vaccination coverage is highest in Lofa (66%) and lowest in Sinoe (27%) (**Figure 10.3**).
- Coverage rates do not exhibit a strong relationship with either mother's education or household wealth other than being lowest among children in the poorest households.

Figure 10.3 Vaccination coverage by county

Percentage of children age 12-23 months who received all basic vaccinations at any time before the survey



10.3 SYMPTOMS OF ACUTE RESPIRATORY INFECTION

Acute respiratory infection (predominantly pneumonia) is a common cause of death in young children. Caregivers are advised that a young child with a cough and/or difficult breathing should be taken to a health facility promptly.

Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Four percent of children under age 5 had ARI symptoms in the 2 weeks before the survey. Advice or treatment was sought for 78% of children with ARI symptoms, and 33% of these children were taken for advice or treatment the same day or the day after their symptoms appeared (**Table 10.5**). The most common places from which advice or treatment was sought were government health clinics, government hospitals, pharmacies, and private hospitals, centers, or clinics (**Table 10.6**).

10.4 FEVER

Fever is a symptom of malaria but is also associated with other childhood illnesses that may contribute to high levels of malnutrition, morbidity, and mortality in young children. Information about malaria is discussed in detail in Chapter 12.

Treatment of fever

Children with fever for whom advice or treatment was sought.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Among children under age 5, 25% were reported to have a fever in the 2 weeks before the survey. Advice or treatment was sought for 81% of children with fever, and 35% of children with fever took antibiotic drugs (**Table 10.7**).

Trends: The percentage of children with a fever for whom advice or treatment was sought has increased slightly over time, rising from 75% in 2007 to 78% in 2013 and 81% in 2019-20.

10.5 DIARRHEAL DISEASE

In Liberia, diarrhea is a leading cause of child illness; in 2017, diarrhea was estimated to be responsible for 8% of deaths among children in the country under age 5 (UNICEF 2020). Oral rehydration therapy (ORT) and supplemental zinc, combined with continued feeding, are the recommended interventions for treating diarrhea.

10.5.1 Prevalence of Diarrhea and Treatment-seeking Behavior

Sixteen percent of children under age 5 had diarrhea in the 2 weeks before the survey. Treatment or advice was sought for 66% of children who had diarrhea (**Table 10.8**).

Patterns by background characteristics

- The prevalence of diarrhea peaks among children age 6-23 months (23%-25%). This corresponds to the time when children start losing protection from maternal antibodies through breastfeeding, begin to crawl and walk, and are at increased risk of contamination from the food, water, and the environment.
- By county, diarrhea prevalence ranges from 7% in Lofa to 25% in Grand Bassa.
- Advice or treatment was more likely to be sought for male children with diarrhea than female children (69% and 63%, respectively).

10.5.2 Feeding Practices

Appropriate feeding practices

Children with diarrhea are given more liquids than usual and as much food or more than usual.

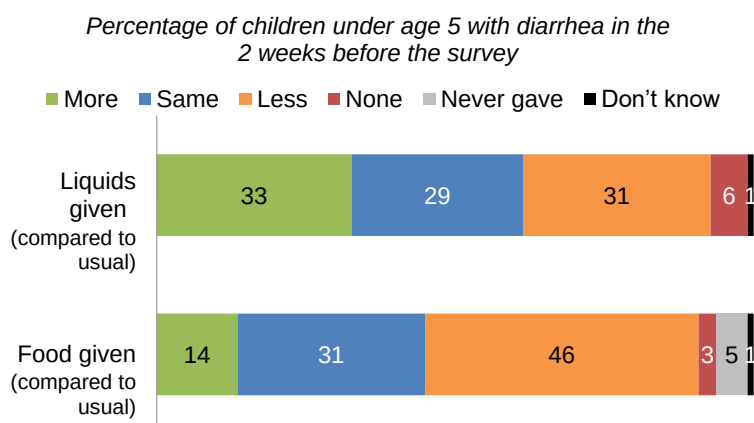
Sample: Children under age 5 with diarrhea in the 2 weeks before the survey

To reduce dehydration and minimize the effects of diarrhea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhea and to increase the amount of fluids given.

Only 33% of children under age 5 with diarrhea in the 2 weeks before the survey were given more liquids than usual, as recommended. Twenty-nine percent received the same amount of liquids. It is of concern that 31% of children were given somewhat less or much less fluid than usual, and 6% were given no fluid at all (**Figure 10.4** and **Table 10.9**).

Forty-five percent of children with diarrhea were fed according to the recommended practice of giving the same amount of food (31%) or more food than usual (14%). Forty-six percent of children were given somewhat less or much less food than usual, and 3% were given no food.

Figure 10.4 Feeding practices during diarrhea



10.5.3 Oral Rehydration Therapy and Other Treatments

Oral rehydration therapy

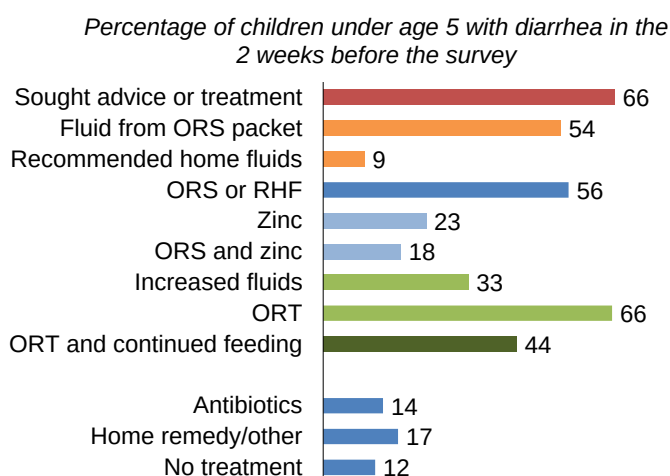
Children with diarrhea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or government-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhea in the 2 weeks before the survey

As noted, all children with diarrhea should receive increased fluids, continued feeding, and oral zinc. Sixty-six percent of children received ORT, with 33% receiving increased fluids, 54% receiving ORS packets, and 9% receiving recommended home fluids (**Figure 10.5**). Forty-four percent of children received ORT and continued feeding, and 23% of children received zinc. Twelve percent of children received no treatment.

Trends: The percentage of children under age 5 with diarrhea in the 2 weeks before the survey who received ORT decreased from 76% in 2013 to 66% in 2019-20; however, during the same period, the percentage of children with diarrhea who received zinc supplements increased from 3% to 23%.

Figure 10.5 Treatment of diarrhea



Patterns by background characteristics

- Children in Greater Monrovia (36%) were more likely to receive zinc than children in other urban areas (20%) or children in rural areas (19%) (**Table 10.10**).

- By region, the percentage of children who were given the recommended treatment of ORS and zinc was highest in North Western (29%) and lowest in North Central (10%).

Among children with diarrhea for whom advice or treatment was sought, the most common source of advice or treatment was a pharmacy or a government health clinic (29% each) (Table 10.11).

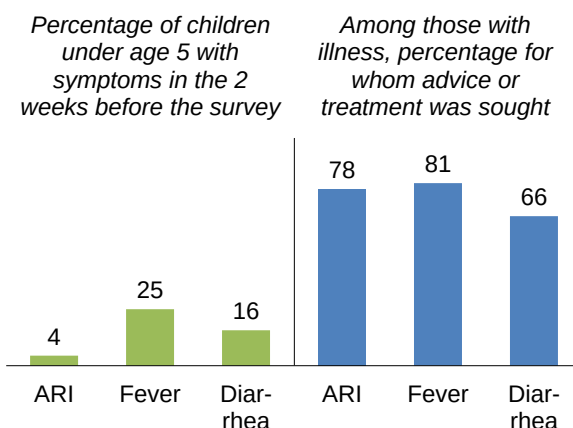
10.5.4 Knowledge of ORS Packets

Almost all women (98%) in Liberia know of ORS packets (Table 10.12). Knowledge is uniformly high across all background characteristics.

10.6 TREATMENT OF CHILDHOOD ILLNESS

Fever (25%) was the most common illness reported among children under age 5 during the 2 weeks before the survey, followed by diarrhea (16%) and symptoms of ARI (4%). Advice or treatment was sought for 81% of children with a fever, 78% of children with ARI symptoms, and 66% of children with diarrhea (Figure 10.6).

Figure 10.6 Prevalence and treatment of childhood illness



10.7 DISPOSAL OF CHILDREN'S STOOLS

Appropriate disposal of children's stools

The child's last stools were put or rinsed into a toilet or latrine or buried, or the child used a toilet or latrine.

Sample: Youngest children under age 2 living with their mother

Proper disposal of human waste is important to prevent the spread of diseases. Only 24% of children under age 2 living with their mother had their last stool disposed of appropriately (Table 10.13). The two most common methods of disposing of children's stools are to throw them into the garbage (35%) and to put/rinse them into a drain or ditch (21%); neither of these disposal methods is appropriate.

LIST OF TABLES

For more information on low birth weight, vaccinations, childhood illness, and disposal of children's stools, see the following tables:

- **Table 10.1** **Child's size and weight at birth**
- **Table 10.2** **Vaccinations by source of information**
- **Table 10.3** **Possession and observation of vaccination cards, according to background characteristics**
- **Table 10.4** **Vaccinations by background characteristics**
- **Table 10.5** **Prevalence and treatment of symptoms of ARI**
- **Table 10.6** **Source of advice or treatment for children with symptoms of ARI**
- **Table 10.7** **Prevalence and treatment of fever**
- **Table 10.8** **Prevalence and treatment of diarrhea**
- **Table 10.9** **Feeding practices during diarrhea**
- **Table 10.10** **Oral rehydration therapy, zinc, and other treatments for diarrhea**
- **Table 10.11** **Source of advice or treatment for children with diarrhea**
- **Table 10.12** **Knowledge of ORS packets**
- **Table 10.13** **Disposal of children's stools**

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percent distribution of births by size of baby at birth					Percentage of births that have a reported birth weight ¹	Number of births	Among births with a reported birth weight ¹	
	Very small	Smaller than average	Average or larger	Don't know	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	8.1	10.0	81.1	0.8	100.0	25.1	1,129	19.0	283
20-34	5.2	8.1	85.8	0.9	100.0	31.7	3,320	7.6	1,052
35-49	5.9	8.4	85.3	0.5	100.0	31.3	815	9.4	255
Birth order									
1	7.9	9.6	81.2	1.3	100.0	31.6	1,423	13.3	449
2-3	5.4	7.8	86.0	0.7	100.0	29.6	1,866	8.5	552
4-5	4.7	8.4	86.3	0.6	100.0	32.1	1,134	7.9	365
6+	5.5	8.6	85.4	0.5	100.0	26.8	839	10.2	225
Mother's smoking status									
Smokes cigarettes/tobacco	2.7	7.5	89.8	0.0	100.0	44.3	44	*	20
Does not smoke	6.0	8.6	84.6	0.8	100.0	30.1	5,219	10.0	1,571
Residence									
Urban	5.9	8.5	84.5	1.1	100.0	36.0	2,805	9.6	1,010
Greater Monrovia	8.1	9.5	81.0	1.4	100.0	37.1	1,416	10.6	526
Other urban	3.7	7.4	88.0	0.8	100.0	34.9	1,388	8.6	484
Rural	6.0	8.7	84.9	0.4	100.0	23.6	2,458	10.5	581
Region									
North Western	6.2	9.7	83.6	0.5	100.0	33.6	464	12.9	156
South Central	7.9	9.6	81.5	1.0	100.0	28.7	2,296	11.1	659
South Eastern A	5.6	9.1	84.4	0.9	100.0	25.5	333	9.2	85
South Eastern B	7.6	8.2	82.6	1.6	100.0	43.0	290	7.7	125
North Central	3.3	7.0	89.2	0.6	100.0	30.1	1,880	8.4	566
County									
Bomi	5.6	6.3	88.0	0.1	100.0	31.4	152	7.0	48
Bong	1.9	6.8	90.6	0.7	100.0	33.1	568	7.8	188
Gbarpolu	9.3	13.2	77.4	0.1	100.0	16.6	95	5.2	16
Grand Bassa	10.1	10.2	79.2	0.4	100.0	15.3	382	10.9	58
Grand Cape Mount	5.4	10.6	83.1	0.9	100.0	42.7	217	17.3	92
Grand Gedeh	7.8	7.5	84.7	0.0	100.0	40.8	120	7.0	49
Grand Kru	10.0	12.0	74.9	3.1	100.0	28.6	104	11.2	30
Lofa	8.3	4.6	86.7	0.4	100.0	36.2	408	8.6	147
Margibi	3.6	10.8	85.6	0.0	100.0	18.7	281	13.5	53
Maryland	6.9	6.8	85.3	1.0	100.0	52.0	134	6.4	70
Montserrado	8.1	9.3	81.3	1.3	100.0	33.5	1,633	10.9	548
Nimba	1.8	8.1	89.4	0.6	100.0	25.5	904	8.8	231
River Cess	6.4	6.1	83.8	3.7	100.0	31.4	80	12.4	25
River Gee	4.8	4.4	90.8	0.0	100.0	48.4	52	6.9	25
Sinoe	3.1	12.3	84.5	0.0	100.0	8.1	132	(11.9)	11
Mother's education									
No education	5.4	9.2	84.8	0.6	100.0	25.2	1,875	10.3	472
Elementary	5.7	9.5	83.6	1.1	100.0	26.6	1,350	10.2	360
Junior high	7.5	7.8	84.0	0.8	100.0	33.1	929	6.9	307
Senior high	5.2	7.6	86.4	0.8	100.0	39.1	912	13.5	356
Higher	9.3	4.0	86.3	0.4	100.0	48.1	198	(3.9)	95
Wealth quintile									
Lowest	5.7	9.0	85.0	0.4	100.0	23.6	1,258	7.9	297
Second	5.0	7.4	86.8	0.8	100.0	27.7	1,159	10.2	321
Middle	5.0	8.7	85.1	1.3	100.0	30.1	989	9.6	297
Fourth	8.3	10.8	79.8	1.1	100.0	31.2	1,004	11.5	313
Highest	6.0	6.8	86.6	0.6	100.0	42.4	854	10.4	362
Total	5.9	8.6	84.7	0.8	100.0	30.2	5,263	9.9	1,591

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Based on either a written record or the mother's recall

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Liberia DHS 2019-20

Vaccine	Children age 12-23 months				Children age 24-35 months			
	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age ^{2,3}	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age ^{2,3}
	Vaccination card ¹	Mother's report	Either source		Vaccination card ¹	Mother's report	Either source	
BCG	62.6	28.0	90.6	89.3	50.1	41.3	91.3	90.7
DPT-HepB-Hib								
1	63.7	27.8	91.4	90.9	50.4	38.8	89.2	88.8
2	61.7	21.7	83.4	82.5	47.1	28.6	75.7	75.0
3	56.5	12.7	69.2	67.8	44.6	19.0	63.6	60.2
OPV								
0 (birth dose)	60.1	26.0	86.1	85.9	46.8	35.6	82.4	82.0
1	63.7	22.8	86.6	86.0	50.4	31.5	81.9	81.6
2	61.6	16.0	77.6	76.7	47.5	21.5	69.0	68.5
3	57.6	5.6	63.2	62.0	45.0	9.3	54.3	51.9
IPV	49.6	25.3	74.9	72.5	32.5	38.4	70.9	67.5
Pneumococcal								
1	62.7	25.5	88.3	87.7	49.3	38.1	87.4	87.1
2	60.8	17.8	78.6	77.7	46.2	26.1	72.3	71.6
3	55.7	12.9	68.5	66.8	43.5	18.4	61.9	59.0
Rotavirus								
1	63.2	25.6	88.8	88.2	49.2	38.1	87.3	87.0
2	59.9	17.0	76.9	76.1	45.7	25.5	71.2	70.5
Measles	49.8	24.0	73.8	68.2	39.6	35.7	75.3	68.3
Yellow fever⁴	47.9	22.3	70.3	65.3	38.6	33.2	71.8	64.4
All basic vaccinations ⁵	47.2	3.6	50.8	45.7	38.1	5.7	43.8	39.1
All age-appropriate vaccinations ⁶	37.3	2.1	39.4	34.6	28.1	3.4	31.4	27.0
No vaccinations	0.0	5.8	5.8	na	0.0	7.0	7.0	na
Number of children	605	332	937	937	445	428	873	873

na = Not applicable

BCG = Bacille Calmette-Guérin

DPT = Diphtheria-pertussis-tetanus

HepB = Hepatitis B

Hib = *Haemophilus influenzae* type b

IPV = Inactivated polio vaccine

OPV = Oral polio vaccine

¹ Vaccination card, booklet, or other home-based record

² Received by age 12 months

³ For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.

⁴ Because of a skip error that affected data collection for the yellow fever vaccination indicator, the "all age-appropriate vaccinations" indicator is missing some yellow fever vaccination data based on mothers' recall.

⁵ BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles

⁶ BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles and yellow fever. Because of the skip error that affected data collection for the yellow fever vaccination indicator, the "vaccinated by appropriate age" indicator excludes some yellow fever vaccination data based on mothers' recall.

Table 10.3 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card ¹	Percentage with a vaccination card seen ¹	Number of children	Percentage who ever had a vaccination card ¹	Percentage with a vaccination card seen ¹	Number of children
Sex						
Male	92.5	66.8	461	91.7	52.7	416
Female	92.0	62.4	476	90.8	49.4	457
Birth order						
1	95.0	61.6	239	91.1	45.7	219
2-3	91.8	62.2	360	90.2	46.9	298
4-5	92.7	73.3	170	94.3	56.2	217
6+	89.0	64.9	169	88.9	59.6	140
Residence						
Urban	93.1	63.7	484	93.5	49.5	450
Greater Monrovia	95.0	61.9	241	92.7	44.7	226
Other urban	91.3	65.5	243	94.3	54.5	223
Rural	91.3	65.4	453	88.8	52.5	423
Region						
North Western	97.1	71.4	89	95.6	62.1	75
South Central	89.8	57.9	383	89.8	42.0	367
South Eastern A	92.3	65.3	71	90.7	46.3	53
South Eastern B	93.1	68.5	50	92.1	59.1	53
North Central	93.6	69.4	343	91.8	57.9	325
County						
Bomi	(97.5)	(62.9)	30	(95.9)	(59.0)	26
Bong	94.7	68.4	102	94.7	52.4	98
Gbarpolu	100.0	69.7	18	100.0	69.9	17
Grand Bassa	90.5	67.9	64	80.9	36.3	81
Grand Cape Mount	95.5	78.3	42	93.0	60.6	32
Grand Gedeh	94.2	73.0	29	(90.6)	(46.9)	19
Grand Kru	89.5	63.6	21	84.7	44.3	17
Lofa	98.4	83.0	80	93.1	66.8	66
Margibi	75.2	33.3	50	(85.7)	(44.2)	31
Maryland	94.2	76.8	18	95.0	71.8	28
Montserrado	92.4	60.0	269	93.1	43.6	255
Nimba	90.4	63.3	161	89.5	57.6	160
River Cess	100.0	72.8	15	(94.1)	(58.0)	14
River Gee	98.3	64.5	11	(97.9)	(45.4)	8
Sinoe	85.9	52.8	27	(88.4)	(37.3)	20
Mother's education						
No education	88.6	72.4	313	87.0	51.1	313
Elementary	94.8	67.4	276	92.4	58.8	236
Junior high	93.3	54.2	174	94.4	43.7	178
Senior high	92.6	50.5	147	94.0	50.0	125
Higher	*	*	28	*	*	21
Wealth quintile						
Lowest	90.9	62.5	258	87.9	54.1	198
Second	93.4	69.7	191	88.3	59.3	201
Middle	92.3	64.9	172	93.7	45.5	159
Fourth	89.3	60.0	192	97.2	47.1	152
Highest	97.8	67.2	123	90.9	45.8	162
Total	92.2	64.5	937	91.2	51.0	873

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Vaccination card, booklet, road to health card, or other home-based record

Table 10.4 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, by background characteristics, Liberia DHS 2019-20

Background characteristic	DPT-HepB-Hib						OPV				Pneumococcal				Rotavirus				Children age 12-23 months:				Children age 24-35 months:				
	1			2			3			1			2			3			1			2			All basic vacci- nations ³	All age-appropriate vacci- nations ⁴	Number of children
	BCG	1	2	3	0 (birth dose) ¹	1	2	3	IPV	1	2	3	1	2	3	Measles	Yellow fever ²	No vacci- nations ⁴	Number of children								
Sex																											
Male	91.5	92.8	85.0	70.5	85.6	87.9	80.1	64.3	75.2	89.1	80.9	70.9	90.6	80.5	77.2	73.3	52.3	41.5	4.6	461	32.7	416					
Female	89.7	90.2	81.8	68.0	86.7	85.3	75.2	62.1	74.7	87.5	76.3	66.2	87.0	73.5	70.5	67.3	49.4	37.4	6.9	476	30.3	457					
Birth order																											
1	95.0	96.0	88.7	73.9	93.1	88.8	81.8	67.1	82.7	94.3	86.6	72.5	95.7	85.4	79.3	74.3	50.9	40.3	3.1	239	31.0	219					
2-3	90.4	90.4	81.6	68.1	87.2	86.7	75.2	61.2	75.4	87.0	74.8	69.0	87.3	74.4	70.4	67.5	46.9	38.0	6.5	360	30.8	298					
4-5	91.3	91.1	85.9	73.1	81.3	88.1	83.6	70.2	71.7	87.5	82.3	72.2	87.7	78.9	75.2	71.0	61.4	43.2	6.4	170	33.9	217					
6+	84.2	87.5	77.1	61.2	78.8	81.6	70.7	54.8	66.2	83.0	71.6	58.1	83.2	68.5	71.9	69.5	48.6	37.3	7.5	169	29.7	140					
Vaccination card⁵																											
Seen	97.1	98.7	95.6	87.6	93.1	98.8	95.5	89.2	76.9	97.2	94.2	86.3	97.9	92.8	77.2	74.3	73.2	57.8	0.0	605	55.1	445					
Not seen/no card	78.9	78.3	61.1	35.8	73.4	64.4	45.1	15.8	71.3	72.0	50.1	36.2	72.2	48.1	67.6	62.9	10.2	5.9	16.3	332	6.9	428					
Residence																											
Urban	92.2	93.2	84.1	70.0	91.2	86.3	76.1	63.6	79.3	89.4	79.1	70.4	89.0	77.9	77.0	74.6	52.5	43.0	4.9	484	35.8	450					
Greater Monrovia	93.9	96.8	84.7	71.6	95.5	86.5	77.3	66.3	84.9	92.3	80.8	73.2	92.7	79.9	84.6	81.0	54.6	47.1	1.8	241	33.1	226					
Other urban	90.6	89.6	83.4	68.3	86.9	86.2	74.8	61.0	73.8	86.6	77.5	67.6	85.3	75.8	69.6	68.1	50.5	38.9	7.9	243	38.6	223					
Rural	88.9	89.6	82.7	68.5	80.7	86.8	79.3	62.7	70.3	87.0	78.0	66.5	88.6	76.0	70.3	65.7	49.0	35.5	6.7	453	26.8	423					
Region																											
North Western	95.5	94.0	90.4	73.6	80.9	92.4	87.0	71.4	85.2	93.7	85.8	74.0	91.9	79.1	76.2	72.0	57.7	45.7	4.1	89	33.5	75					
South Central	88.1	90.4	80.3	67.3	87.2	84.6	74.5	60.9	76.1	86.9	75.9	67.5	87.3	74.1	77.0	73.2	48.9	39.3	5.8	383	27.7	367					
South Eastern A	89.9	91.5	81.1	56.7	79.7	90.6	77.1	53.5	63.5	89.0	77.8	58.6	91.5	76.5	55.5	52.2	37.2	28.1	5.3	71	25.1	53					
South Eastern B	89.8	90.3	84.6	71.2	87.4	84.2	80.6	62.0	77.2	89.0	82.2	71.7	90.2	83.6	67.1	63.5	47.1	42.9	6.8	50	41.3	53					
North Central	92.4	92.1	85.3	72.6	87.4	86.8	78.3	65.8	73.0	88.1	79.4	69.8	88.8	78.7	74.4	71.3	54.6	39.7	6.1	343	34.6	325					
County																											
Bomi	(97.8)	(96.1)	(90.8)	(74.0)	(84.9)	(92.3)	(88.9)	(76.6)	(94.6)	(96.1)	(79.6)	(76.5)	(90.7)	(74.1)	(76.1)	(76.1)	(56.8)	(52.6)	(1.0)	30	(35.4)	26					
Bong	95.3	91.1	83.8	75.9	88.6	83.1	80.7	63.5	59.4	88.8	78.4	72.4	90.1	81.3	73.6	70.2	53.2	28.1	2.8	102	24.4	98					
Gbarpolu	95.1	92.3	84.9	60.2	62.8	90.8	80.2	60.4	74.2	92.7	80.6	58.0	90.7	76.8	72.6	66.8	50.4	32.8	4.6	18	21.7	17					
Grand Bassa	75.4	83.9	76.6	65.9	76.8	83.8	73.3	61.2	59.2	79.6	74.4	62.6	82.8	72.2	67.0	64.0	42.8	28.1	8.5	64	13.5	81					
Grand Cape Mount	93.9	93.2	92.5	79.0	85.7	93.2	88.5	72.3	83.1	92.5	92.5	79.0	93.2	83.6	77.8	71.2	61.5	46.1	6.1	42	38.3	32					
Grand Gedeh	94.3	96.1	89.7	65.7	91.0	100.0	88.6	63.8	64.5	96.1	89.7	68.4	100.0	85.1	63.1	56.1	47.2	37.8	0.0	29	(24.4)	19					
Grand Kru	89.1	90.2	83.8	77.8	88.1	87.6	82.3	62.3	78.8	88.6	84.4	73.6	88.6	83.5	62.3	58.1	48.9	47.7	8.9	21	45.9	17					
Lofa	96.4	99.3	95.0	87.3	96.9	95.3	89.3	79.7	80.1	92.9	86.6	78.4	94.1	88.6	85.8	78.1	66.1	52.4	0.7	80	41.6	66					
Margibi	77.2	71.3	65.1	51.7	65.6	74.3	68.5	41.8	58.2	70.6	61.0	54.2	68.6	54.9	59.8	52.9	31.6	19.7	22.2	50	(29.1)	31					
Maryland	86.3	86.1	83.0	59.7	81.7	82.9	79.8	64.6	71.9	84.5	76.4	64.5	87.7	84.5	63.5	59.1	44.4	38.1	7.3	18	45.3	28					
Montserado	93.1	95.5	83.9	70.5	93.7	86.7	75.9	64.3	83.4	91.7	78.9	71.1	91.8	78.1	82.5	79.1	53.6	45.6	2.2	269	32.1	255					
Nimba	88.6	89.1	81.5	63.2	82.0	84.9	71.4	60.4	78.2	85.2	76.4	63.9	85.3	72.0	69.3	68.7	49.7	40.8	10.9	161	38.0	160					
River Cess	94.3	97.3	80.6	54.5	86.0	90.2	83.3	52.0	61.4	89.7	77.6	55.0	95.2	84.5	56.8	54.9	35.5	30.0	0.0	15	(43.4)	14					
River Gee	96.9	97.5	88.7	77.4	95.4	79.7	78.8	56.9	82.8	97.5	87.3	79.8	97.5	82.4	82.5	81.7	47.9	41.4	1.7	11	(16.1)	8					
Sinoe	82.8	83.2	72.3	48.4	64.1	80.7	61.3	43.2	63.8	81.1	65.3	50.2	80.4	62.6	46.6	46.6	27.4	16.7	14.1	27	(12.3)	20					

Continued...

Table 10.4—Continued

Background characteristic	DPT-HepB-Hib				OPV			Pneumococcal			Rotavirus		Children age 12-23 months:				Children age 24-35 months:						
													All age-appropriate vacci- nations ³				All age-appropriate vacci- nations ⁴						
	BCG	1	2	3	0 (birth dose) ¹	1	2	3	IPV	1	2	3	1	2	Measles	Yellow fever ²	All age-appropriate vacci- nations ³	No vacci- nations ⁴	Number of children				
Mother's education																							
No education	86.9	87.6	79.6	66.6	82.7	85.1	76.3	63.5	67.9	86.0	76.8	66.2	86.7	75.0	68.2	63.3	52.4	40.7	8.7	313	27.6	313	
Elementary	91.8	91.3	86.0	69.9	84.7	90.1	79.9	66.8	75.0	85.5	80.1	68.8	87.6	78.2	67.6	63.6	50.6	36.7	4.9	276	35.9	236	
Junior high	93.3	94.3	83.7	69.9	89.5	85.0	76.4	56.1	78.0	90.9	81.3	69.6	90.3	79.7	77.8	76.6	43.6	35.6	3.5	174	26.7	178	
Senior high	91.2	94.9	85.4	69.5	89.5	85.0	75.9	59.8	81.3	93.0	74.8	68.3	91.3	75.7	87.6	84.6	49.7	39.3	4.9	147	38.3	125	
Higher	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	28	*	21
Wealth quintile																							
Lowest	86.7	88.6	77.3	59.8	80.7	84.6	70.7	54.7	67.0	85.0	73.2	60.3	86.2	69.1	64.0	59.4	41.9	30.4	6.5	258	27.5	198	
Second	92.6	92.3	88.5	74.7	83.3	91.0	82.4	67.8	75.4	90.1	80.3	73.3	90.5	81.4	73.8	69.9	53.6	40.7	5.4	191	31.7	201	
Middle	91.1	91.3	87.4	72.2	87.3	88.2	84.8	65.6	79.2	89.8	81.3	66.1	90.0	80.7	73.9	69.3	51.7	38.2	7.5	172	27.8	159	
Fourth	89.3	89.3	82.0	69.7	86.9	82.5	73.5	64.0	72.0	86.7	81.0	72.0	83.8	77.6	78.1	77.6	55.5	42.6	7.3	192	34.3	152	
Highest	96.9	99.8	84.6	75.7	99.0	87.8	81.0	69.3	89.4	92.6	79.6	76.2	97.5	80.1	87.2	83.5	56.5	52.8	0.0	123	36.8	162	
Total	90.6	91.4	83.4	69.2	86.1	86.6	77.6	63.2	74.9	88.3	78.6	68.5	88.8	76.9	73.8	70.3	50.8	39.4	5.8	937	31.4	873	

Note: Children are considered to have received the vaccine if it was either written on their vaccination card or reported by their mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

BCG = Bacille Calmette-Guérin

DPT = Diphtheria-pertussis-tetanus

HepB = Hepatitis B

Hib = *Haemophilus influenzae* type b

IPV = Inactivated polio vaccine

OPV = Oral polio vaccine

¹ Polio 0 is the polio vaccination given at birth.

² Following data collection, a skip error was identified that impacted yellow fever vaccination rates according to mothers' recall.

³ BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles

⁴ BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles and yellow fever.

⁵ Because of the skip error that affected data collection for the yellow fever vaccination indicator, the "vaccinated by appropriate age" indicator excludes some yellow fever vaccination data by mothers' recall.

⁶ Vaccination card, booklet, or other home-based record

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
	Percentage with symptoms of ARI ¹	Number of children	Percentage for whom advice or treatment was sought ²	Percentage for whom advice or treatment was sought same or next day ²	Number of children
Age in months					
<6	5.2	569	(81.8)	(28.6)	30
6-11	8.8	529	(64.9)	(20.9)	46
12-23	5.7	937	78.3	36.4	53
24-35	4.0	873	(84.4)	(39.0)	35
36-47	3.5	978	(85.5)	(51.2)	35
48-59	1.7	980	(83.1)	(14.4)	16
Sex					
Male	4.1	2,431	81.4	39.2	100
Female	4.7	2,434	75.8	27.8	115
Cooking fuel					
Electricity or gas	(0.4)	61	*	*	0
Kerosene	*	5	*	nc	0
Fire coal/charcoal	4.7	2,132	80.1	38.5	100
Wood/straw ³	4.3	2,668	76.9	28.5	115
Residence					
Urban	3.8	2,615	76.3	35.0	101
Greater Monrovia	4.7	1,326	*	*	63
Other urban	2.9	1,289	(87.7)	(41.1)	38
Rural	5.1	2,251	80.3	31.5	115
Region					
North Western	3.7	419	(71.9)	(37.6)	16
South Central	4.8	2,123	75.8	25.2	102
South Eastern A	4.7	302	(89.2)	(48.1)	14
South Eastern B	6.9	268	82.9	47.1	18
North Central	3.7	1,755	80.3	37.0	66
County					
Bomi	1.4	143	*	*	2
Bong	6.1	540	(83.6)	(45.0)	33
Gbarpolu	8.8	86	*	*	8
Grand Bassa	4.2	341	*	*	14
Grand Cape Mount	3.2	190	*	*	6
Grand Gedeh	5.3	111	*	*	6
Grand Kru	7.3	96	*	*	7
Lofa	4.3	375	*	*	16
Margibi	1.9	256	*	*	5
Maryland	5.5	123	*	*	7
Montserrado	5.4	1,526	(72.2)	(27.5)	82
Nimba	1.9	839	*	*	16
River Cess	7.4	74	*	*	5
River Gee	9.4	48	*	*	5
Sinoe	2.5	117	*	*	3
Mother's education					
No education	4.2	1,723	70.6	27.8	73
Elementary	4.3	1,236	87.5	33.8	53
Junior high	3.5	852	(66.0)	(21.6)	30
Senior high	4.9	866	(80.6)	(36.2)	42
Higher	8.9	189	*	*	17
Wealth quintile					
Lowest	5.3	1,169	70.7	23.1	62
Second	3.8	1,061	84.3	34.6	40
Middle	3.7	912	71.6	33.9	33
Fourth	4.3	913	(74.6)	(33.7)	39
Highest	5.0	811	*	*	40
Total	4.4	4,866	78.4	33.1	216

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

nc = No unweighted cases

¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

² Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, or black baggers/drug peddlers. Excludes advice or treatment from a traditional practitioner.

³ Includes grass, shrubs, and crop residues

Table 10.6 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Liberia DHS 2019-20

Source	Percentage for whom advice or treatment was sought from each source:	
	Among children with symptoms of ARI ¹	Among children with symptoms of ARI for whom advice or treatment was sought ¹
Public sector	42.0	53.2
Government hospital	14.8	18.8
Government health center	2.7	3.4
Government health clinic	23.9	30.3
Mobile clinic	0.6	0.8
Private medical sector	33.0	41.9
Private hospital/center/clinic	13.9	17.6
Pharmacy	19.7	25.1
Private doctor	0.8	1.0
Mobile clinic	1.2	1.5
Other private sector	4.3	5.4
Shop	1.5	1.8
Traditional practitioner	0.4	0.5
Black bagger/drug peddler	2.4	3.1
Other	1.3	1.6
Number of children	216	170

¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Table 10.7 Prevalence and treatment of fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among children under age 5:		Among children under age 5 with fever:			
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought ¹	Percentage for whom advice or treatment was sought same or next day ¹	Percentage who took antibiotic drugs	Number of children with fever
Age in months						
<6	22.1	569	80.9	47.9	44.8	126
6-11	31.8	529	80.3	43.7	41.6	168
12-23	28.4	937	79.6	45.3	33.0	267
24-35	25.8	873	78.2	49.9	34.1	225
36-47	23.2	978	86.2	48.7	34.6	227
48-59	20.9	980	80.1	49.8	26.1	205
Sex						
Male	25.1	2,431	82.1	47.7	32.2	611
Female	24.9	2,434	79.7	47.5	37.2	606
Residence						
Urban	23.7	2,615	87.1	55.3	37.2	620
Greater Monrovia	23.8	1,326	90.3	57.8	33.7	316
Other urban	23.6	1,289	83.8	52.6	40.8	304
Rural	26.5	2,251	74.4	39.7	32.2	597
Region						
North Western	35.4	419	80.4	52.5	34.2	148
South Central	26.5	2,123	84.4	47.6	35.9	562
South Eastern A	33.7	302	85.5	43.2	43.6	102
South Eastern B	33.4	268	77.7	45.9	32.7	89
North Central	18.0	1,755	74.3	47.1	30.6	315
County						
Bomi	42.7	143	91.6	58.8	36.0	61
Bong	25.5	540	73.9	42.9	37.1	138
Gbarpolu	35.4	86	64.8	38.6	33.6	30
Grand Bassa	29.5	341	74.5	37.5	34.3	101
Grand Cape Mount	29.8	190	76.6	53.0	32.4	57
Grand Gedeh	30.0	111	85.8	43.9	34.4	33
Grand Kru	21.4	96	74.3	50.9	15.4	21
Lofa	11.4	375	(77.9)	(45.4)	(12.4)	43
Margibi	34.1	256	89.2	35.6	52.5	87
Maryland	40.6	123	77.2	39.3	37.8	50
Montserrado	24.6	1,526	85.9	53.2	32.5	375
Nimba	16.1	839	73.6	52.0	29.6	135
River Cess	36.3	74	90.0	37.1	62.6	27
River Gee	39.4	48	82.5	57.8	38.3	19
Sinoe	35.4	117	82.4	46.7	38.6	41
Mother's education						
No education	23.4	1,723	75.9	43.8	31.4	403
Elementary	25.6	1,236	78.8	42.0	33.9	317
Junior high	25.9	852	82.8	53.5	34.1	220
Senior high	27.7	866	88.3	54.0	38.4	240
Higher	19.3	189	*	*	*	36
Wealth quintile						
Lowest	23.2	1,169	70.5	33.5	30.5	271
Second	25.4	1,061	76.5	47.7	31.6	270
Middle	22.8	912	75.4	39.9	35.4	208
Fourth	27.6	913	89.1	57.3	35.0	252
Highest	26.7	811	95.1	61.2	43.0	216
Total	25.0	4,866	80.9	47.6	34.7	1,217

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, or black baggers/drug peddlers. Excludes advice or treatment from a traditional practitioner.

Table 10.8 Prevalence and treatment of diarrhea

Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey, and among children with diarrhea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage with diarrhea	Number of children	Among children under age 5 with diarrhea:	
			Percentage for whom advice or treatment was sought ¹	Number of children with diarrhea
Age in months				
<6	11.6	569	57.1	66
6-11	23.1	529	67.9	122
12-23	25.3	937	69.1	237
24-35	16.0	873	63.3	139
36-47	13.8	978	68.0	135
48-59	6.5	980	65.2	63
Sex				
Male	15.9	2,431	69.1	386
Female	15.5	2,434	63.4	377
Source of drinking water²				
Improved	15.4	4,006	69.4	616
Unimproved	17.2	860	53.3	148
Type of toilet facility³				
Improved sanitation facility	15.1	2,252	69.8	340
Unimproved facility	13.6	756	78.5	103
Open defecation	17.3	1,858	58.7	321
Residence				
Urban	14.3	2,615	71.1	373
Greater Monrovia	14.4	1,326	67.1	191
Other urban	14.1	1,289	75.4	182
Rural	17.4	2,251	61.6	391
Region				
North Western	17.1	419	72.8	72
South Central	16.8	2,123	65.4	357
South Eastern A	21.3	302	71.3	64
South Eastern B	18.5	268	73.9	49
North Central	12.6	1,755	62.3	220
County				
Bomi	14.6	143	(67.2)	21
Bong	17.8	540	59.6	96
Gbarpolu	16.7	86	(63.6)	14
Grand Bassa	24.8	341	62.3	84
Grand Cape Mount	19.2	190	(79.6)	37
Grand Gedeh	19.0	111	(64.2)	21
Grand Kru	11.2	96	(71.4)	11
Lofa	6.8	375	(67.6)	26
Margibi	16.6	256	74.4	42
Maryland	23.0	123	79.1	28
Montserrado	15.1	1,526	64.9	231
Nimba	11.8	839	63.7	99
River Cess	19.9	74	77.9	15
River Gee	21.4	48	62.0	10
Sinoe	24.3	117	73.2	28
Mother's education				
No education	14.5	1,723	58.4	250
Elementary	17.9	1,236	67.5	222
Junior high	17.7	852	75.2	151
Senior high	12.1	866	67.4	105
Higher	18.6	189	*	35
Wealth quintile				
Lowest	16.7	1,169	57.6	195
Second	15.4	1,061	60.9	163
Middle	16.0	912	70.0	146
Fourth	16.1	913	79.4	147
Highest	13.8	811	67.0	112
Total	15.7	4,866	66.3	763

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, or black baggers/drug peddlers. Excludes advice or treatment from a traditional practitioner.

² See Table 2.1.1 for definition of categories.

³ See Table 2.3.1 for definition of categories.

Table 10.9 Feeding practices during diarrhea

Percent distribution of children under age 5 who had diarrhea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Amount of liquids given							Amount of food given							Number of children with diarrhea	
	More	Same as usual	Somewhat less	Much less	None	Don't know	Total	More	Same as usual	Somewhat less	Much less	None	Never gave food	Don't know		Total
Age in months																
<6	8.1	29.1	24.8	14.6	23.4	0.0	100.0	6.7	32.1	15.7	15.1	0.0	30.3	0.0	100.0	66
6-11	43.9	19.4	9.9	22.5	4.3	0.0	100.0	17.2	20.4	14.3	32.0	5.9	10.2	0.0	100.0	122
12-23	29.5	30.7	17.8	13.6	7.0	1.4	100.0	13.4	31.9	24.4	21.4	4.6	2.8	1.4	100.0	237
24-35	35.7	31.9	10.2	18.8	3.4	0.0	100.0	8.0	34.8	25.1	29.8	2.2	0.1	0.0	100.0	139
36-47	37.6	27.0	14.6	16.8	3.6	0.4	100.0	18.5	33.4	20.4	25.7	0.5	1.1	0.4	100.0	135
48-59	30.8	35.2	14.5	12.4	1.1	5.9	100.0	15.0	38.0	22.8	17.5	0.9	0.0	5.9	100.0	63
Sex																
Male	32.7	28.9	14.7	15.6	7.0	1.0	100.0	8.2	34.1	23.9	22.6	3.4	6.8	1.0	100.0	386
Female	32.5	28.4	15.2	17.4	5.5	1.0	100.0	18.9	28.6	18.7	26.5	2.5	3.9	1.0	100.0	377
Breastfeeding status																
Breastfeeding	28.6	26.0	17.8	18.0	9.4	0.2	100.0	12.7	26.6	20.5	24.2	3.6	12.0	0.2	100.0	316
Not breastfeeding	35.5	30.6	12.9	15.4	4.0	1.6	100.0	14.0	34.7	21.9	24.7	2.5	0.6	1.6	100.0	447
Residence																
Urban	37.1	26.4	11.5	17.6	5.8	1.6	100.0	13.1	28.5	21.2	28.2	3.9	3.6	1.6	100.0	373
Greater Monrovia	44.0	14.0	4.1	25.1	9.7	3.1	100.0	14.4	17.4	19.2	40.9	4.9	0.0	3.1	100.0	191
Other urban	29.8	39.4	19.3	9.8	1.7	0.0	100.0	11.7	40.0	23.3	14.8	2.8	7.4	0.0	100.0	182
Rural	28.4	30.9	18.2	15.5	6.7	0.4	100.0	13.8	34.2	21.5	21.0	2.1	7.0	0.4	100.0	391
Region																
North Western	28.7	36.3	13.1	16.7	3.6	1.7	100.0	13.8	35.9	23.0	22.8	0.7	2.3	1.7	100.0	72
South Central	35.3	20.9	10.9	22.7	8.4	1.7	100.0	15.4	24.6	18.0	32.7	4.5	3.2	1.7	100.0	357
South Eastern A	26.4	33.7	18.4	13.0	7.7	0.7	100.0	7.1	40.1	25.3	19.0	0.3	7.4	0.7	100.0	64
South Eastern B	33.2	44.6	7.8	11.7	2.7	0.0	100.0	8.6	35.7	22.8	28.3	1.1	3.5	0.0	100.0	49
North Central	31.3	33.8	22.5	8.5	3.9	0.0	100.0	13.2	37.5	24.7	12.7	2.3	9.6	0.0	100.0	220
County																
Boni	(31.4)	(38.7)	(11.6)	(13.8)	(2.2)	(2.2)	100.0	(0.0)	(54.0)	(21.9)	(21.8)	(0.0)	(0.0)	(2.2)	100.0	21
Bong	20.4	43.6	20.9	11.7	3.4	0.0	100.0	4.6	45.0	28.6	13.7	0.0	8.1	0.0	100.0	96
Gbarpolu	(25.1)	(38.5)	(18.9)	(13.1)	(4.4)	(0.0)	100.0	(15.0)	(37.6)	(29.1)	(14.0)	(3.3)	(1.1)	(0.0)	100.0	14
Grand Bassa	17.8	24.1	22.7	25.9	9.5	0.0	100.0	22.6	25.4	18.0	23.1	8.1	2.8	0.0	100.0	84
Grand Cape Mount	(28.6)	(34.0)	(11.7)	(19.8)	(4.0)	(2.0)	100.0	(21.1)	(24.9)	(21.1)	(26.7)	(0.0)	(4.2)	(2.0)	100.0	37
Grand Gedeh	(25.2)	(27.0)	(32.5)	(10.5)	(2.4)	(2.3)	100.0	(9.3)	(31.1)	(48.2)	(6.7)	(0.0)	(2.4)	(2.3)	100.0	21
Grand Kru	(40.7)	(26.3)	(1.8)	(25.9)	(5.3)	(0.0)	100.0	(4.0)	(24.5)	(39.8)	(27.4)	(1.6)	(2.7)	(0.0)	100.0	11
Lofa	(44.5)	(16.1)	(19.9)	(16.1)	(3.4)	(0.0)	100.0	(18.0)	(30.6)	(13.2)	(27.9)	(0.0)	(10.3)	(0.0)	100.0	26
Margibi	29.6	28.8	16.6	20.6	4.5	0.0	100.0	4.7	27.7	18.0	36.3	0.0	13.2	0.0	100.0	42
Maryland	30.9	51.6	5.8	9.8	1.8	0.0	100.0	10.7	40.6	13.3	29.1	1.2	5.0	0.0	100.0	28
Montserrado	42.8	18.3	5.5	22.0	8.8	2.6	100.0	14.7	23.7	18.0	35.5	4.1	1.5	2.6	100.0	231
Nimba	38.3	28.9	24.9	3.4	4.5	0.0	100.0	20.3	31.9	23.9	7.8	5.2	11.0	0.0	100.0	99
River Cess	29.6	35.2	20.7	10.2	4.3	0.0	100.0	9.6	41.5	19.6	24.1	1.3	3.8	0.0	100.0	15
River Gee	31.3	44.7	19.5	1.8	2.7	0.0	100.0	7.8	34.0	31.0	27.1	0.0	0.0	0.0	100.0	10
Sinoe	25.7	37.9	6.8	16.3	13.3	0.0	100.0	4.1	46.0	11.4	25.5	0.0	13.0	0.0	100.0	28
Mother's education																
No education	27.1	29.0	19.5	18.9	5.1	0.3	100.0	13.5	31.6	22.3	24.5	1.9	5.9	0.3	100.0	250
Elementary	35.1	32.2	14.8	14.8	3.0	0.2	100.0	16.3	32.8	22.7	20.8	2.0	5.2	0.2	100.0	222
Junior high	33.0	28.2	10.1	10.1	14.7	4.0	100.0	10.4	36.4	18.4	17.1	6.5	7.2	4.0	100.0	151
Senior high	30.1	26.3	15.0	22.2	5.8	0.5	100.0	6.3	26.4	17.8	42.6	3.4	3.2	0.5	100.0	105
Higher	*	*	*	*	*	*	100.0	*	*	*	*	*	*	*	100.0	35
Wealth quintile																
Lowest	24.4	33.0	21.2	14.2	7.2	0.0	100.0	20.7	29.0	23.9	19.4	1.5	5.5	0.0	100.0	195
Second	37.1	27.3	16.3	12.7	5.9	0.6	100.0	11.4	37.7	22.8	17.7	2.7	7.2	0.6	100.0	163
Middle	31.1	29.7	18.5	17.1	3.0	0.5	100.0	8.0	36.2	17.6	26.7	3.2	7.7	0.5	100.0	146
Fourth	37.4	24.6	4.8	18.5	10.7	4.1	100.0	9.2	33.7	13.3	30.3	5.2	4.2	4.1	100.0	147
Highest	36.2	27.3	10.4	22.7	3.4	0.0	100.0	16.5	17.0	30.3	33.0	2.6	0.7	0.0	100.0	112
Total	32.6	28.7	14.9	16.5	6.2	1.0	100.0	13.5	31.4	21.3	24.5	2.9	5.3	1.0	100.0	763

Note: It is recommended that children be given more liquids to drink during diarrhea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.10 Oral rehydration therapy, zinc, and other treatments for diarrhea

Among children under age 5 who had diarrhea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet, government-recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), continued feeding and ORT, and other treatments, and percentage given no treatment, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of children with diarrhea who were given:										Other treatment:							
	Government -recommended-					ORT (ORS, RHF, or increased fluids)					Continued feeding and ORT ¹	Antibiotic drugs	Anti-motility drugs	Intravenous solution	Home remedy/ other	Percentage given no treatment	Number of children with diarrhea	
	Fluid from ORS packets	home fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)											
Age in months																		
<6	13.2	3.1	14.7	13.2	4.4	17.8	19.4	8.0	34.2	15.8	0.0	24.4	25.7	66				
6-11	48.1	11.1	52.4	27.0	16.1	64.7	68.3	35.1	15.6	31.4	0.0	13.4	13.9	122				
12-23	62.3	9.5	63.7	31.5	24.8	71.9	73.3	51.9	11.9	50.5	2.0	18.3	6.2	237				
24-35	55.4	8.6	55.7	15.8	12.8	67.2	67.4	43.9	14.0	45.6	0.0	15.5	16.9	139				
36-47	58.9	11.1	60.4	18.5	16.9	67.2	67.5	50.0	5.8	58.0	0.0	19.5	9.5	135				
48-59	64.9	10.2	66.4	23.7	19.2	72.0	73.4	54.4	10.6	46.1	0.0	9.0	7.6	63				
Sex																		
Male	55.0	9.5	56.6	24.8	18.5	63.7	65.1	42.1	15.6	44.0	1.2	19.0	10.0	386				
Female	53.2	9.3	55.0	21.9	16.7	65.1	66.4	45.6	11.6	45.0	0.0	14.9	13.5	377				
Residence																		
Urban	53.3	7.3	55.3	28.2	20.6	64.9	66.8	43.0	16.4	42.4	1.0	15.0	10.1	373				
Greater Monrovia	52.0	6.2	54.3	36.4	24.5	69.2	71.5	41.5	16.4	31.9	2.0	13.9	13.1	191				
Other urban	54.8	8.5	56.3	19.6	16.6	60.4	61.9	44.6	16.3	53.5	0.0	16.1	7.0	182				
Rural	54.9	11.3	56.3	18.7	14.7	63.9	64.7	44.6	11.0	46.5	0.2	18.9	13.4	391				
Region																		
North Western	71.5	14.9	73.0	33.1	29.2	74.4	76.0	52.3	12.8	47.1	0.0	15.3	8.8	72				
South Central	54.8	7.1	56.7	29.2	20.7	67.1	68.3	43.4	12.6	39.7	1.1	16.1	11.8	357				
South Eastern A	57.6	6.2	58.9	20.7	15.8	64.2	65.5	46.0	12.1	63.8	0.0	15.5	8.4	64				
South Eastern B	55.1	10.7	55.8	20.1	16.0	68.6	69.3	46.9	17.6	53.7	0.0	11.2	13.5	49				
North Central	46.1	11.8	47.8	12.1	9.6	55.8	57.5	40.5	15.2	43.7	0.4	20.6	13.2	220				
County																		
Bomi	(75.5)	(7.8)	(75.5)	(35.4)	(35.4)	(75.5)	(75.5)	(51.4)	(3.0)	(49.5)	(0.0)	(20.1)	(1.8)	21				
Bong	41.0	10.2	42.1	14.5	11.6	48.7	49.8	34.0	17.3	47.0	0.0	17.9	15.4	96				
Gbarpolu	(70.3)	(10.4)	(72.9)	(33.4)	(30.4)	(74.4)	(77.1)	(65.2)	(9.4)	(47.1)	(0.0)	(7.3)	(12.3)	14				
Grand Bassa	52.3	8.1	52.3	27.4	20.7	56.9	56.9	43.4	7.3	48.6	0.0	22.5	9.5	84				
Grand Cape Mount	(69.7)	(20.7)	(71.7)	(31.7)	(25.2)	(73.8)	(75.8)	(47.8)	(19.8)	(45.8)	(0.0)	(15.6)	(11.4)	37				
Grand Gedeh	(66.1)	(4.6)	(66.1)	(33.4)	(25.4)	(71.0)	(71.0)	(60.5)	(16.0)	(68.1)	(0.0)	(22.0)	(7.9)	21				
Grand Kru	(43.9)	(5.8)	(47.1)	(15.4)	(10.1)	(64.3)	(67.5)	(45.4)	(8.0)	(43.9)	(0.0)	(5.3)	(25.6)	11				
Lofa	(45.4)	(20.0)	(55.8)	(4.3)	(4.3)	(64.0)	(74.4)	(53.4)	(0.0)	(40.7)	(0.0)	(14.1)	(15.6)	26				
Margibi	72.4	4.3	72.4	20.4	15.9	74.2	74.2	35.1	9.8	58.4	0.0	13.7	4.0	42				
Maryland	56.9	16.5	56.9	26.5	23.2	68.8	68.8	46.6	22.7	54.9	0.0	13.9	8.3	28				
Montserrado	52.5	7.3	55.5	31.5	21.6	69.5	71.4	44.9	15.1	33.0	1.7	14.2	14.2	231				
Nimba	51.3	11.3	51.3	11.9	9.1	60.6	60.6	43.3	17.1	41.4	0.9	24.8	10.5	99				
River Cess	73.7	15.9	75.1	20.7	17.2	77.3	78.6	55.7	16.3	67.4	0.0	22.2	4.4	15				
River Gee	62.1	0.0	62.1	7.7	2.7	72.5	72.5	49.4	13.9	60.8	0.0	10.2	14.9	10				
Sinoe	42.9	2.3	45.2	11.4	8.1	52.4	54.7	30.2	7.0	58.7	0.0	7.3	10.9	28				
Mother's education																		
No education	51.9	13.0	55.2	18.0	14.7	62.0	64.3	42.5	10.4	44.5	0.4	14.3	17.8	250				
Elementary	56.8	8.8	56.9	21.7	16.7	67.4	67.4	49.0	14.8	47.2	0.0	24.0	8.6	222				
Junior high	62.3	4.9	62.3	24.2	22.5	67.5	67.5	44.2	7.8	48.6	0.0	18.4	6.0	151				
Senior high	41.0	7.1	45.1	23.7	12.4	52.0	56.2	26.0	21.6	36.0	0.0	11.9	16.1	105				
Higher	*	*	*	*	*	*	*	*	*	*	*	*	*	*	35			
Wealth quintile																		
Lowest	54.1	15.1	56.5	19.1	15.7	63.6	64.7	47.7	11.2	47.4	0.0	17.1	12.8	195				
Second	56.6	7.9	57.2	17.3	13.9	63.9	64.6	46.7	11.6	43.6	0.5	20.3	15.0	163				
Middle	52.0	8.3	53.8	19.7	16.2	58.6	60.4	33.8	16.0	48.0	0.0	20.1	12.3	146				
Fourth	56.7	3.3	56.8	21.6	18.1	70.5	70.6	37.7	10.9	44.9	0.0	16.7	3.0	147				
Highest	50.0	11.0	53.9	46.8	27.4	65.9	69.9	54.0	21.4	35.7	3.4	8.2	16.0	112				
Total	54.1	9.4	55.8	23.4	17.6	64.4	65.7	43.8	13.6	44.5	0.6	17.0	11.8	763				

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

ORS = Oral rehydration salts

¹ Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhea episode.

Table 10.11 Source of advice or treatment for children with diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhea who received ORS, percentage for whom advice or treatment was sought from specific sources, Liberia DHS 2019-20

Source	Percentage for whom advice or treatment was sought from each source:		
	Among children with diarrhea	Among children with diarrhea for whom advice or treatment was sought	Among children with diarrhea who received ORS ¹
Public sector	31.7	46.0	42.2
Government hospital	8.9	13.0	12.8
Government health center	2.3	3.4	3.8
Government health clinic	19.6	28.5	24.2
Mobile clinic	0.8	1.2	1.3
Private medical sector	32.2	46.7	34.0
Private hospital/center/clinic	7.5	10.9	7.6
Pharmacy	20.2	29.3	21.5
Private doctor	1.3	1.9	2.4
Mobile clinic	3.1	4.5	2.5
Other private sector	7.0	10.2	6.4
Shop	0.5	0.8	0.3
Traditional practitioner	2.9	4.3	1.5
Black bagger/drug peddler	3.6	5.2	4.6
Other	1.0	1.4	1.0
Number of children	763	526	413

ORS = Oral rehydration salts

¹ Fluids from ORS packet

Table 10.12 Knowledge of ORS packets

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets for treatment of diarrhea, by background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	98.2	414
20-24	98.0	983
25-34	97.8	1,661
35-49	97.4	968
Residence		
Urban	98.5	2,269
Greater Monrovia	99.1	1,184
Other urban	97.8	1,084
Rural	97.0	1,757
Region		
North Western	97.8	331
South Central	98.7	1,825
South Eastern A	99.4	248
South Eastern B	97.8	222
North Central	96.3	1,400
County		
Bomi	99.6	119
Bong	98.7	443
Gbarpolu	97.6	67
Grand Bassa	96.9	264
Grand Cape Mount	96.3	145
Grand Gedeh	99.4	90
Grand Kru	95.9	80
Lofa	99.1	317
Margibi	99.3	217
Maryland	98.6	100
Montserrado	99.0	1,343
Nimba	93.4	640
River Cess	99.2	58
River Gee	99.8	42
Sinoe	99.5	100
Education		
No education	96.3	1,366
Elementary	98.3	984
Junior high	98.4	725
Senior high	99.6	782
Higher	97.0	170
Wealth quintile		
Lowest	97.1	855
Second	95.8	849
Middle	98.1	785
Fourth	99.6	816
Highest	98.8	721
Total	97.8	4,026

ORS = Oral rehydration salts

Table 10.13 Disposal of children's stools

Percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last fecal matter, and percentage of children whose stools are disposed of appropriately, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of appropriately ¹	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other			
Age of child in months										
0-1	0.2	23.4	1.1	25.1	31.9	16.6	1.8	100.0	24.7	161
2-3	0.0	23.0	0.3	24.9	37.0	13.7	1.1	100.0	23.2	201
4-5	0.2	14.0	0.7	26.0	32.5	25.0	1.6	100.0	14.9	194
6-8	1.0	14.4	4.9	24.9	38.6	15.5	0.7	100.0	20.3	290
9-11	0.0	14.2	4.0	22.8	40.8	16.9	1.4	100.0	18.1	233
12-17	0.8	18.5	6.8	20.6	33.1	19.3	0.9	100.0	26.1	440
18-23	0.1	21.2	10.2	11.9	33.4	22.2	0.9	100.0	31.6	404
6-23	0.5	17.7	6.9	19.3	35.7	18.9	0.9	100.0	25.2	1,366
Type of toilet facility²										
Improved sanitation facility	0.8	23.3	2.5	12.9	48.7	10.7	1.1	100.0	26.6	874
Unimproved facility	0.2	24.7	6.4	21.4	32.5	12.8	2.0	100.0	31.3	291
Open defecation	0.0	10.2	7.6	30.4	20.6	30.4	0.7	100.0	17.8	756
Residence										
Urban	0.6	22.0	3.0	12.8	48.2	12.3	1.1	100.0	25.6	1,040
Greater Monrovia	0.5	12.7	2.3	8.9	67.4	7.4	0.7	100.0	15.6	521
Other urban	0.6	31.4	3.7	16.7	29.0	17.2	1.5	100.0	35.6	519
Rural	0.2	14.0	7.6	30.8	19.8	26.5	1.1	100.0	21.9	881
Region										
North Western	0.0	24.2	4.8	33.3	21.1	13.8	2.9	100.0	28.9	163
South Central	0.4	14.3	3.3	14.6	50.9	14.9	1.6	100.0	18.0	837
South Eastern A	0.0	22.9	8.2	24.4	28.5	15.9	0.0	100.0	31.2	130
South Eastern B	1.2	19.1	3.1	23.6	26.7	24.3	2.0	100.0	23.5	100
North Central	0.4	20.9	7.2	25.0	21.9	24.5	0.2	100.0	28.5	691
County										
Bomi	0.0	28.8	6.6	41.5	12.9	10.3	0.0	100.0	35.3	51
Bong	0.0	13.2	4.2	37.8	10.4	34.1	0.2	100.0	17.4	217
Gbarpolu	0.0	19.9	1.8	42.9	24.5	11.0	0.0	100.0	21.7	33
Grand Bassa	0.0	18.0	5.8	29.7	17.3	28.3	0.9	100.0	23.8	134
Grand Cape Mount	0.0	23.0	4.9	24.0	24.9	17.3	6.0	100.0	27.9	79
Grand Gedeh	0.0	19.6	3.9	12.2	44.1	20.1	0.0	100.0	23.5	51
Grand Kru	0.0	23.7	0.9	25.3	15.6	33.3	1.1	100.0	24.6	38
Lofa	0.0	13.7	2.2	30.7	35.5	17.9	0.0	100.0	15.9	158
Margibi	0.2	25.5	7.1	7.2	30.6	22.2	7.1	100.0	32.9	108
Maryland	3.0	14.2	6.4	22.3	35.3	15.0	3.7	100.0	23.6	42
Montserrat	0.6	11.5	2.0	12.5	62.1	10.6	0.7	100.0	14.1	596
Nimba	0.9	29.8	11.6	13.4	23.0	21.1	0.2	100.0	42.3	316
River Cess	0.0	25.9	7.6	29.8	13.7	23.0	0.0	100.0	33.5	29
River Gee	0.0	20.5	0.5	23.1	29.6	26.3	0.0	100.0	21.0	20
Sinoe	0.0	24.6	13.1	33.8	21.1	7.4	0.0	100.0	37.7	50
Mother's education										
No education	0.5	16.9	5.4	26.0	24.8	25.3	1.0	100.0	22.8	640
Elementary	0.1	17.5	8.0	26.3	27.5	19.8	0.8	100.0	25.6	518
Junior high	0.8	22.1	2.7	17.7	38.8	16.5	1.3	100.0	25.7	345
Senior high	0.3	16.5	2.7	11.0	58.2	9.8	1.6	100.0	19.4	344
Higher	(0.0)	(27.9)	(5.3)	(3.9)	(54.8)	(8.1)	(0.0)	100.0	(33.3)	75
Wealth quintile										
Lowest	0.0	10.1	6.3	30.4	18.3	34.3	0.6	100.0	16.4	462
Second	0.2	18.0	8.2	29.0	20.4	22.8	1.4	100.0	26.4	411
Middle	0.8	26.1	5.5	21.2	29.4	15.3	1.6	100.0	32.4	369
Fourth	0.8	23.1	2.4	13.4	49.2	9.2	1.8	100.0	26.4	370
Highest	0.2	16.4	2.0	5.5	70.0	5.9	0.0	100.0	18.6	310
Total	0.4	18.4	5.1	21.1	35.2	18.8	1.1	100.0	23.9	1,921

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Children's stools are considered to be disposed of appropriately if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine, or if it was buried.

² See Table 2.3.1 for definition of categories.

Key Findings

- **Nutritional status of children:** 30% of children under age 5 are stunted (short for their age), 3% are wasted (thin for their height), 11% are underweight (thin for their age), and 4% are overweight (heavy for their height).
- **Breastfeeding:** Almost all children (97%) born in the 2 years before the survey were breastfed at some point; 55% of children age 0-5 months are exclusively breastfed.
- **Minimum acceptable diet:** Overall, 3% of children age 6-23 months were fed a minimum acceptable diet in the 24 hours before the survey.
- **Anemia:** The prevalence of anemia in children age 6-59 months is 71%. Almost half (45%) of women age 15-49 are anemic.
- **Salt iodization:** Almost all (99%) households with tested salt have iodized salt.
- **Nutritional status of women:** 5% of women age 15-49 are thin (a body mass index [BMI] below 18.5), while 37% are overweight or obese.

This chapter reports on nutritional status and anemia among children and women. It also reports on infant and young child feeding practices, including breastfeeding and complementary feeding, as well as micronutrient supplementation and deworming for children and pregnant women and the presence of iodine in household cooking salt.

11.1 NUTRITIONAL STATUS OF CHILDREN

The distribution of height and weight for children under age 5 was compared against the WHO Child Growth Standards reference population (WHO 2006). A well-nourished population will be similar to the reference population, while a poorly nourished population will differ from the reference population. Three indices—height-for-age, weight-for-height, and weight-for-age—can be expressed in standard deviation units (Z-scores) from the median of the reference population, with values greater than two standard deviations from the median of the WHO Child Growth Standards used to define malnutrition.

Stunting, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period of time. The most direct causes of stunting are inadequate nutrition (not eating enough or eating foods that lack growth-promoting nutrients) and recurrent infections or chronic diseases that lead to poor nutrient intake, absorption, and utilization.

Wasting, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness or infection causing weight loss.

Overweight, or high weight-for-height, is a measure of overnutrition and results from an imbalance between energy consumed (too much) and energy expended (too little).

Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age reflecting both acute (wasting) and chronic (stunting) undernutrition.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the

entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of malnutrition.

11.1.1 Anthropometry Training and Data Collection

Health technicians were trained to measure the height and weight of children and women. Training on child height measurement included a standardization exercise (and re-standardization exercise for those who did not pass the standardization exercise). Results of these exercises are provided in Appendix **Table C.7**.

Children younger than age 24 months were measured lying down (recumbent length); older children and women were measured standing up (height). Weight measurements were taken using SECA scales with a digital display (model number SECA 878U). Length and height were measured with a ShorrBoard® measuring board.

The survey identified a total of 3,138 children under age 5 who were eligible for height and weight measurements. Valid height-for-age measurements were obtained for 94% of eligible children. Similarly, valid weight-for-height measurements were obtained for 94% of eligible children. Valid weight-for-age measurements were obtained for 95% of eligible children. Appendix **Table C.8** provides additional information on the completeness and quality of anthropometry data for children.

A difference of less than 1 centimeter between the two height/length measurements was defined as an acceptable level of precision. To assess the precision of measurements, in each cluster, two children were randomly selected to be measured a second time. Additionally, any children with a Z-score of less than -3 or more than 3 for height-for-age, weight-for-height, or weight-for-age were also flagged and measured a second time. The re-measurement of flagged cases was performed to ensure accurate reporting of height and weight measurements.

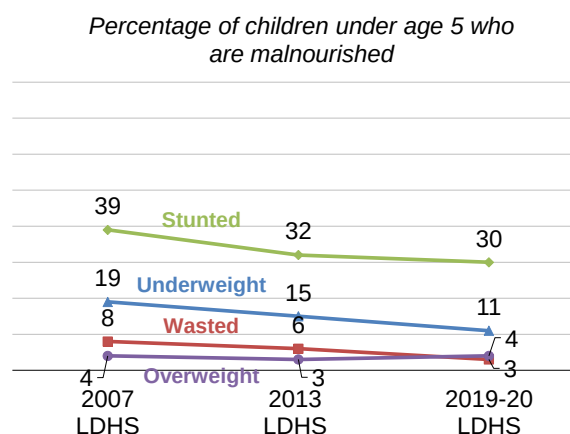
Calculation of Z-scores was based on the first measurement among children randomly selected for re-measurement and on the second measurement among children flagged for re-measurement. The re-measurement completion rate was 99% for both children randomly selected for re-measurement and those flagged for re-measurement. Appendix **Table C.9** provides additional information on re-measurement data.

11.1.2 Levels of Child Malnutrition

Table 11.1 shows that 30% of children under age 5 are stunted (too short for their age) and 10% are severely stunted. Three percent are wasted (too thin for their height), with 1% being severely wasted. Eleven percent of children are underweight (too thin for their age), and 3% are severely underweight. Four percent of children are overweight.

Trends: Stunting, wasting, and underweight among children under age 5 decreased between 2007 and 2019-20, from 39% to 30%, from 8% to 3%, and from 19% to 11%, respectively. There was almost no change in overweight during that period (**Figure 11.1**).

Figure 11.1 Trends in nutritional status of children



Patterns by background characteristics

- The prevalence of stunting generally increases from 21% among children less than age 6 months to a peak of 41% among children age 24-35 months. Wasting, on the other hand, is more prevalent (8%) among children age 9-11 months and 12-17 months (**Table 11.1**).
- The prevalence of stunting is higher among children in rural areas (35%) than among children in urban areas (25%). Conversely, the prevalence of overweight is higher among urban children (5%) than rural children (4%).
- Stunting is more common among boys (32%) than girls (28%).
- At the county level, stunting ranges from a low of 21% in Montserrado to a high of 41% in River Cess (**Figure 11.2**).
- Wasting ranges from a low of 1% in Grand Kru and Lofa to a high of 8% in Maryland.
- Children who are born small or very small have a higher prevalence of stunting, wasting, and underweight than children average or larger at birth. Conversely, children who are born average or larger are more likely to be overweight than children small or very small at birth.
- Children whose mothers are thin (a body mass index [BMI] below 18.5) are more likely to be wasted or underweight than children whose mothers have a normal BMI and children whose mothers are overweight or obese. The prevalence of wasting among children whose mothers are thin is more than twice that of children whose mothers are overweight or obese (8% versus 3%).
- Stunting declines with increasing household wealth. The prevalence of stunting is 38% among children from households in the lowest wealth quintile, as compared with 14% among children from households in the highest wealth quintile (**Figure 11.3**).

Figure 11.2 Stunting in children by county

Percentage of children under age 5 who are stunted

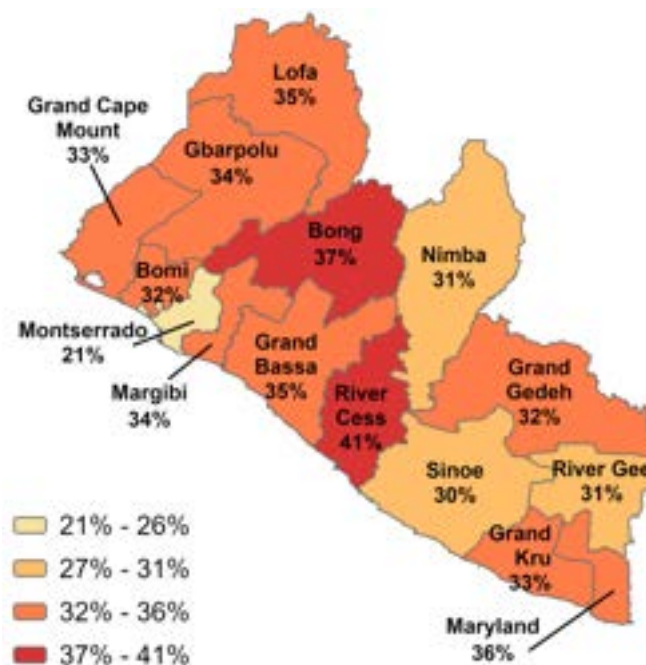
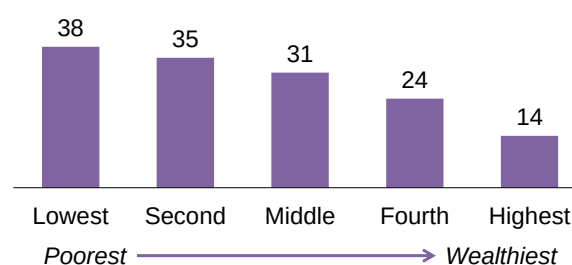


Figure 11.3 Stunting in children by wealth quintile

Percentage of children under age 5 who are stunted



11.2 INFANT AND YOUNG CHILD FEEDING PRACTICES

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding (within the first hour of life), exclusive breastfeeding in the first 6 months of life, continued breastfeeding for 2 years or more, and introduction of safe, appropriate, and adequate complementary foods at age 6 months (WHO 2008).

11.2.1 Early Initiation of Breastfeeding

Initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

Early initiation of breastfeeding

Initiation of breastfeeding within 1 hour of birth.

Sample: Last-born children who were born in the 2 years before the survey

Table 11.2 shows that 97% of last-born children who were born in the 2 years preceding the survey were breastfed at some point. Sixty-seven percent were breastfed within 1 hour after birth, while 91% were breastfed within 24 hours after delivery. Ten percent of infants received a prelacteal feed.

Trends: The percentage of children ever breastfed increased slightly from 96% in 2007 to 97% in 2019-20. The percentage of children who started breastfeeding within 1 hour of birth has also increased slightly since 2007, from 66% to 67%, while the percentage who started breastfeeding within 1 day has increased from 85% to 91%. Over the same period, the percentage of children receiving a prelacteal feed has decreased from 23% to 10%.

Patterns by background characteristics

- Early initiation of breastfeeding is higher among children whose deliveries were assisted by health personnel (67%) than among those whose deliveries were assisted by traditional midwives (64%).
- At the county level, the percentage of infants breastfed within 1 hour of birth ranges from 52% in Sinoe to 82% in River Gee.
- The percentage of children given a prelacteal feed is twice as high in urban areas (13%) as in rural areas (6%) and higher among children born at home (11%) than among those born in health facilities (9%).
- Early initiation of breastfeeding decreases with increasing wealth, from 69% among children in the lowest quintile to 64% among those in the highest quintile. Conversely, prelacteal feeding generally increases with increasing wealth, from 5% among children in the lowest quintile to 13% among those in the highest quintile.

11.2.2 Exclusive Breastfeeding

Breast milk contains all of the nutrients needed by children during their first 6 months of life. It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breast milk. Exclusive breastfeeding for 6 months prevents infections such as diarrhea and respiratory illnesses and provides all of the nutrients and liquid an infant requires for optimal growth and

development. Providing complementary foods within the first 6 months will have the adverse effect of reducing breast milk output because the production and release of breast milk are modulated by the frequency and intensity of suckling.

Exclusive breastfeeding

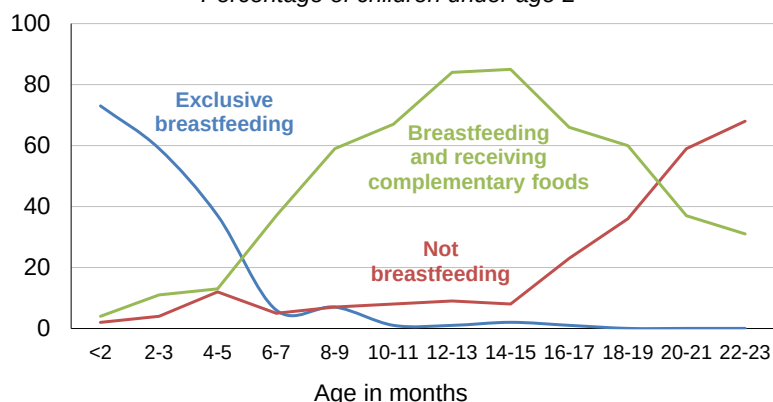
Proportion of children age 0-5 months who are fed exclusively with breast milk.

Sample: Last-born children who were born in the 2 years before the survey

Breastfeeding status was ascertained for last-born children under age 2 who are currently living with their mother. Fifty-five percent of children under age 6 months are exclusively breastfed. Exclusive breastfeeding declines with age, from 73% among children age 0-1 months to 59% among those age 2-3 months and 37% among those age 4-5 months. Twenty-two percent of children age 0-5 months are breastfeeding and consuming plain water only; this practice tends to decrease the exclusive breastfeeding rate. The percentage of children who are breastfeeding and consuming complementary foods first increases with age (peaking at 78% among children age 12-17 months) and then falls among children age 18-23 months (as older children stop breastfeeding). Ninety-two percent of children are breastfeeding at 1 year, and 37% are breastfeeding at 2 years. The percentage of children who are not breastfeeding generally increases with age, from 2% among those age 0-1 months to 52% among those age 18-23 months (**Table 11.3**, **Table 11.4**, and **Figure 11.4**).

Figure 11.4 Breastfeeding practices by age

Percentage of children under age 2



Trends: Exclusive breastfeeding among children age 0-5 months increased from 13% in 1986 to 55% in 2013 and 2019-20.

Median Duration of Breastfeeding

Table 11.5 shows that the median duration of any breastfeeding among children born in the 3 years before the survey is 19.4 months. Overall, the median duration of exclusive breastfeeding is 3.1 months, and the median duration of predominant breastfeeding (either exclusively breastfed or breastfed and receiving plain water and/or non-milk liquids) is 6.5 months.

Trends: The median duration of any breastfeeding increased from 16.8 months in 1986 to 19.4 months in 2019-20, while the median duration of predominant breastfeeding increased from 2.5 months to 6.5 months. Over the same period, the median duration of exclusive breastfeeding increased from 0.5 months to 3.1 months.

Patterns by background characteristics

- The median duration of any breastfeeding is 20.6 months among children in rural areas, as compared with 18.1 months among children in urban areas.

- By county, the median duration of predominant breastfeeding ranges from a low of 3.6 months in Montserrado to a high of 10.0 months in Gbarpolu. However, these figures should be interpreted with caution due to the small number of cases.
- The median duration of any breastfeeding decreases with increasing mother's education, from 21.4 months among mothers with no education to 16.6 months among mothers with a senior high education.

11.2.3 Bottle Feeding

The nipple on a feeding bottle is susceptible to contamination and increases the risk of disease among children. Thus, bottle feeding is not recommended for children under age 2 (WHO 2005a).

Bottle feeding

Proportion of children age 0-23 months who are fed from a bottle with a nipple.

Sample: Last-born children who were born in the 2 years before the survey

Sixteen percent of children age 0-1 months are fed using a bottle with a nipple. The proportion of children under age 2 using a bottle with a nipple peaks at age 4-5 months (29%). Overall, 14% of children age 0-23 months are fed from a bottle with a nipple (**Tables 11.3 and 11.4**).

11.2.4 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer enough to meet the nutritional needs of an infant. After 6 months, appropriate complementary foods should be introduced while breastfeeding is continued until age 2 or older. The transition from exclusive breastfeeding to complementing breastfeeding with family foods is when children are most vulnerable to becoming undernourished, and during this time it is important that they receive solid, semisolid, or soft foods.

Appropriate complementary feeding should include feeding children a variety of foods to ensure that nutrient requirements are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs be part of the daily diet or eaten as often as possible (WHO 2003).

Table 11.6 shows the types of foods and liquids consumed by children under age 2 living with their mother during the day and night preceding the interview, according to breastfeeding status and age. Generally, among children age 6-23 months, consumption of all types of foods is higher among nonbreastfeeding children than among breastfeeding children. The most common foods given to children age 6-23 months are foods made from grains (65% among breastfeeding children and 74% among nonbreastfeeding children), followed by meat, fish, and poultry (43% among breastfeeding children and 61% among nonbreastfeeding children) and fruits and vegetables rich in vitamin A (37% among breastfeeding children and 50% among nonbreastfeeding children). Eggs are less commonly given to children age 6-23 months (8% among breastfeeding children and 10% among nonbreastfeeding children). Consumption of infant formula is low among both breastfeeding (6%) and nonbreastfeeding (8%) children.

11.2.5 Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to

undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality. The WHO minimum acceptable diet recommendation is a combination of minimum dietary diversity and minimum meal frequency. The three indicators are defined in the box below.

Minimum dietary diversity is a proxy for adequate micronutrient density of foods. Consumption of food from at least five food groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers (WHO 2008). The five groups come from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for meeting energy requirements. Breastfed children age 6-8 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day. Breastfed children age 9-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods or milk feeds at least four times a day and if at least one of the feeds is a solid, semisolid, or soft food.

Minimum dietary diversity

Proportion of children age 6-23 months who received a minimum of five out of eight food groups during the previous day.

Minimum meal frequency

Proportion of children age 6-23 months who received solid, semisolid, or soft food (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

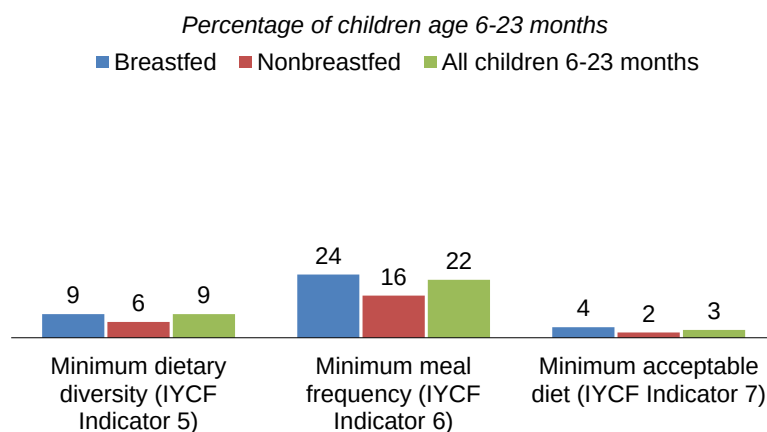
Minimum acceptable diet

Proportion of children age 6-23 months who receive a minimum acceptable diet. This indicator is a composite of children fed with a minimum dietary diversity and a minimum meal frequency.

Sample: Youngest children age 6-23 months living with their mother

Minimum dietary diversity, minimum meal frequency, and appropriate milk feeds together constitute a child's minimum acceptable diet. Three percent of children age 6-23 months living with their mother were fed a minimum acceptable diet in the 24 hours preceding the interview. Nine percent of children had an adequately diverse diet in which they had been given foods from at least five food groups, and 22% had been fed the minimum number of times appropriate for their age (Table 11.7 and Figure 11.5).

Figure 11.5 IYCF indicators on minimum acceptable diet



Patterns by background characteristics

- The percentage of children age 6-23 months who are fed a minimum acceptable diet is higher among breastfed children (4%) than among nonbreastfed children (2%).
- Children in urban areas (5%) are more likely to be fed a minimum acceptable diet than those in rural areas (2%).
- At the county level, the percentage of children fed a minimum acceptable diet is highest in Bomi (7%) and lowest in Gbarpolu, Grand Kru, Lofa, and Maryland (1% each).
- The percentage of children who are fed a minimum acceptable diet rises with increasing mother's education, from 1% among children whose mothers have no education to 6% among those whose mothers have a senior high education.

11.3 ANEMIA PREVALENCE IN CHILDREN

Anemia in children

Anemia status	Hemoglobin level in grams/deciliter*
Anemic	<11.0
Mildly anemic	10.0-10.9
Moderately anemic	7.0-9.9
Severely anemic	<7.0
Not anemic	11.0 or higher
*Hemoglobin levels are adjusted for altitude in enumeration areas that are above 1,000 meters.	

Sample: Children age 6-59 months

Anemia is a condition that is marked by low levels of hemoglobin in the blood. Iron deficiency is a common cause of anemia and is estimated to be responsible for half of all anemia cases in women and children globally. Other causes of anemia include malaria, hookworm and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions such as thalassemia. Anemia is a serious concern for children because it can impair cognitive development and is associated with long-term health and economic consequences (Balarajan et al. 2011). Severe anemia leads to increased mortality. The HemoCue® Hb 201+ device was used to measure hemoglobin levels from a finger-/heel-stick blood sample, which was then used to determine anemia levels in the population.

In the 2019-20 LDHS, hemoglobin testing was performed for children age 6-59 months using the methodology described in Chapter 1. The testing was successfully completed for 93% of eligible children. Seventy-one percent of children had anemia, with 29% having mild anemia, 38% having moderate anemia, and 3% having severe anemia (**Table 11.8**).

Trends: The prevalence of any anemia increased from 63% in 2009 to 77% in 2016 before declining to 71% in 2019-20 (**Figure 11.6**).

Patterns by background characteristics

- In general, the prevalence of anemia is higher among younger (age 6-35 months) than older (age 36-59 months) children, with a peak prevalence of 79% among children age 9-11 months.
- Anemia prevalence is higher in rural areas (72%) than in urban areas (70%).
- By county, the prevalence of any anemia is highest in Bomi (81%) and lowest in Gbarpolu (57%), while the prevalence of severe anemia is highest in Grand Bassa (8%)

Figure 11.6 Trends in childhood anemia

Percentage of children age 6-59 months

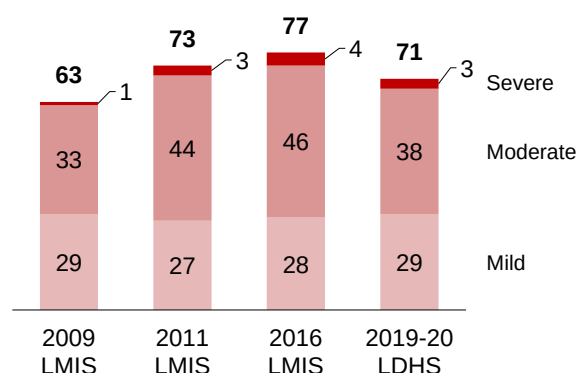
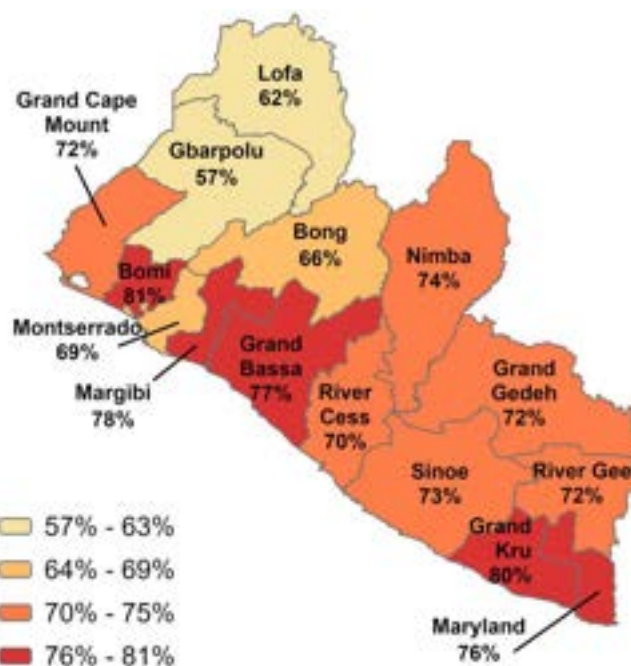


Figure 11.7 Anemia in children by county

Percentage of children under age 5 who are anemic



11.4 PRESENCE OF IODIZED SALT IN HOUSEHOLDS

Iodine is a micronutrient that plays an important role in thyroid function. In line with food and drug regulations, household salt should be fortified with iodine. Sufficient iodine prevents goiter, brain damage, and other thyroid-related health problems.

The 2019-20 LDHS tested for the presence of iodine in household salt in the form of potassium iodate. Salt was tested for the presence or absence of iodine only; the iodine content of the salt was not measured. All households were asked if they had salt and, if so, if that salt could be tested. In total, 12% of households had no salt and less than 1% had salt that was not tested. Salt was tested in 88% of households, and among households in which salt was tested 99% had iodized salt (**Table 11.9**). By county, the percentage of households without salt was highest in Montserrado (18%) and Nimba (12%).

11.5 MICRONUTRIENT INTAKE AND SUPPLEMENTATION AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients in their daily diet: iron and vitamin A. Iron plays an important role in numerous biological systems and iron deficiency is one of the

primary causes of anemia, which has serious health consequences for children. Vitamin A supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrheal disease and slows recovery from illness.

Table 11.10 presents information on consumption of foods rich in vitamin A and iron in the 24 hours preceding the survey among last-born children age 6-23 months who are living with their mother. It also provides information on receipt of multiple micronutrient powders among children age 6-23 months and information on micronutrient supplementation and deworming among children age 6-59 months.

Overall, 61% of last-born children age 6-23 months consumed foods rich in vitamin A in the 24 hours before the survey, and half (50%) consumed foods rich in iron. Eight percent of children age 6-23 months received multiple micronutrient powders in the 7 days preceding the survey. Twenty-eight percent of children age 6-59 months were given iron supplements in the past 7 days, and 46% were given vitamin A supplements in the past 6 months, and 52% were given deworming medication in the past 6 months.

Clinical treatment for severely wasted children (with no medical complications) involves ready-to-use therapeutic foods alongside other interventions (WHO 2013). In Liberia, 5% of children age 6-35 months received Plumpy'Nut (a ready-to-use therapeutic food) in the 7 days prior to the survey (**Table 11.11**).

Trends: The percentage of children age 6-23 months who consumed foods rich in vitamin A increased from 58% in 2013 to 61% in 2019-20. Over the same period, the percentage of children consuming foods rich in iron increased from 45% to 50%. There were decreases from 2013 to 2019-20 in the percentages of children age 6-59 months who received vitamin A supplements (from 60% to 46%) and deworming medication (from 56% to 52%). The percentage of children receiving iron supplements increased slightly from 27% in 2013 to 28% in 2019-20.

Patterns by background characteristics

- Consumption of foods rich in vitamin A and iron is higher in rural areas (65% and 51%, respectively) than urban areas (57% and 48%, respectively) (**Table 11.10**).
- The percentage of children age 6-23 months given multiple micronutrient powders is higher in urban areas (9%) than in rural areas (6%).
- Iron and vitamin A supplementation is higher among breastfeeding children than among nonbreastfeeding children. Thirty-three percent of breastfeeding children age 6-59 months are given iron supplements, as compared with 26% of nonbreastfeeding children. Similarly, 51% of breastfeeding children are given vitamin A supplements, compared with 45% of nonbreastfeeding children.
- The percentage of children age 6-59 months given deworming medication is higher (54%) among those who are not breastfed than among those who are breastfed (46%). The same is true for the percentage of children age 6-23 months given multiple micronutrient powders (12% versus 6%).
- There are variations by county in provision of vitamin A supplements, iron supplements, and multiple micronutrient powders. The percentages of children given vitamin A supplements are highest in Grand Gedeh (82%) and lowest in Sinoe (22%), the percentages given iron supplements are highest in Bomi and Grand Gedeh (44% each) and lowest in Lofa (19%), and the percentages given multiple micronutrient powders are highest in Grand Gedeh (22%) and lowest in Sinoe, Margibi, River Gee, and Grand Kru (3% each).

- Seven percent of children age 6-35 months in urban areas received Plumpy’Nut, as compared with 3% of children in rural areas (**Table 11.11**).
- By county, receipt of Plumpy’Nut is highest in Grand Gedeh (16%) and Montserrado (8%) and lowest in Gbarpolu (less than 1%).
- The percentage of children given Plumpy’Nut increases with increasing household wealth (from 2% to 10%).

11.6 WOMEN’S NUTRITIONAL STATUS

Chronic energy deficiency is caused by eating too little or having an unbalanced diet that lacks adequate nutrients. Women of reproductive age are especially vulnerable to chronic energy deficiency and malnutrition due to low dietary intakes, inequitable distribution of food within the household, improper food storage and preparation, dietary taboos, infectious diseases, and inadequate care practices. It is well known that chronic energy deficiency leads to low productivity among adults and is related to heightened morbidity and mortality. In addition, chronic undernutrition among women is a major risk factor for adverse birth outcomes. Overnutrition has adverse health outcomes as well. Overweight and obesity are major risk factors for a number of chronic diseases, including diabetes, cardiovascular diseases, and cancer.

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in meters squared (kg/m^2).

Status	BMI
Too thin for height	Less than 18.5
Normal	Between 18.5 and 24.9
Overweight	Between 25.0 and 29.9
Obese	Greater than or equal to 30.0

Sample: Women age 15-49 who are not pregnant and who have not had a birth in the 2 months before the survey

Short stature

Proportion of women with height under 145 cm.

Sample: Women age 15-49

The 2019-20 LDHS collected anthropometric data on height and weight among women age 15-49. These data were used to calculate measures of nutritional status such as maternal height and body mass index (BMI). The results showed that 58% of women have a normal BMI, while 5% are thin and 37% are overweight or obese; the mean BMI among women is 24.5. Two percent of women are of short stature (**Table 11.12** and **Figure 11.8**).

Trends: The percentage of women age 15-49 who are thin declined from 7% in 2013 to 5% in 2019-20. On the other hand, the percentage of women who are overweight or obese increased from 26% to 37%.

Patterns by background characteristics

- Fifty-four percent of women in the highest wealth quintile are overweight or obese, as compared with 21% of women in the lowest quintile.
- The percentage of women who are of normal weight generally declines with age, from 80% among those age 15-19 to 45% among those age 40-49.
- The percentage of women who are overweight or obese is higher in urban than rural areas (43% versus 26%), whereas the percentage of women who are thin is higher in rural areas (7% versus 4%).
- By county, overweight or obesity is highest in Montserrado (48%) and lowest in Maryland (23%).

11.7 ANEMIA PREVALENCE IN WOMEN

Hemoglobin levels below which women are considered anemic

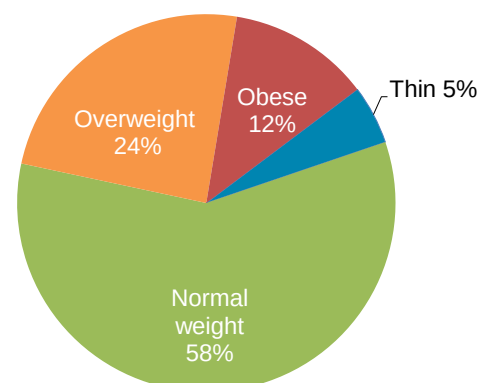
Respondents	Hemoglobin level in grams/deciliter*
Non-pregnant women age 15-49	Less than 12.0
Pregnant women age 15-49	Less than 11.0
*Hemoglobin levels are adjusted for cigarette smoking and for altitude in enumeration areas that are above 1,000 meters.	

The procedure used to measure anemia among women age 15-49 was similar to that used for children age 6-59 months except that capillary blood was collected exclusively from a finger prick. The methodology employed for hemoglobin testing is described in detail in Chapter 1.

Anemia is a major concern among women, leading to increased maternal mortality and poor birth outcomes as well as reductions in work productivity. **Table 11.13** shows that 45% of women age 15-49 are anemic, with 23% being mildly anemic, 21% being moderately anemic, and 1% being severely anemic.

Figure 11.8 Nutritional status of women

Percent distribution of women age 15-49



Note: Figures may not add up to 100% due to rounding.

Patterns by background characteristics

- Anemia prevalence is higher in rural areas (47%) than in urban areas (43%).
- By county, the prevalence of anemia ranges from a low of 35% in Lofa and Nimba to a high of 59% in Grand Bassa.
- The prevalence of anemia is higher among pregnant women (52%) than among breastfeeding women (48%) and women who are neither pregnant nor breastfeeding (43%).
- The prevalence of anemia generally decreases with increasing wealth, from 51% among women in the lowest wealth quintile to 44% among women in the highest wealth quintile.

11.8 MICRONUTRIENT SUPPLEMENTATION AND DEWORMING DURING PREGNANCY

During pregnancy, women are at a higher risk of anemia due to an increase in blood volume. Severe anemia can place both the mother and the baby in danger through increased risk of blood loss during labor, preterm delivery, low birth weight, and perinatal mortality. To prevent anemia, pregnant women are advised to take iron folate supplements, eat iron-rich foods, and prevent intestinal worms.

The 2019-20 LDHS asked women age 15-49 who gave birth in the 5 years before the survey whether they took iron supplements and/or deworming medication during their most recent pregnancy. The results show that, overall, only 43% of pregnant women took iron supplements for 90 days or more, while 64% took deworming medication. Six percent of women did not take any iron supplements (**Table 11.14**).

Trends: Both micronutrient supplementation and deworming during pregnancy have improved. The percentage of women taking iron supplements for 90 days or more increased from 14% in 2007 to 21% in 2013 and 43% in 2019-20. The percentage of women who did not take any iron supplements decreased from 12% in 2007 to 3% in 2013 before increasing slightly to 6% in 2019-20. Finally, the percentage of women taking deworming medication during pregnancy increased from 29% in 2007 to 58% in 2013 and 64% in 2019-20.

Patterns by background characteristics

- Women in urban areas were more likely than those in rural areas to have taken deworming tablets (65% versus 62%).
- The percentage of women taking iron tablets for 90 days or more during the pregnancy of their last birth generally increases with rising education, from 40% among those with no education to 54% among those with a higher education.
- The percentages of women taking both iron tablets for 90 days or more and deworming medication during pregnancy also generally increase with increasing household wealth. Thirty-seven percent of women in the lowest wealth quintile and 50% in the highest quintile took iron supplements for at least 90 days, while 61% of women in the lowest quintile and 68% in the highest quintile took deworming medication.
- The percentage of women taking iron supplements for at least 90 days ranges from a low of 25% in Grand Bassa to a high of 69% in River Cess.

LIST OF TABLES

For more information on nutrition of children and women, see the following tables:

- **Table 11.1** **Nutritional status of children**
- **Table 11.2** **Initial breastfeeding**
- **Table 11.3** **Breastfeeding status by age**
- **Table 11.4** **Infant and young child feeding (IYCF) indicators on breastfeeding status**
- **Table 11.5** **Median duration of breastfeeding**
- **Table 11.6** **Foods and liquids consumed by children in the day or night preceding the interview**
- **Table 11.7** **Minimum acceptable diet**
- **Table 11.8** **Prevalence of anemia in children**
- **Table 11.9** **Presence of iodized salt in household**
- **Table 11.10** **Micronutrient intake among children**
- **Table 11.11** **Therapeutic and supplemental foods**
- **Table 11.12** **Nutritional status of women**
- **Table 11.13** **Prevalence of anemia in women**
- **Table 11.14** **Micronutrient intake among mothers**

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Height-for-age ¹				Weight-for-height				Weight-for-age			
	Percent- age below -3 SD	Percent- age below -2 SD ²	Mean Z-score (SD)	Number of children	Percent- age below -3 SD	Percent- age below -2 SD ²	Percent- age above +2 SD	Mean Z-score (SD)	Percent- age below -3 SD	Percent- age below -2 SD ²	Percent- age above +2 SD	Mean Z-score (SD)
Age in months												
<6	3.6	21.4	-0.9	275	0.5	3.3	18.7	0.7	1.2	5.1	5.2	-0.2
6-8	3.2	12.7	-0.8	181	0.9	6.2	4.0	-0.2	0.9	8.6	0.6	-0.6
9-11	8.7	24.5	-1.4	150	2.1	8.0	5.7	-0.4	6.1	15.7	1.6	-1.1
12-17	7.4	26.4	-1.3	281	0.9	7.6	4.0	-0.3	3.1	13.5	1.7	-0.8
18-23	9.7	31.2	-1.5	241	1.1	4.1	3.4	0.0	5.1	10.7	2.2	-0.7
24-35	16.7	41.3	-1.6	514	0.3	3.3	1.6	0.1	3.7	15.7	0.5	-0.8
36-47	13.7	35.4	-1.5	600	0.1	1.9	2.6	0.1	3.3	11.1	0.2	-0.8
48-59	7.5	25.6	-1.2	572	0.2	0.6	2.0	0.1	1.2	7.3	0.8	-0.7
Sex												
Male	11.7	31.8	-1.4	1,387	0.6	3.6	4.5	0.1	3.0	11.4	0.9	-0.8
Female	8.6	27.9	-1.2	1,427	0.4	3.2	4.2	0.0	2.7	10.4	1.7	-0.7
Birth interval in months³												
First birth ⁴	9.6	30.6	-1.4	591	0.7	3.8	5.3	-0.0	2.6	11.6	0.7	-0.9
<24	13.8	40.8	-1.6	210	0.4	2.2	2.2	0.1	3.8	12.5	0.4	-0.8
24-47	9.4	30.9	-1.4	797	0.2	4.5	4.7	0.1	3.3	10.3	1.5	-0.7
48+	6.1	21.7	-1.1	714	0.7	3.4	4.2	0.0	1.8	8.6	1.2	-0.6
Size at birth³												
Very small	12.6	39.5	-1.6	125	0.8	14.4	0.5	-0.5	5.1	26.8	0.8	-1.3
Small	15.7	37.4	-1.7	182	0.9	3.6	3.7	-0.2	3.8	18.3	0.0	-1.2
Average or larger	8.0	27.3	-1.3	1,992	0.4	3.1	4.8	0.1	2.4	8.6	1.2	-0.7
Don't know	*	*	*	13	*	*	*	*	*	*	*	*
Mother's interview status												
Interviewed	8.8	28.9	-1.3	2,312	0.5	3.7	4.5	0.0	2.7	10.3	1.1	-0.7
Not interviewed but in household	3.8	19.3	-0.7	58	0.0	0.7	9.9	0.3	0.0	7.2	9.2	-0.2
Not interviewed and not in the household ⁵	17.5	36.0	-1.5	444	0.7	2.0	3.0	0.1	4.3	14.4	1.3	-0.8
Mother's nutritional status⁶												
Thin (BMI <18.5)	9.8	27.4	-1.4	96	1.0	8.3	4.0	-0.5	7.2	19.0	1.9	-1.1
Normal (BMI 18.5-24.9)	10.0	32.4	-1.4	1,258	0.4	4.1	3.1	0.0	3.4	11.6	1.2	-0.8
Overweight/obese (BMI ≥25)	6.9	21.8	-1.1	644	0.6	2.9	4.4	0.0	1.1	7.9	0.8	-0.6
Residence												
Urban	8.8	25.0	-1.2	1,465	0.2	3.4	4.7	0.0	2.1	9.2	1.6	-0.7
Greater Monrovia	6.4	18.7	-1.1	732	0.0	4.2	3.3	-0.1	2.5	9.9	1.3	-0.7
Other urban	11.2	31.2	-1.4	733	0.4	2.5	6.0	0.2	1.6	8.5	2.0	-0.6
Rural	11.5	35.1	-1.5	1,349	0.9	3.4	4.0	0.1	3.7	12.7	0.9	-0.8
Region												
North Western	10.4	32.8	-1.4	254	1.9	5.0	3.3	-0.1	3.6	15.9	0.7	-0.9
South Central	8.4	24.6	-1.2	1,173	0.3	3.8	3.5	-0.1	2.6	10.7	1.0	-0.8
South Eastern A	9.5	33.5	-1.4	194	0.8	3.8	2.3	-0.0	4.0	12.6	0.2	-0.9
South Eastern B	10.7	34.0	-1.5	157	0.9	4.7	3.8	0.1	2.3	12.2	1.2	-0.8
North Central	12.0	33.7	-1.4	1,037	0.3	2.2	6.1	0.3	2.9	9.3	1.9	-0.6

Continued...

Table 11.1—Continued

Background characteristic	Height-for-age ¹				Weight-for-height				Weight-for-age					
	Percent- age below -3 SD	Percent- age below -2 SD ²	Mean Z-score (SD)	Number of children	Percent- age below -3 SD	Percent- age below -2 SD ²	Percent- age above +2 SD	Mean Z-score (SD)	Number of children	Percent- age below -3 SD	Percent- age below -2 SD ²	Percent- age above +2 SD	Mean Z-score (SD)	Number of children
County														
Bomi	9.1	32.4	-1.4	91	2.7	5.7	1.8	-0.1	92	4.1	14.2	0.9	-0.9	93
Bong	11.4	37.4	-1.5	321	1.1	2.8	7.5	0.3	322	0.9	9.3	0.6	-0.6	322
Gbarpolu	15.3	34.3	-1.4	52	0.0	4.6	5.8	0.0	52	3.6	15.3	1.4	-0.8	52
Grand Bassa	14.6	34.7	-1.6	198	0.9	3.4	2.9	-0.0	198	2.8	12.4	0.0	-0.9	198
Grand Cape Mount	9.3	32.5	-1.3	111	2.1	4.6	3.5	-0.2	110	3.1	17.7	0.3	-0.9	112
Grand Gedeh	12.4	31.9	-1.3	66	0.3	4.8	1.1	-0.1	66	5.4	11.5	0.7	-0.8	67
Grand Kru	8.3	32.6	-1.4	54	0.0	1.2	1.3	0.1	55	2.0	14.7	1.2	-0.8	54
Lofa	12.5	35.0	-1.5	214	0.0	1.2	6.1	0.4	216	2.8	8.0	1.4	-0.6	216
Margibi	9.9	33.8	-1.4	143	1.0	5.0	5.4	-0.0	144	3.9	14.2	2.1	-0.8	143
Maryland	12.0	36.3	-1.6	72	2.0	8.0	2.5	-0.0	73	2.6	12.5	0.9	-1.0	73
Montserrado	6.7	20.7	-1.1	831	0.0	3.7	3.3	-0.1	835	2.3	9.6	1.1	-0.7	836
Nimba	12.1	30.7	-1.3	501	0.0	2.3	5.1	0.2	503	4.1	10.0	3.0	-0.6	506
River Cess	12.7	40.6	-1.6	52	1.5	4.9	1.5	-0.3	52	4.0	19.5	0.0	-1.1	52
River Gee	11.7	31.0	-1.4	30	0.0	3.3	11.4	0.3	30	2.0	7.2	1.8	-0.6	30
Sinoe	4.8	30.0	-1.4	76	0.8	2.2	3.7	0.2	76	2.8	8.7	0.0	-0.7	76
Mother's education⁷														
No education	9.9	31.6	-1.4	823	0.7	3.4	3.4	0.0	827	2.5	10.4	0.8	-0.8	830
Elementary	9.9	33.9	-1.5	651	0.6	4.5	5.8	0.1	651	2.9	11.0	0.4	-0.7	655
Junior high	9.1	28.3	-1.3	440	0.3	2.9	5.6	0.0	445	3.2	11.6	1.9	-0.7	446
Senior high	5.7	17.4	-1.0	362	0.2	4.6	3.3	-0.1	361	2.2	9.3	2.0	-0.6	362
Higher	(0.0)	(12.4)	0.4	94	(0.0)	(0.0)	(7.6)	-0.1	94	(0.0)	(0.0)	(5.8)	0.2	94
Wealth quintile														
Lowest	14.0	37.9	-1.5	698	0.5	2.4	3.8	0.1	699	3.4	13.7	1.1	-0.8	703
Second	11.7	34.7	-1.5	619	0.5	2.9	3.7	0.1	622	3.3	9.7	0.9	-0.8	623
Middle	8.2	31.3	-1.4	572	1.3	4.9	6.4	0.2	574	2.4	10.8	1.9	-0.6	577
Fourth	8.5	24.3	-1.2	511	0.0	5.0	4.5	-0.1	515	3.4	12.4	0.5	-0.8	515
Highest	5.6	13.6	-0.9	414	0.0	1.8	3.3	-0.1	414	1.3	6.0	2.4	-0.6	412
Total	10.1	29.8	-1.3	2,814	0.5	3.4	4.4	0.1	2,825	2.9	10.9	1.3	-0.7	2,831

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Recumbent length is measured for children under age 2; standing height is measured for all other children.

² Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median

³ Excludes children whose mothers were not interviewed

⁴ First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

⁵ Includes children whose mothers are deceased

⁶ Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months.

⁷ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among last-born children born in the past 2 years:			Among last-born children born in the past 2 years who were ever breastfed:		
	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth ¹	Number of last-born children	Percentage who received a prelacteal feed ²	Number of last-born children ever breastfed
Sex						
Male	96.2	65.6	90.0	1,044	7.6	1,004
Female	97.5	67.4	91.4	1,052	11.4	1,025
Assistance at delivery						
Health personnel ³	96.5	66.7	90.8	1,823	9.8	1,760
Traditional midwife	99.0	64.2	89.9	254	8.6	251
Other	*	*	*	15	*	15
No one	*	*	*	3	*	3
Place of delivery						
Health facility	96.7	66.9	90.9	1,744	9.3	1,687
At home	97.6	65.5	89.7	333	11.4	325
Other	(93.2)	(48.9)	(87.4)	18	(0.9)	17
Residence						
Urban	96.2	64.4	89.6	1,129	12.5	1,086
Greater Monrovia	95.3	67.0	88.7	574	15.7	547
Other urban	97.2	61.8	90.6	555	9.4	539
Rural	97.5	68.9	91.9	967	6.1	943
Region						
North Western	99.0	72.9	93.9	184	6.9	183
South Central	96.0	64.9	88.8	926	14.3	889
South Eastern A	97.0	66.9	88.3	140	6.6	136
South Eastern B	97.0	75.9	94.2	112	6.7	109
North Central	97.2	65.4	92.2	733	5.3	713
County						
Bomi	98.6	66.5	93.5	58	11.2	57
Bong	97.0	78.6	88.8	231	5.3	224
Gbarpolu	99.4	68.3	89.9	37	4.5	36
Grand Bassa	97.0	64.0	87.0	151	14.0	146
Grand Cape Mount	99.1	78.9	95.9	90	5.1	89
Grand Gedeh	99.1	77.9	93.2	53	6.2	53
Grand Kru	98.4	73.3	93.6	43	8.3	42
Lofa	96.0	60.0	92.3	172	3.3	165
Margibi	96.9	56.5	90.8	119	10.6	115
Maryland	96.3	75.3	95.2	48	5.7	46
Montserrado	95.7	66.6	88.8	656	15.1	628
Nimba	98.1	59.0	94.4	330	6.3	324
River Cess	97.0	74.7	89.8	32	4.4	31
River Gee	95.9	82.2	93.3	22	5.7	21
Sinoe	94.9	51.5	82.5	55	8.4	52
Mother's education						
No education	97.0	69.2	92.4	683	6.0	662
Elementary	97.4	64.0	90.5	565	9.1	551
Junior high	95.5	68.5	90.0	381	9.9	364
Senior high	97.4	64.7	90.2	388	15.3	378
Higher	(94.8)	(60.1)	(82.1)	78	(13.5)	74
Wealth quintile						
Lowest	96.3	69.0	90.5	507	5.4	488
Second	98.1	66.9	93.1	444	5.0	436
Middle	99.0	66.0	92.3	394	13.4	390
Fourth	95.9	65.4	88.7	411	12.8	394
Highest	94.5	64.2	88.2	340	13.4	321
Total	96.8	66.5	90.7	2,096	9.6	2,029

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes children who started breastfeeding within 1 hour of birth

² Children given something other than breast milk during the first 3 days of life

³ Doctor, nurse, midwife, or physician's assistant

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and percentage currently breastfeeding, and percentage of all children under age 2 using a bottle with a nipple, according to age in months, Liberia DHS 2019-20

Age in months	Breastfeeding status						Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids ¹	Breast-feeding and consuming other milk	Breast-feeding and consuming complementary foods					
0-1	2.2	72.6	15.0	4.5	1.4	4.3	100.0	97.8	161	15.5	167
2-3	3.9	59.3	21.8	0.5	3.5	11.1	100.0	96.1	201	21.4	204
4-5	11.9	36.6	26.5	2.2	10.2	12.6	100.0	88.1	194	28.6	198
6-8	4.4	6.8	33.1	3.3	8.5	44.0	100.0	95.6	290	21.9	294
9-11	9.4	3.0	18.0	0.7	5.1	63.9	100.0	90.6	233	16.9	235
12-17	13.5	1.1	6.6	0.1	0.5	78.2	100.0	86.5	440	6.3	464
18-23	52.1	0.0	1.8	0.3	1.1	44.6	100.0	47.9	404	5.9	474
0-3	3.1	65.2	18.8	2.3	2.6	8.1	100.0	96.9	361	18.8	371
0-5	6.2	55.2	21.5	2.2	5.2	9.7	100.0	93.8	555	22.2	569
6-9	6.2	6.6	30.0	2.9	7.0	47.2	100.0	93.8	373	21.3	377
12-15	8.4	1.3	5.8	0.0	0.0	84.6	100.0	91.6	285	9.1	300
12-23	32.0	0.6	4.3	0.2	0.8	62.1	100.0	68.0	844	6.1	937
20-23	63.0	0.0	0.8	0.0	1.9	34.3	100.0	37.0	240	3.4	282

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100%. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

¹ Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, Liberia DHS 2019-20

Indicator	Percentage	Number
Exclusive breastfeeding under 6 months	55.2	555
Exclusive breastfeeding at 4-5 months	36.6	194
Continued breastfeeding at 1 year	91.6	285
Introduction of solid, semisolid, or soft foods (6-8 months)	45.0	290
Continued breastfeeding at 2 years	37.0	240
Age-appropriate breastfeeding (0-23 months) ¹	57.6	1,921
Predominant breastfeeding (0-5 months) ²	79.0	555
Mixed breast and non-breast milk feeding (0-5 months) ³	7.7	555
Bottle feeding (0-23 months)	14.1	2,035

¹ For children age 0-5 months: exclusively breastfed; for children age 6-23 months: received breast milk and complementary foods

² Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

³ Received breast milk and fresh, tinned, or powdered animal milk or commercial infant formula

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years ¹		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding ²
Sex			
Male	19.7	2.7	6.5
Female	19.3	3.7	6.4
Residence			
Urban	18.1	2.4	5.6
Greater Monrovia	(16.6)	a	*
Other urban	20.4	4.0	6.9
Rural	20.6	3.7	7.8
Region			
North Western	19.3	3.9	7.5
South Central	17.3	1.8	4.4
South Eastern A	20.5	*	6.7
South Eastern B	21.4	3.7	7.5
North Central	21.3	4.1	7.8
County			
Bomi	(19.2)	*	*
Bong	21.8	4.4	7.5
Gbarpolu	(20.8)	*	(10.0)
Grand Bassa	(21.4)	3.1	7.5
Grand Cape Mount	(18.4)	(4.9)	(6.8)
Grand Gedeh	(20.2)	*	(8.0)
Grand Kru	(20.7)	*	(8.1)
Lofa	(20.9)	(4.4)	(6.3)
Margibi	(17.8)	(3.8)	(5.7)
Maryland	(21.4)	(5.3)	(6.7)
Montserrado	16.8	a	3.6
Nimba	20.7	3.8	8.3
River Cess	(23.7)	(3.7)	(7.2)
River Gee	*	*	(7.8)
Sinoe	(20.1)	a	(5.7)
Mother's education			
No education	21.4	3.9	7.4
Elementary	20.1	3.7	8.0
Junior high	17.9	3.4	7.0
Senior high	16.6	*	3.4
Higher	a	a	a
Wealth quintile			
Lowest	20.7	3.9	7.8
Second	20.6	3.3	8.1
Middle	21.0	4.3	6.9
Fourth	17.2	a	5.6
Highest	(16.5)	*	3.0
Total	19.4	3.1	6.5
Mean for all children	19.6	4.5	7.8

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

a = Omitted because less than 50% of the children in this group were exclusively or predominantly breastfeeding

¹ For last-born children under age 24 months who live with their mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding.

² Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Liberia DHS 2019-20

Age in months	Liquids			Solid or semisolid foods										Number of children under age 2	
	Infant formula	Other milk ¹	Other liquids ²	Fortified baby foods	Food made from grains ³	Fruits and vegetables rich in vitamin A ⁴	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Red palm oil		Any solid or semi-solid food
BREASTFEEDING CHILDREN															
0-1	1.5	0.0	6.7	0.0	0.0	3.9	0.0	1.8	0.0	3.9	2.1	0.0	1.8	4.4	157
2-3	2.7	4.4	1.8	4.3	10.9	1.4	2.4	0.0	0.0	1.9	0.5	0.0	1.9	11.5	193
4-5	7.3	13.5	2.5	6.5	12.9	1.9	2.2	1.8	0.5	2.5	0.5	0.0	1.9	14.3	171
6-8	11.9	9.6	12.8	13.4	38.5	14.9	3.7	7.2	1.7	14.6	2.9	3.6	21.8	46.0	277
9-11	7.8	11.1	13.0	3.1	54.6	30.2	9.9	15.1	4.4	35.1	10.4	9.1	39.3	70.5	211
12-17	3.7	8.7	21.2	4.8	80.0	50.9	12.3	28.9	5.8	57.4	9.9	4.7	61.7	90.2	380
18-23	0.6	3.1	18.1	0.0	83.5	48.6	13.0	39.6	8.9	64.0	6.2	1.8	68.0	93.2	193
6-23	6.1	8.4	16.8	5.8	64.8	36.9	9.7	22.5	5.0	43.0	7.5	4.7	48.0	75.3	1,062
Total	5.3	7.6	12.4	5.1	46.2	25.6	7.0	15.5	3.4	29.7	5.4	3.2	32.8	53.9	1,582
NONBREASTFEEDING CHILDREN															
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23
6-8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
9-11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
12-17	0.9	14.2	20.4	12.2	72.7	51.3	7.9	28.2	18.8	71.2	13.9	6.5	58.3	95.2	59
18-23	5.8	10.8	25.4	0.9	79.7	54.4	17.1	29.1	13.1	65.8	10.5	5.1	73.2	95.6	211
6-23	7.7	13.1	24.0	5.9	73.9	50.2	14.6	27.1	13.0	61.1	10.1	7.1	64.2	91.9	304
Total	8.2	16.5	21.6	7.8	69.0	45.1	13.2	24.4	11.7	54.9	9.1	7.5	57.7	86.2	339

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Other milk includes fresh, tinned, and powdered animal milk.

² Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

³ Includes fortified baby food

⁴ Includes pumpkin, carrots, squash, yellow or orange sweet potatoes, dark green leafy vegetables, ripe mangoes, ripe papayas, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.7 Minimum acceptable diet

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Liberia DHS 2019-20

Among breastfed children age 6-23 months, percentage fed:				Among nonbreastfed children age 6-23 months, percentage fed:										Among all children age 6-23 months, percentage fed:			
Background characteristic	Minimum dietary diversity ¹	Minimum meal frequency ²	Minimum acceptable diet ³	Number of breastfed children age 6-23 months	Number of non-breastfed children age 6-23 months				Breast milk, milk, or milk products ⁷	Minimum dietary diversity ⁴	Minimum meal frequency ⁵	Minimum acceptable diet ⁶	Minimum dietary diversity ¹	Minimum meal frequency ⁸	Minimum acceptable diet ⁹	Number of all children age 6-23 months	
					Minimum milk feeding frequency ⁴	Minimum dietary diversity ¹	Minimum meal frequency ⁵	Minimum acceptable diet ⁶									
Age in months																	
6-11	5.1	23.3	2.4	488	*	*	*	34	95.0	4.8	23.3	2.2	522				
6-8	2.6	30.0	2.2	277	*	*	*	13	95.9	2.5	28.9	2.1	290				
9-11	8.3	14.6	2.7	211	*	*	*	22	93.8	7.6	16.3	2.5	233				
12-17	14.0	27.5	5.5	380	14.2	3.0	17.7	59	88.4	12.5	26.1	4.8	440				
18-23	10.6	18.4	3.6	193	11.5	8.1	13.8	211	53.8	9.3	16.0	3.3	404				
Sex																	
Male	9.0	22.1	3.9	515	13.1	4.7	9.9	151	80.3	8.0	19.3	3.1	665				
Female	9.6	25.6	3.6	547	13.6	7.6	21.3	154	81.1	9.2	24.7	3.6	701				
Residence																	
Urban	11.9	26.9	5.0	521	19.8	7.9	20.2	203	77.6	10.7	25.0	4.5	724				
Greater Monrovia	10.9	34.9	6.5	220	(25.6)	(3.6)	(24.4)	132	72.1	8.2	30.9	4.4	352				
Other urban	12.5	21.1	3.9	301	9.1	15.9	12.4	71	82.7	13.2	19.5	4.6	372				
Rural	6.8	21.0	2.5	540	0.5	2.9	6.6	102	84.2	6.2	18.7	2.1	642				
Region																	
North Western	11.0	23.6	4.5	91	(0.0)	(0.9)	(11.1)	23	79.7	9.0	21.1	3.6	114				
South Central	9.4	25.8	4.5	412	21.1	6.5	20.8	170	77.0	8.6	24.3	3.6	582				
South Eastern A	12.5	32.4	3.8	83	(9.8)	(8.2)	(15.5)	18	84.0	11.8	29.4	3.8	101				
South Eastern B	8.2	27.5	2.4	62	(0.0)	(6.1)	(23.6)	11	85.2	7.9	26.9	2.0	73				
North Central	8.3	19.8	3.0	413	3.8	6.6	5.4	83	84.0	8.0	17.4	3.2	496				
County																	
Bomi	(18.3)	(30.3)	(8.2)	28	*	*	*	6	82.1	15.7	27.6	6.7	34				
Bong	10.8	20.8	5.0	135	*	*	*	18	88.4	11.0	19.2	4.4	153				
Gbarpolu	4.4	15.0	0.8	21	*	*	*	4	84.8	3.7	13.3	0.7	25				
Grand Bassa	14.0	14.8	4.9	84	*	*	*	11	88.6	13.6	14.3	4.3	95				
Grand Cape Mount	9.5	23.7	3.9	41	*	*	*	13	75.8	7.2	20.6	2.9	55				
Grand Gedeh	17.0	18.9	2.6	35	*	*	*	8	83.6	16.1	18.8	3.7	43				
Grand Kru	2.5	34.5	0.9	23	*	*	*	4	84.5	2.1	32.7	0.8	28				
Lofa	8.1	28.7	1.4	85	*	*	*	27	75.9	6.2	21.8	1.1	112				
Margibi	3.4	15.2	0.0	62	*	*	*	20	77.7	9.0	13.9	1.8	82				
Maryland	9.4	24.2	1.6	25	*	*	*	6	81.4	9.8	24.5	1.3	30				
Montserrado	9.3	31.7	5.3	267	24.3	3.4	23.2	139	74.1	7.3	28.8	3.8	405				
Nimba	6.7	15.2	2.4	193	(8.3)	(8.3)	(8.3)	38	84.9	7.0	14.1	3.4	231				
River Cess	14.3	34.3	4.8	18	*	*	*	2	89.9	15.1	31.8	4.3	20				
River Gee	15.7	21.7	6.0	14	*	*	*	1	94.5	14.9	21.1	5.7	15				
Sinoe	6.4	47.0	4.7	30	*	*	*	8	81.4	5.1	40.2	3.7	38				

Continued...

Table 11.7—Continued

Background characteristic	Among breastfed children age 6-23 months, percentage fed:					Among nonbreastfed children age 6-23 months, percentage fed:					Among all children age 6-23 months, percentage fed:				
	Minimum dietary diversity ¹	Minimum meal frequency ²	Minimum acceptable diet ³	Number of breastfed children age 6-23 months	Minimum milk feeding frequency ⁴	Minimum dietary diversity ¹	Minimum meal frequency ⁵	Minimum acceptable diet ⁶	Number of non-breastfed children age 6-23 months	Breast milk, milk, or milk products ⁷	Minimum dietary diversity ¹	Minimum meal frequency ⁸	Minimum acceptable diet ⁹	Number of all children age 6-23 months	
Mother's education															
No education	6.2	19.7	1.5	366	7.9	3.4	12.2	0.9	82	83.2	5.7	18.3	1.4	448	
Elementary	8.9	24.6	3.2	298	9.4	8.5	5.7	0.0	71	82.6	8.8	21.0	2.6	370	
Junior high	8.5	27.1	2.4	197	10.5	6.6	17.0	5.3	74	75.5	8.0	24.3	3.2	271	
Senior high	15.0	29.0	7.9	166	(19.1)	(6.9)	(21.2)	(1.1)	59	78.7	12.9	27.0	6.1	226	
Higher	*	*	*	34	*	*	*	*	18	*	*	*	*	52	
Wealth quintile															
Lowest	5.1	17.1	2.0	275	0.0	0.7	2.8	0.0	62	81.7	4.3	14.5	1.7	336	
Second	8.4	23.5	2.3	245	6.7	14.4	13.9	6.7	47	84.9	9.3	21.9	3.0	292	
Middle	8.2	23.3	2.3	228	0.0	17.5	10.5	0.0	38	85.6	9.5	21.4	2.0	266	
Fourth	9.7	25.2	3.1	187	6.4	1.8	8.4	0.0	90	69.6	7.1	19.8	2.1	277	
Highest	21.6	38.5	13.5	127	(47.2)	(4.8)	(41.3)	(4.8)	67	81.8	15.8	39.5	10.5	194	
Total	9.3	23.9	3.7	1,062	13.4	6.2	15.6	2.1	304	80.7	8.6	22.1	3.4	1,366	

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Children received foods from five or more of the following eight food groups: a. breast milk; b. infant formula, milk other than breast milk; cheese or yogurt or other milk products; c. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; d. vitamin A-rich fruits and vegetables and red palm oil; e. other fruits and vegetables; f. eggs; g. meat, poultry, fish, and shellfish (and organ meats); h. legumes and nuts.

² For breastfed children, minimum meal frequency is receiving solid, semisolid, or soft food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months.

³ Breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2.

⁴ Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

⁵ For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed.

⁶ Nonbreastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote 5, and receive solid, semisolid, or soft foods from at least four food groups not including the milk or milk products food group.

⁷ Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

⁸ Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5.

⁹ Children age 6-23 months are considered to be fed a minimum acceptable diet if they receive breast milk, receive other milk or milk products as described in footnote 7, are fed the minimum dietary diversity as described in footnote 1, and are fed the minimum meal frequency as described in footnotes 2 and 5.

Table 11.8 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Anemia status by hemoglobin level				Number of children age 6-59 months
	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (<7.0 g/dl)	
Age in months					
6-8	72.1	29.8	38.7	3.7	172
9-11	78.5	41.7	36.1	0.7	151
12-17	76.3	25.4	47.5	3.4	281
18-23	75.8	26.1	45.0	4.7	239
24-35	78.4	30.6	42.2	5.6	513
36-47	69.1	31.5	34.5	3.2	598
48-59	58.4	24.8	31.6	1.9	571
Sex					
Male	70.8	29.3	38.4	3.0	1,238
Female	70.8	28.9	38.0	3.8	1,286
Mother's interview status					
Interviewed	71.0	29.4	38.5	3.2	2,028
Not interviewed but in household	56.3	38.4	13.7	4.2	56
Not interviewed and not in the household ¹	71.4	26.7	40.1	4.6	440
Residence					
Urban	70.1	30.1	36.9	3.0	1,311
Greater Monrovia	67.9	30.0	35.5	2.4	664
Other urban	72.3	30.2	38.5	3.6	647
Rural	71.5	28.1	39.6	3.9	1,213
Region					
North Western	72.2	24.9	43.7	3.6	226
South Central	71.2	28.7	38.9	3.7	1,055
South Eastern A	71.7	30.3	38.4	3.0	172
South Eastern B	76.5	24.8	47.6	4.1	144
North Central	68.8	31.1	34.6	3.1	926
County					
Bomi	80.8	26.1	50.4	4.3	85
Bong	65.7	27.0	34.2	4.5	283
Gbarpolu	56.7	19.0	35.2	2.5	45
Grand Bassa	77.3	22.9	46.1	8.3	175
Grand Cape Mount	72.0	26.6	41.8	3.6	96
Grand Gedeh	72.4	23.6	44.1	4.7	60
Grand Kru	80.0	27.0	49.2	3.8	51
Lofa	61.9	31.6	29.3	1.0	190
Margibi	78.4	30.7	47.4	0.3	127
Maryland	75.6	23.5	46.7	5.4	66
Montserrado	68.6	29.7	35.8	3.1	754
Nimba	73.7	33.5	37.1	3.1	453
River Cess	69.6	34.5	35.1	0.0	46
River Gee	72.3	23.9	46.6	1.9	26
Sinoe	72.5	33.3	35.6	3.6	67
Mother's education²					
No education	70.8	29.0	38.6	3.2	1,431
Elementary	77.6	25.7	45.4	6.6	395
Junior high	68.6	31.2	35.4	1.9	376
Senior high	69.1	32.4	33.0	3.7	160
Higher	60.4	30.3	29.1	1.0	162
Wealth quintile					
Lowest	70.3	27.6	37.3	5.4	626
Second	71.8	27.1	41.5	3.3	562
Middle	76.5	31.7	41.6	3.2	506
Fourth	69.8	28.7	38.8	2.3	458
Highest	63.3	31.8	29.4	2.1	373
Total	70.8	29.1	38.2	3.4	2,524

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC 1998. Hemoglobin is in grams per deciliter (g/dl).

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.9 Presence of iodized salt in household

Among all households, percentage with salt tested for iodine content, percentage with salt in the household but the salt was not tested, and percentage with no salt in the household, and among households with salt tested, percentage with iodized salt, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among all households, percentage			Number of households	Among households with tested salt:	
	With salt tested	With salt, but salt not tested ¹	With no salt in the household		Percentage with iodized salt	Number of households
Residence						
Urban	85.0	0.3	14.7	5,195	98.3	4,416
Greater Monrovia	81.7	0.4	17.8	2,911	98.1	2,380
Other urban	89.1	0.3	10.6	2,284	98.5	2,036
Rural	91.4	0.0	8.6	3,873	98.7	3,540
Region						
North Western	91.2	0.0	8.8	850	98.7	775
South Central	84.5	0.3	15.3	4,334	98.5	3,660
South Eastern A	96.7	0.1	3.2	628	99.1	608
South Eastern B	94.8	0.1	5.2	473	96.9	448
North Central	88.6	0.2	11.2	2,784	98.5	2,466
County						
Bomi	88.7	0.0	11.3	319	98.5	283
Bong	89.6	0.3	10.1	868	98.6	778
Gbarpolu	93.5	0.0	6.5	175	100.0	164
Grand Bassa	91.5	0.0	8.5	517	99.0	473
Grand Cape Mount	92.4	0.0	7.6	355	98.2	328
Grand Gedeh	97.3	0.1	2.6	246	99.1	239
Grand Kru	91.1	0.2	8.7	147	97.0	134
Lofa	88.9	0.0	11.1	734	98.6	653
Margibi	93.8	0.0	6.2	560	99.1	525
Maryland	98.1	0.0	1.9	229	95.9	224
Montserrado	81.7	0.4	17.9	3,257	98.3	2,662
Nimba	87.6	0.3	12.1	1,181	98.3	1,035
River Cess	97.5	0.0	2.5	157	99.7	153
River Gee	92.5	0.0	7.5	97	99.1	90
Sinoe	95.7	0.0	4.3	225	98.7	215
Wealth quintile						
Lowest	90.7	0.0	9.3	1,965	98.3	1,783
Second	90.4	0.0	9.6	1,723	98.9	1,557
Middle	90.4	0.0	9.6	1,748	98.2	1,580
Fourth	80.7	0.3	19.0	1,892	98.8	1,527
Highest	86.8	0.7	12.6	1,740	98.1	1,510
Total	87.7	0.2	12.1	9,068	98.5	7,956

¹ Includes households in which salt could not be tested for technical or logistical reasons, including availability of test kits

Table 11.10 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among all children age 6-23 months, percentage given multiple micronutrient powders in the 7 days preceding the survey; among all children age 6-59 months, percentages who were given vitamin A supplements in the 6 months preceding the survey, who were given iron supplements in the 7 days preceding the survey, and who were given deworming medication in the 6 months preceding the survey; and among all children age 6-59 months who live in households in which salt was tested for iodine, percentage who live in households with iodized salt, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among youngest children age 6-23 months living with their mother:			Among all children age 6-23 months:		Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodized salt:	
	Percentage who consumed foods rich in vitamin A in last 24 hours ¹	Percentage who consumed foods rich in iron in last 24 hours ²	Number of children	Percentage given multiple micro-nutrient powders in past 7 days	Number of children	Percentage given iron supplements in past 7 days ³	Percentage given vitamin A supplements in past 6 months ⁴	Percentage given deworming medication in past 6 months ^{3,5}	Number of children	Percentage living in households with iodized salt ⁶	Number of children
Age in months											
6-8	21.2	14.2	290	2.8	294	26.9	34.6	19.5	294	99.1	281
9-11	48.0	39.9	233	9.8	235	34.6	53.3	40.2	235	97.7	217
12-17	75.6	61.9	440	8.8	464	33.3	56.1	56.5	464	98.7	441
18-23	80.3	67.2	404	8.7	474	32.8	51.1	60.4	474	98.4	438
24-35	na	na	na	na	na	28.6	47.9	55.3	873	98.9	784
36-47	na	na	na	na	na	25.0	44.3	53.8	978	99.5	893
48-59	na	na	na	na	na	23.8	42.1	52.0	980	99.2	885
Sex											
Male	60.3	48.9	665	6.7	717	29.1	46.3	51.0	2,137	98.9	1,954
Female	61.2	50.3	701	8.7	749	26.7	46.5	52.2	2,160	99.1	1,985
Breastfeeding status											
Breastfeeding	55.9	45.4	1,062	6.3	1,081	32.9	51.3	45.7	1,188	98.9	1,125
Not breastfeeding	77.6	64.1	304	11.8	384	25.9	44.5	53.9	3,109	99.0	2,814
Mother's age											
15-19	62.2	50.2	182	8.5	202	24.5	37.5	39.4	321	99.5	294
20-29	57.7	48.0	699	8.5	756	26.7	45.4	51.0	2,195	98.6	1,985
30-39	64.2	51.7	381	7.0	400	30.9	48.2	55.4	1,363	99.3	1,276
40-49	65.9	51.8	104	3.0	108	26.9	52.7	51.9	418	99.4	384
Residence											
Urban	57.1	48.1	724	9.0	780	30.6	46.9	51.6	2,290	98.9	2,045
Greater Monrovia	49.7	38.5	352	12.0	387	28.2	41.3	51.8	1,150	99.5	979
Other urban	64.2	57.3	372	6.1	393	33.1	52.5	51.4	1,140	98.4	1,066
Rural	64.9	51.2	642	6.2	686	24.7	45.8	51.7	2,007	99.1	1,894
Region											
North Western	64.5	53.1	114	9.7	128	30.8	45.7	57.4	370	99.1	350
South Central	53.1	43.4	582	10.4	632	29.0	42.0	53.4	1,856	99.6	1,643
South Eastern A	66.5	61.2	101	11.1	107	33.4	48.9	59.4	274	98.5	271
South Eastern B	56.0	49.9	73	4.1	79	26.5	48.2	56.9	240	97.4	233
North Central	68.4	53.6	496	3.9	520	25.1	51.1	46.0	1,557	98.6	1,441
County											
Bomi	66.5	58.4	34	16.0	41	44.0	57.5	60.1	127	99.3	116
Bong	64.2	46.8	153	4.3	159	26.8	52.1	52.8	475	99.5	447
Gbarpolu	61.8	51.9	25	7.8	27	30.7	48.2	56.6	77	100.0	76
Grand Bassa	58.1	50.8	95	11.6	102	31.8	43.1	45.8	299	99.7	286
Grand Cape Mount	64.6	50.4	55	6.4	60	20.8	35.7	55.8	166	98.6	158
Grand Gedeh	75.2	70.9	43	22.0	43	44.1	81.8	79.3	103	98.1	103
Grand Kru	49.3	44.8	28	3.4	31	30.3	42.8	50.9	86	98.6	80
Lofa	74.7	62.5	112	3.9	119	19.1	50.2	47.8	328	98.5	314
Margibi	66.9	57.9	82	3.0	86	29.7	38.9	62.2	229	99.5	223
Maryland	55.6	51.3	30	5.1	32	21.4	48.2	59.7	112	95.5	111
Montserrado	49.1	38.8	405	11.5	444	28.2	42.3	53.5	1,328	99.5	1,134
Nimba	68.2	53.8	231	3.6	242	26.6	50.8	40.9	754	98.1	681
River Cess	74.6	71.0	20	4.8	21	25.0	39.7	38.8	65	100.0	64
River Gee	69.1	56.6	15	3.1	16	32.2	58.9	61.6	43	100.0	42
Sinoe	52.5	45.3	38	3.0	43	28.1	22.3	52.7	106	98.0	105
Mother's education											
No education	62.0	48.7	448	5.8	471	23.7	45.7	48.0	1,527	99.0	1,422
Elementary	66.2	53.4	370	5.8	399	28.1	46.0	50.9	1,085	98.6	1,007
Junior high	60.9	53.5	271	5.4	289	29.6	48.2	53.2	778	99.3	709
Senior high	53.4	43.9	226	16.2	255	31.8	46.8	56.0	742	98.9	659
Higher	*	*	52	*	53	39.4	44.9	62.5	165	100.0	142
Wealth quintile											
Lowest	63.1	51.4	336	4.8	371	22.5	45.0	46.2	1,042	98.5	977
Second	65.0	51.7	292	6.8	305	27.7	49.4	53.3	938	99.2	877
Middle	67.3	55.2	266	3.7	277	25.0	44.4	47.6	809	98.7	762
Fourth	57.5	50.2	277	10.7	299	33.6	46.6	55.0	816	99.7	713
Highest	45.9	34.9	194	15.1	214	32.6	46.6	58.2	692	98.9	609
Total	60.8	49.6	1,366	7.7	1,466	27.9	46.4	51.6	4,297	99.0	3,939

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrots, squash, yellow or orange sweet potatoes, dark green leafy vegetables, ripe mango, ripe papaya, other locally grown fruits and vegetables that are rich in vitamin A, and red palm oil.

² Includes meat (and organ meat), fish, poultry, and eggs

³ Based on mother's recall

⁴ Based on both mother's recall and the vaccination card (where available)

⁵ Deworming for intestinal parasites is commonly done for helminths and for schistosomiasis.

⁶ Excludes children in households in which salt was not tested

Table 11.11 Therapeutic and supplemental foods

Among children age 6-35 months, percentage who received Plumpy'Nut in the 7 days preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who received Plumpy'Nut in the past 7 days	Number of children
Age in months		
6-8	3.7	294
9-11	7.5	235
12-17	7.2	464
18-23	5.0	474
24-35	3.6	873
Sex		
Male	3.6	1,133
Female	6.3	1,206
Breastfeeding status		
Breastfeeding	4.9	1,160
Not breastfeeding	5.1	1,178
Wasting status¹		
Sever acute malnutrition ²	*	8
Moderate acute malnutrition ³	14.7	52
Not wasted ⁴	4.1	1,058
Mother's age		
15-19	2.2	264
20-29	5.8	1,228
30-39	5.1	639
40-49	3.3	207
Residence		
Urban	6.7	1,230
Greater Monrovia	8.6	614
Other urban	4.8	616
Rural	3.1	1,109
Region		
North Western	2.9	202
South Central	7.6	999
South Eastern A	8.5	160
South Eastern B	4.2	132
North Central	1.9	845
County		
Bomi	6.4	67
Bong	2.3	257
Gbarpolu	0.1	44
Grand Bassa	5.5	183
Grand Cape Mount	1.7	92
Grand Gedeh	15.5	63
Grand Kru	5.7	48
Lofa	3.5	185
Margibi	6.1	116
Maryland	3.8	61
Montserrado	8.4	699
Nimba	0.9	402
River Cess	2.3	35
River Gee	2.3	23
Sinoe	5.0	62
Mother's education		
No education	4.6	783
Elementary	3.2	634
Junior high	4.9	467
Senior high	6.6	380
Higher	(16.9)	74

Continued...

Table 11.11—Continued

Background characteristic	Percentage who received Plumpy'Nut in the past 7 days	Number of children
Wealth quintile		
Lowest	1.7	569
Second	3.5	506
Middle	4.0	436
Fourth	7.8	451
Highest	9.9	377
Total	5.0	2,338

Note: In the questionnaire, respondents were asked about consumption of Plumpy'Nut/peanut butter, as peanut butter is the local name for Plumpy'Nut. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Restricted to children with valid data for weight and height

² Children with severe acute malnutrition (SAM) are those whose weight-for-height Z-score is below -3 standard deviations (SD) from the WHO Child Growth Standards population median.

³ Children with moderate acute malnutrition (MAM) are those whose weight-for-height Z-score is between -3 standard deviations and -2 standard deviations (SD) from the WHO Growth Standards population median.

⁴ Children whose weight-for-height Z-score is $\geq$ 2 standard deviations (SD) from the WHO Child Growth Standards population median

Table 11.12 Nutritional status of women

Among women age 15-49, percentage with height under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Height		Mean body mass index (BMI)	Body mass index ¹							Number of women
	Percentage below 145 cm	Number of women		Normal	Thin		Overweight/obese				
				18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total overweight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	
Age											
15-19	1.5	878	21.7	80.1	10.4	8.5	1.9	9.5	8.5	0.9	812
20-29	1.6	1,400	24.0	63.9	4.8	4.2	0.5	31.4	22.0	9.3	1,219
30-39	1.8	1,061	26.3	42.1	3.2	2.9	0.3	54.7	36.1	18.6	960
40-49	1.9	743	26.2	45.2	2.9	2.2	0.7	51.9	30.2	21.7	732
Residence											
Urban	1.4	2,545	25.3	52.7	4.4	3.8	0.7	42.9	27.4	15.5	2,354
Greater Monrovia	1.4	1,457	26.1	46.6	4.6	4.0	0.6	48.8	28.5	20.3	1,348
Other urban	1.4	1,088	24.2	60.7	4.2	3.5	0.8	35.0	25.9	9.1	1,005
Rural	2.2	1,536	23.2	67.5	6.6	5.6	1.0	25.9	19.1	6.8	1,369
Region											
North Western	1.1	304	24.4	57.3	5.8	5.3	0.5	36.9	24.7	12.2	268
South Central	1.7	2,068	25.5	50.1	5.8	5.0	0.8	44.1	26.5	17.6	1,907
South Eastern A	1.9	240	23.9	61.8	5.3	4.3	1.0	32.9	22.7	10.2	215
South Eastern B	1.4	224	23.6	68.1	4.7	4.4	0.3	27.2	20.5	6.7	200
North Central	1.8	1,246	23.3	69.5	4.1	3.3	0.9	26.4	21.6	4.8	1,131
County											
Bomi	0.7	119	24.2	50.0	7.2	6.4	0.8	42.8	32.4	10.4	110
Bong	2.4	415	23.4	70.9	3.4	2.2	1.2	25.7	20.0	5.7	373
Gbarpolu	1.8	57	23.7	68.1	2.8	1.7	1.1	29.1	20.6	8.5	49
Grand Bassa	2.2	233	23.2	61.6	11.0	8.9	2.1	27.3	19.7	7.6	208
Grand Cape Mount	1.3	127	24.8	59.7	5.8	5.8	0.0	34.5	18.6	15.8	109
Grand Gedeh	1.3	83	23.9	61.3	4.7	3.5	1.2	34.0	24.8	9.2	75
Grand Kru	0.9	69	23.7	68.2	4.4	3.7	0.7	27.4	20.7	6.7	60
Lofa	1.7	306	23.7	65.6	3.4	2.4	1.0	31.0	23.3	7.7	284
Margibi	2.5	227	24.4	55.3	8.4	7.5	0.9	36.3	22.4	13.9	212
Maryland	1.3	110	23.2	71.6	5.6	5.5	0.2	22.8	18.2	4.6	100
Montserrado	1.5	1,607	26.0	47.7	4.7	4.1	0.6	47.6	28.0	19.6	1,487
Nimba	1.3	525	22.9	70.6	5.2	4.6	0.6	24.2	21.9	2.4	474
River Cess	2.4	56	23.0	62.6	9.4	8.2	1.3	28.0	20.7	7.3	50
River Gee	2.7	44	24.5	59.3	2.9	2.9	0.0	37.8	26.0	11.8	40
Sinoe	2.2	101	24.3	61.8	3.6	2.8	0.8	34.6	22.0	12.6	91
Education											
No education	2.6	1,240	24.7	56.0	4.3	3.2	1.1	39.6	27.3	12.4	1,137
Elementary	1.5	981	23.3	67.6	6.7	5.9	0.8	25.8	18.4	7.3	869
Junior high	0.7	751	23.7	64.1	7.6	6.7	0.9	28.3	18.9	9.4	687
Senior high	1.4	862	25.7	52.4	2.4	2.4	0.1	45.1	28.6	16.5	799
Higher	1.9	248	26.8	34.9	6.6	5.0	1.6	58.5	33.5	25.0	230
Wealth quintile											
Lowest	3.0	719	22.7	72.1	6.5	5.2	1.3	21.4	17.2	4.2	618
Second	1.9	721	23.1	70.2	5.7	5.3	0.4	24.1	18.8	5.3	660
Middle	1.8	827	23.9	61.6	5.2	4.3	0.9	33.2	25.3	7.9	748
Fourth	0.5	916	25.2	49.8	7.3	6.6	0.7	42.9	27.4	15.5	844
Highest	1.5	900	26.9	43.8	1.9	1.1	0.7	54.3	29.9	24.4	852
Total	1.7	4,082	24.5	58.1	5.2	4.4	0.8	36.6	24.3	12.3	3,722

Note: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

¹ Excludes pregnant women and women with a birth in the preceding 2 months

Table 11.13 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Anemia status by hemoglobin level				Number of women
	Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 11.0-11.9 g/dl/ P 10.0-10.9 g/dl)	Moderate (NP 8.0-10.9 g/dl/ P 7.0-9.9 g/dl)	Severe (NP < 8.0 g/dl/ P < 7.0 g/dl)	
Age					
15-19	55.1	24.8	29.6	0.7	872
20-29	39.8	20.9	18.4	0.6	1,392
30-39	42.4	25.3	16.9	0.2	1,037
40-49	43.7	22.1	19.5	2.1	726
Number of children ever born					
0	51.0	24.3	26.3	0.4	934
1	45.4	23.6	21.5	0.4	770
2-3	37.1	17.2	18.7	1.2	1,073
4-5	44.2	26.6	16.9	0.7	669
6+	46.8	27.3	18.4	1.1	581
Maternity status					
Pregnant	51.7	25.7	25.8	0.1	281
Breastfeeding	47.6	26.1	20.2	1.2	873
Neither	42.9	21.9	20.3	0.7	2,872
Using IUD					
Yes	*	*	*	*	6
No	44.4	23.1	20.5	0.8	4,021
Cigarette use¹					
Smokes cigarettes	*	*	*	*	28
Does not smoke cigarettes	44.5	23.2	20.5	0.8	3,999
Residence					
Urban	43.2	21.7	20.7	0.9	2,515
Greater Monrovia	43.7	20.9	22.1	0.7	1,446
Other urban	42.6	22.8	18.7	1.1	1,069
Rural	46.7	25.4	20.6	0.6	1,512
Region					
North Western	52.4	29.6	22.4	0.4	297
South Central	46.9	21.9	24.1	0.9	2,042
South Eastern A	47.7	26.0	20.8	0.8	236
South Eastern B	48.7	25.1	23.5	0.1	222
North Central	37.3	22.6	13.9	0.7	1,231
County					
Bomi	57.4	31.8	25.6	0.0	120
Bong	41.5	25.2	15.1	1.3	408
Gbarpolu	40.8	27.1	13.7	0.0	57
Grand Bassa	59.1	22.7	33.8	2.6	228
Grand Cape Mount	52.8	28.7	23.2	0.9	120
Grand Gedeh	40.4	20.3	19.3	0.8	83
Grand Kru	51.6	26.1	25.5	0.0	69
Lofa	35.2	22.5	12.5	0.3	300
Margibi	52.9	19.7	31.6	1.5	220
Maryland	45.1	23.8	21.2	0.2	108
Montserrado	44.3	22.0	21.7	0.6	1,593
Nimba	35.2	20.8	13.8	0.5	523
River Cess	50.2	32.9	17.3	0.0	55
River Gee	52.8	26.9	25.9	0.0	44
Sinoe	52.3	26.9	24.1	1.3	98
Education					
No education	43.0	25.7	16.3	1.0	1,211
Elementary	48.8	24.9	23.4	0.5	969
Junior high	48.7	21.4	26.5	0.8	754
Senior high	38.6	19.9	18.3	0.4	858
Higher	42.4	19.4	21.1	2.0	235
Wealth quintile					
Lowest	50.8	28.1	21.9	0.8	708
Second	41.5	22.6	18.3	0.6	714
Middle	43.8	23.4	19.7	0.7	812
Fourth	42.8	19.5	21.9	1.4	899
Highest	44.3	22.9	21.0	0.4	895
Total	44.5	23.1	20.6	0.8	4,027

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC 1998. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes manufactured cigarettes and hand-rolled cigarettes

Table 11.14 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child and percentage who took deworming medication during the pregnancy of the last child, and among women age 15-49 with a child born in the 5 years preceding the survey who live in households that were tested for iodized salt, percentage who live in households with iodized salt, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Among women with a child born in the past 5 years:		Among women with a child born in the past 5 years who live in households in which salt was tested:	
	None	<60	60-89	90+	Don't know/missing	Total	Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Percentage living in households with iodized salt ¹	Number of women
Age										
15-19	4.4	33.8	9.6	39.1	13.1	100.0	58.5	414	99.1	383
20-29	6.0	28.6	9.7	43.9	11.8	100.0	62.2	1,975	98.5	1,784
30-39	6.5	26.6	10.1	42.4	14.4	100.0	67.0	1,234	98.9	1,144
40-49	6.7	24.6	11.1	44.1	13.6	100.0	66.8	403	99.1	370
Residence										
Urban	6.1	27.2	9.2	43.1	14.5	100.0	65.3	2,269	98.6	2,024
Greater Monrovia	3.6	30.0	7.2	46.8	12.5	100.0	65.7	1,184	98.9	1,013
Other urban	8.8	24.1	11.4	39.1	16.6	100.0	64.8	1,084	98.3	1,010
Rural	6.0	29.4	10.9	42.8	10.9	100.0	61.8	1,757	98.9	1,657
Region										
North Western	3.0	28.8	11.1	47.3	9.7	100.0	64.7	331	98.8	311
South Central	3.7	27.9	9.8	46.7	11.9	100.0	64.7	1,825	99.1	1,612
South Eastern A	2.7	21.3	9.3	49.9	16.7	100.0	59.2	248	98.9	246
South Eastern B	5.2	28.4	6.8	47.3	12.4	100.0	73.0	222	97.4	216
North Central	10.5	29.5	10.4	35.2	14.3	100.0	61.7	1,400	98.5	1,295
County										
Bomi	1.6	29.7	12.0	46.5	10.2	100.0	63.6	119	99.2	108
Bong	3.0	41.7	13.3	28.3	13.7	100.0	66.3	443	99.4	417
Gbarpolu	6.4	37.8	11.6	33.9	10.3	100.0	56.1	67	100.0	65
Grand Bassa	2.0	38.0	24.5	25.4	10.1	100.0	50.7	264	99.0	250
Grand Cape Mount	2.7	23.9	10.2	54.2	9.1	100.0	69.6	145	97.9	138
Grand Gedeh	3.1	23.3	9.8	57.0	6.7	100.0	69.7	90	98.5	90
Grand Kru	10.1	32.8	3.1	36.1	17.9	100.0	76.9	80	98.1	75
Lofa	12.1	20.3	6.7	51.0	9.9	100.0	51.2	317	98.5	301
Margibi	6.0	13.7	8.5	59.4	12.3	100.0	60.3	217	99.5	211
Maryland	2.6	30.5	7.2	56.8	2.9	100.0	72.9	100	95.9	100
Montserrado	3.6	28.2	7.2	48.8	12.2	100.0	68.2	1,343	99.1	1,151
Nimba	14.9	25.7	10.2	32.2	16.9	100.0	63.6	640	97.9	577
River Cess	1.6	12.2	9.5	69.0	7.7	100.0	39.7	58	100.0	57
River Gee	2.1	14.9	12.8	45.7	24.6	100.0	65.7	42	99.3	42
Sinoe	3.0	24.8	8.6	32.5	31.0	100.0	61.2	100	98.5	99
Education										
No education	7.8	29.6	10.0	39.9	12.7	100.0	62.6	1,366	98.9	1,274
Elementary	5.5	27.1	11.0	42.9	13.4	100.0	62.0	984	98.4	907
Junior high	6.6	27.1	10.5	40.8	15.0	100.0	65.6	725	99.3	658
Senior high	3.2	28.5	9.0	48.0	11.2	100.0	67.4	782	98.2	693
Higher	5.6	25.1	4.7	53.9	10.6	100.0	58.8	170	100.0	149
Wealth quintile										
Lowest	7.4	33.1	10.3	37.4	11.8	100.0	61.4	855	98.2	809
Second	10.6	24.9	9.9	42.0	12.6	100.0	63.0	849	99.1	781
Middle	5.9	27.2	9.9	45.2	11.9	100.0	61.0	785	98.7	739
Fourth	2.8	29.6	12.4	41.4	13.8	100.0	66.1	816	99.5	717
Highest	2.9	25.4	6.9	50.1	14.7	100.0	67.9	721	98.1	635
Total	6.0	28.1	9.9	43.0	12.9	100.0	63.8	4,026	98.8	3,681

¹ Excludes women in households where salt was not tested

Key Findings

- **Ownership of insecticide-treated nets:** 55% of households own at least one insecticide-treated net (ITN).
- **Source of ITNs:** The vast majority (83%) of ITNs were obtained through mass distribution campaigns.
- **Use of ITNs:** 47% of pregnant women age 15-49 and 44% of children under age 5 slept under an ITN the night before the survey.
- **Intermittent preventive treatment (IPTp) during pregnancy:** 40% of women age 15-49 with a live birth in the 2 years preceding the survey reported taking three or more doses of SP/Fansidar during their last pregnancy.
- **Prevalence of low hemoglobin:** 9% of children age 6-59 months have a hemoglobin level below 8.0 g/dl.

Malaria, a preventable, treatable, and curable disease, is endemic in Liberia and remains one of the foremost public health problems in the country, taking its greatest toll on children under age 5 and pregnant women. This chapter presents data that are useful for assessing how well malaria control strategies are being implemented, including the availability and use of mosquito nets, the prophylactic and therapeutic use of antimalarial drugs, diagnostic testing of children with fever, and prevalence of anemia and malaria among children under age 5.

12.1 OWNERSHIP OF INSECTICIDE-TREATED NETS

Ownership of insecticide-treated nets

Households that have at least one insecticide-treated net (ITN). An ITN is defined as a factory-treated net that does not require any further treatment.

Sample: Households

Full household ITN coverage

Percentage of households with at least one ITN for every two people.

Sample: Households

Household ownership and use of mosquito nets (in particular ITNs) is a central strategy in malaria prevention, and in Liberia it is a core intervention. All households in the 2019-20 LDHS were asked if they owned mosquito nets, and, if so, they were asked a series of follow-up questions about each net: what type it was, where it was obtained, and who slept under it the night before the survey.

Fifty-six percent of households in Liberia have at least one mosquito net, while 55% have at least one ITN. Thus, nearly all mosquito nets in Liberian households are ITNs. The average number of ITNs per household is 1.0. Twenty-five percent of households have achieved full household ITN coverage, meaning that there is at least one ITN for every two persons who slept in the household the night before the survey. The remaining households either have no ITNs (45%) or do not have enough ITNs for all household members (30%) (**Table 12.1** and **Figure 12.1**).

Trends: After increasing from 47% in 2009 to 62% in 2016, ownership of ITNs dropped to 55% in 2019-20 (**Figure 12.2**).

Patterns by background characteristics

- A higher percentage of households in rural areas (63%) than urban areas (49%) have at least one ITN; however, this difference is entirely due to much lower ownership of at least one ITN in Greater Monrovia (38%) than in other urban areas (63%) (**Table 12.1**).
- Household ownership of ITNs is highest in Nimba (71%) and lowest in Montserrado (39%) (**Figure 12.3**).

Figure 12.3 ITN ownership by county

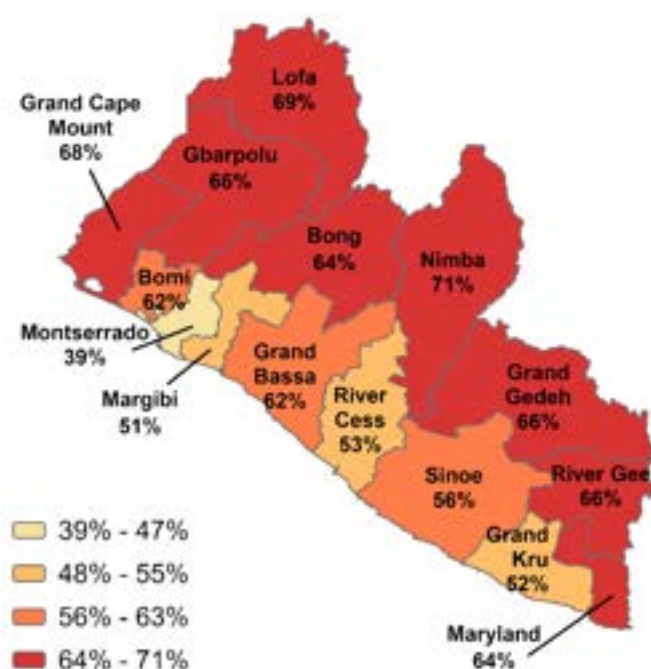


Figure 12.1 Household ownership of ITNs

Percent distribution of households

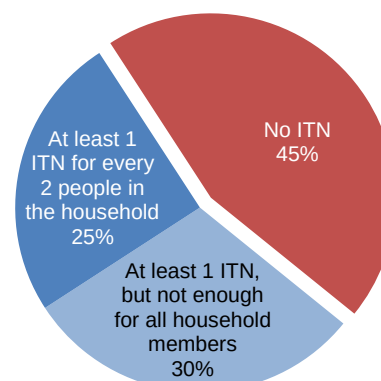
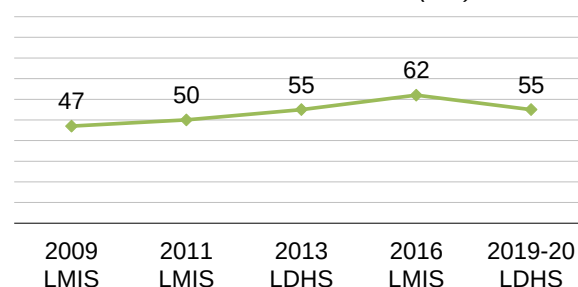


Figure 12.2 Trends in household ownership of ITNs

Percentage of households owning at least one insecticide-treated net (ITN)



Note: The definition of an ITN in surveys conducted prior to the 2019-20 LDHS included nets that had been soaked with insecticides within the past 12 months.

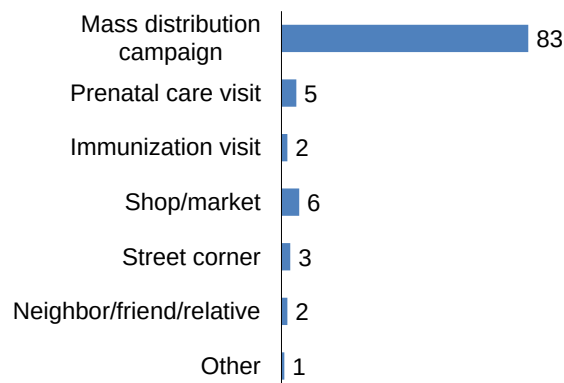
- Full household ITN coverage generally decreases with increasing wealth, from 33% in the second wealth quintile to 17% in the highest quintile.

Source of Nets

Eighty-three percent of ITNs were obtained through mass distribution campaigns, while 5% were obtained during prenatal care visits, 2% were obtained during immunization visits, 6% were obtained from a shop/market, 3% were obtained on a street corner, and 2% were obtained from a neighbor/friend/relative or other sources (Table 12.2 and Figure 12.4). By contrast, 70% of non-ITNs were obtained from a shop/market, 11% on a street corner, and 11% from a neighbor/friend/relative.

Figure 12.4 Source of ITNs

Percent distribution of ITNs in interviewed households



Note: Figures may not add up to 100% due to rounding.

12.2 HOUSEHOLD ACCESS AND USE OF ITNS

Access to an ITN

Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people.

Sample: De facto household population

Use of ITNs

Percentage of the population that slept under an ITN the night before the survey.

Sample: De facto household population

Access to an ITN is measured as the proportion of the population that could sleep under an ITN if each ITN in the household were used by up to two people. Comparing ITN access and ITN use indicators can help programs identify if there is a behavioral gap in which available ITNs are not being used. If the difference between these indicators is substantial, the ITN program may need to focus on behavior change and identify the main barriers to ITN use. This analysis helps ITN programs determine whether they need to achieve higher ITN coverage, promote ITN use, or both.

Nationally, 40% of de facto household members in Liberia who stayed in the household the night before the survey could sleep inside an ITN if each ITN were used by up to two people (**Tables 12.3 and 12.4**), and 39% of household members slept under an ITN the night before the survey (**Table 12.5**). Comparing these two population-level indicators, it is evident that the proportion of the population with access to an ITN is similar to the proportion of the population using an ITN. Thus, there is no major gap between ITN access and ITN use at the population level (**Figure 12.5**). Overall, 75% of ITNs were used the night before the survey (**Table 12.6**).

Patterns by background characteristics

- ITN access is highest in Grand Gedeh (53%) and lowest in Montserrado (26%) (**Figure 12.6**).
- The percentage of the household population that slept under a ITN decreases from 51% in the second wealth quintile to 27% in the highest quintile (**Table 12.5**).
- Use of existing ITNs varies from a low of 61% in Grand Bassa to a high of 82% in River Cess (**Table 12.6**).

Figure 12.5 Access to and use of ITNs

Percentage of the household population with access to an ITN and who slept under an ITN the night before the survey

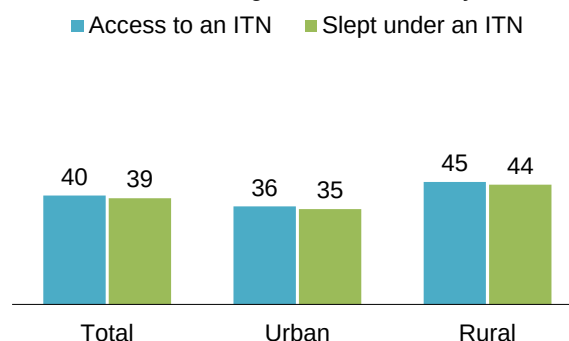
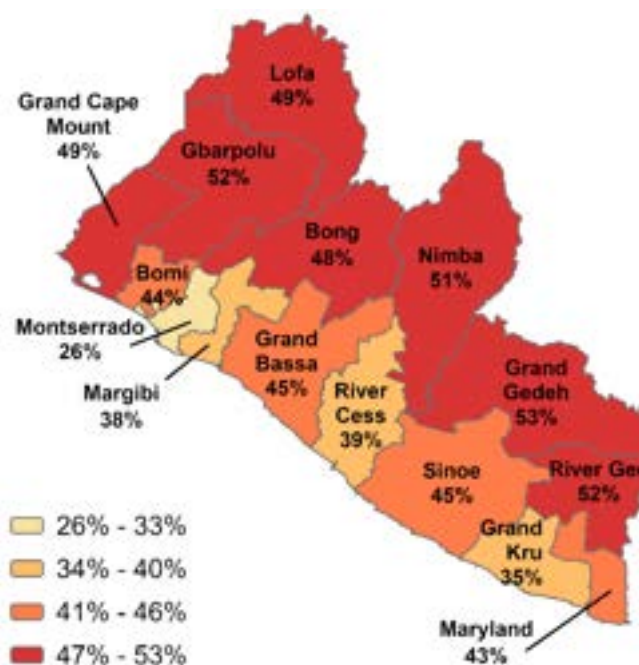


Figure 12.6 ITN access by county

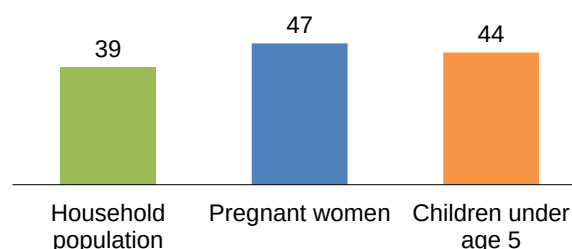


12.3 USE OF ITNS BY CHILDREN AND PREGNANT WOMEN

Children and pregnant women are particularly vulnerable to malaria. Just over 4 in 10 (44%) children under age 5 slept under an ITN the night before the survey, and 72% of children in households with at least one ITN slept under an ITN the night preceding the survey (**Table 12.7** and **Figure 12.7**). Similarly, 47% of pregnant women age 15-49 slept under an ITN the night before the survey, and 78% of pregnant women in households with at least one ITN slept under an ITN the night preceding the survey (**Table 12.8** and **Figure 12.7**).

Trends: Use of ITNs among children under age 5 increased from 26% in 2009 to 44% in 2016 and 2019-20. Over this same time period, use of ITNs by pregnant women increased from 33% to 47%.

Figure 12.7 ITN use
Percentage who slept under an ITN the night before the survey



Patterns by background characteristics

- The percentage of children under age 5 who slept under an ITN the night preceding the survey ranges from a high of 53% among those less than age 12 months to a low of 40% among those age 36-47 months and age 48-59 months (**Table 12.7**).
- By county, the proportion of children under age 5 who slept under an ITN the night before the survey ranges from 33% in Montserrado to 57% in Grand Gedeh.
- The proportion of pregnant women age 15-49 who slept under an ITN the night before the survey is markedly lower in Greater Monrovia (34%) than in other urban areas (57%) and rural areas (48%) (**Table 12.8**).
- By region, the proportion of pregnant women age 15-49 who slept under an ITN the night before the survey ranges from 35% in South Central to 59% in North Central.

12.4 MALARIA IN PREGNANCY

Intermittent preventive treatment (IPTp) during pregnancy

Percentage of women who took at least three doses of SP/Fansidar during their last pregnancy.

Sample: Women age 15-49 with a live birth in the 2 years before the survey

Malaria infection during pregnancy is a major public health problem in Liberia, with substantial risks for the mother, her fetus, and the neonate. Intermittent preventive treatment of malaria in pregnancy (IPTp) is a full therapeutic course of antimalarial medicine given to pregnant women at routine prenatal care visits to prevent malaria. IPTp helps prevent maternal malaria episodes, maternal and fetal anemia, placental parasitemia, low birth weight, and neonatal mortality.

The WHO recommends a three-pronged approach for reducing the negative health effects associated with malaria in pregnancy: prompt diagnosis and treatment of confirmed infections, use of long-lasting insecticidal nets (LLINs), and IPTp (WHO 2004).

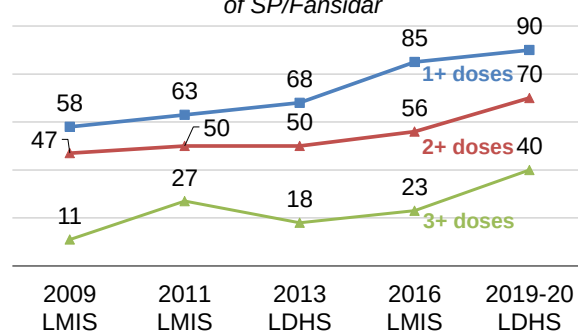
Sulfadoxine-pyrimethamine (SP), also known as Fansidar, is the recommended drug for IPTp in Liberia. The household survey indicator used to measure coverage of this intervention is the percentage of women with a live birth in the 2 years preceding the survey who received three or more doses of SP/Fansidar to prevent malaria during their most recent pregnancy (IPTp3+).

In Liberia, 90% of women with a live birth in the 2 years before the survey reported taking one or more doses of SP/Fansidar during their last pregnancy; 70% reported taking two or more doses, and 40% reported taking three or more doses (**Table 12.9**).

Trends: The percentage of women receiving one or more doses of IPTp increased from 58% in 2009 to 90% in 2019-20, while the percentage receiving two or more doses increased from 47% to 70%. Over the same period, the percentage of women receiving three or more doses of IPTp increased from 11% to 40% (**Figure 12.8**).

Figure 12.8 Trends in IPTp use by pregnant women

Percentage of women with a live birth in the 2 years before the survey who received at least 1, 2, or 3 doses of SP/Fansidar



Patterns by background characteristics

- The percentage of pregnant women who received three or more doses of SP/Fansidar is slightly higher in rural areas (43%) than in urban areas (38%); however, this difference is a reflection of women in Greater Monrovia being much less likely to have received three or more doses than women in other urban areas (30% versus 46%) (**Table 12.9**).
- By county, IPTp coverage of three or more doses is lowest in Bong (27%) and highest in Nimba (62%).
- The percentage of women who received three or more doses of SP/Fansidar during pregnancy generally decreases with increasing wealth, from 46% among those in the lowest wealth quintile to 29% among those in the highest wealth quintile.

12.5 CASE MANAGEMENT OF MALARIA IN CHILDREN

Care seeking for children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey for whom advice or treatment was sought from a health provider, a health facility, or a pharmacy.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Diagnosis of malaria in children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey who had blood taken from a finger or heel for testing. This is a proxy measure of diagnostic testing for malaria.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Artemisinin-based combination therapy (ACT) for children under age 5 with a fever

Among children under age 5 with a fever in the 2 weeks before the survey who took any antimalarial drugs, the percentage who received artemisinin-based combination therapy (ACT).

Sample: Children under age 5 with a fever in the 2 weeks before the survey

One in four (25%) children under age 5 had a fever in the 2 weeks preceding the survey. Eighty-one percent of children who had a fever were taken for advice or treatment, and 48% were taken for advice or treatment the same or next day. Forty-nine percent of children with a fever had blood taken from a finger or heel for testing (**Table 12.10**).

Source of Advice or Treatment for Children with Fever

Among children who received advice or treatment for fever in the 2 weeks preceding the survey, 48% each went to public sector providers and private institutions (**Table 12.11**). The most common providers were government health clinics (28%), government hospitals (15%), pharmacies (32%), and private hospitals/clinics (13%).

Types of Antimalarial Drugs Used

WHO recommends artemisinin-based combination therapy (ACT) for the treatment of uncomplicated malaria caused by the *Plasmodium falciparum* parasite. In sub-Saharan Africa, the two most frequently recommended types of ACT are the drug combinations artesunate/amodiaquine (ASAQ) and artemether/lumefantrine (AL) (WHO 2015c). In 2003, Liberia adopted ASAQ as the first-line treatment of uncomplicated malaria, with AL as the alternative treatment (PMI 2018).

As part of the 2019-20 LDHS, women who recently sought care for their child's fever were asked "What drugs did [NAME] take?" The purpose of this question is to assess if the antimalarial treatment received by children under age 5 is in accordance with national malaria treatment policy. However, it is not always possible to accurately distinguish types of antimalarial drugs from respondents' recall during fieldwork. To ensure the highest possible data quality during fieldwork, interviewers were given images of common antimalarial drugs to show to respondents or interviewers asked respondents to see the drug packaging to ensure that the correct drug was documented in the questionnaire.

The 2019-20 LDHS results showed that among children with a fever who were given antimalarial medications, only 41% received ACT (**Table 12.12**); 44% received amodiaquine, 6% received SP/Fansidar, and another 6% received quinine pills. These findings suggest that many children did not receive the first-line antimalarial medication (ASAQ) but instead received amodiaquine. However, in Liberia, ASAQ is colloquially referred to as amodiaquine, making it difficult to distinguish use of the single drug and the combination therapy. Thus, it is possible that many of the children who were reportedly given amodiaquine actually received ASAQ. If so, this would affect the estimate of children with fever who received ACT. Indeed, if all of the children who were reported to have received amodiaquine actually received ASAQ, the proportion who took ACT (among those who took an antimalarial) would double from 41% to 85%.

The possibility of respondents mistakenly stating that their child received amodiaquine rather than ASAQ was also noted in the 2013 Liberia DHS (LISGIS, MOH, NACP, and ICF International 2014). With this in mind, interviewers in the 2016 LMIS were instructed to probe carefully when respondents said their child received amodiaquine in response to the question on the medications the child took when she or he had a fever. They

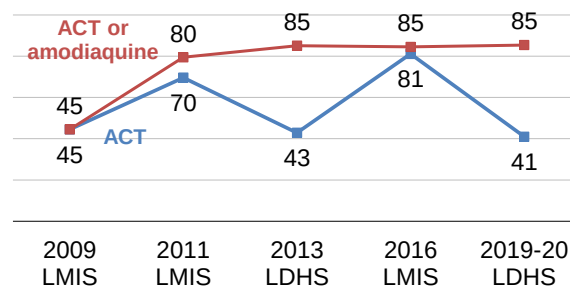
also had images of common antimalarial drugs to show to respondents to ensure that the correct drug was documented in the questionnaire. The results of the 2016 LMIS showed that 81% of children with a fever who were given antimalarials received ACT.

A similar training approach to the 2016 LMIS was taken in the 2019-20 LDHS. The conjecture that misclassification nevertheless occurred in the 2019-20 LDHS may be a reflection of the much greater questionnaire burden placed on interviewers and respondents in a DHS relative to an MIS.

Trends: The percentage of children with a fever given ACT appears to vary widely between surveys conducted in Liberia from 2009 to 2019-20. However, if the assumption is made that when respondents indicated their child received amodiaquine the child actually received ASAQ, the trend line is more credible, rising from 45% in 2009 to 85% in 2013 and 2019-20 (**Figure 12.9**).

Figure 12.9 Trends in ACT use by children with fever

Among children with recent fever who took an antimalarial, percentage who received ACT and the percentage who received ACT or reported receiving amodiaquine



12.6 PREVALENCE OF LOW HEMOGLOBIN IN CHILDREN

Prevalence of low hemoglobin in children

Percentage of children age 6-59 months who had a hemoglobin measurement of less than 8 grams per deciliter (g/dl) of blood. The cutoff of 8 g/dl is often used to classify malaria-related anemia. This is a different cutoff than was used to classify severe anemia in the nutrition chapter (7 g/dl).

Sample: Children age 6-59 months

Anemia, defined as a reduced level of hemoglobin in the blood, decreases the amount of oxygen reaching the tissues and organs of the body and reduces their capacity to function. Anemia is associated with impaired motor and cognitive development in children. The main causes of anemia in children are malaria and inadequate intake of iron, folate, vitamin B12, or other nutrients. Other causes of anemia include intestinal worms, hemoglobinopathy, and sickle cell disease. Although anemia is not specific to malaria, trends in anemia prevalence can reflect malaria morbidity, and they respond to changes in the coverage of malaria interventions (Korenromp et al. 2004). Malaria interventions have been associated with a 60% reduction in the risk of anemia using a cutoff of 8 g/dl (RBM 2003).

Hemoglobin testing was carried out for 93% of eligible children age 6-59 months (**Table 12.13**), and 9% had hemoglobin levels lower than 8.0 g/dl (**Table 12.14**).

Trends: The percentage of children age 6-59 months with hemoglobin levels below 8.0 g/dl increased by 1 percentage point between 2016 and 2019-20, from 8% to 9%.

Patterns by background characteristics

- By age, the percentage of children with low hemoglobin is highest among those age 18-23 months (16%) (**Table 12.14**).

- By county, the percentage of children with low hemoglobin is lowest in Lofa and River Cess (2% each) and highest in Bomi and Grand Bassa (15% each).
- By wealth quintile, the proportion of children with hemoglobin levels below 8.0 g/dl ranges from a high of 11% among those in the lowest quintile to a low of 3% among those in the highest quintile.

LIST OF TABLES

For more information on malaria, see the following tables:

- **Table 12.1** Household possession of mosquito nets
- **Table 12.2** Source of mosquito nets
- **Table 12.3** Access to an insecticide-treated net (ITN)
- **Table 12.4** Access to an ITN according to background characteristics
- **Table 12.5** Use of mosquito nets by persons in the household
- **Table 12.6** Use of existing ITNs
- **Table 12.7** Use of mosquito nets by children
- **Table 12.8** Use of mosquito nets by pregnant women
- **Table 12.9** Use of intermittent preventive treatment (IPTp) by women during pregnancy
- **Table 12.10** Prevalence, diagnosis, and prompt treatment of children with fever
- **Table 12.11** Source of advice or treatment for children with fever
- **Table 12.12** Type of antimalarial drugs used
- **Table 12.13** Coverage of testing for anemia in children
- **Table 12.14** Hemoglobin <8.0 g/dl in children

Table 12.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated) and insecticide-treated net (ITN), average number of nets and ITNs per household, and percentage of households with at least one net and ITN per two persons who stayed in the household last night, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of households with at least one mosquito net		Average number of nets per household		Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night		Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN) ¹	Any mosquito net	Insecticide-treated mosquito net (ITN) ¹		Any mosquito net	Insecticide-treated mosquito net (ITN) ¹	
Residence								
Urban	51.1	48.9	1.0	0.9	5,195	22.7	21.9	5,161
Greater Monrovia	41.0	37.9	0.7	0.6	2,911	16.7	15.7	2,903
Other urban	63.9	63.0	1.4	1.3	2,284	30.4	29.8	2,258
Rural	63.1	62.5	1.2	1.2	3,873	30.0	29.7	3,850
Region								
North Western	65.9	65.5	1.2	1.2	850	32.7	32.7	843
South Central	45.2	42.9	0.8	0.7	4,334	19.5	18.6	4,319
South Eastern A	59.6	59.0	1.2	1.2	628	33.2	32.7	625
South Eastern B	61.3	61.0	1.2	1.2	473	27.6	27.5	469
North Central	68.7	67.9	1.5	1.4	2,784	31.7	31.2	2,755
County								
Bomi	62.7	62.2	1.2	1.2	319	34.6	34.6	317
Bong	63.8	63.6	1.3	1.3	868	30.0	30.0	863
Gbarpolu	66.5	66.2	1.3	1.3	175	36.6	36.6	173
Grand Bassa	62.4	61.5	1.2	1.2	517	28.7	27.8	514
Grand Cape Mount	68.5	68.1	1.2	1.2	355	29.0	29.0	353
Grand Gedeh	67.0	65.8	1.2	1.2	246	39.9	39.0	244
Grand Kru	52.4	52.1	1.0	1.0	147	22.6	22.6	145
Lofa	69.0	68.6	1.4	1.4	734	34.3	33.9	729
Margibi	51.5	51.3	0.9	0.9	560	25.4	25.1	558
Maryland	64.6	64.4	1.2	1.2	229	27.3	27.3	227
Montserrado	41.4	38.5	0.7	0.6	3,257	17.1	16.0	3,246
Nimba	72.1	70.6	1.6	1.6	1,181	31.2	30.5	1,163
River Cess	52.8	52.8	0.9	0.9	157	26.4	26.4	157
River Gee	66.9	66.4	1.6	1.6	97	35.8	35.1	96
Sinoe	56.2	55.9	1.3	1.2	225	30.6	30.3	224
Wealth quintile								
Lowest	57.7	57.3	1.0	1.0	1,965	26.7	26.5	1,953
Second	70.7	70.3	1.4	1.4	1,723	33.4	33.0	1,701
Middle	58.5	57.0	1.2	1.2	1,748	28.3	27.9	1,736
Fourth	50.2	48.1	0.9	0.9	1,892	23.1	22.2	1,885
Highest	44.3	41.4	0.8	0.8	1,740	18.0	16.8	1,735
Total	56.2	54.7	1.1	1.0	9,068	25.8	25.2	9,011

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.2 Source of mosquito nets

Percent distribution of mosquito nets by source of net, according to background characteristics, Liberia DHS 2019-20

Background Characteristic	Mass distribution campaign	Prenatal care visit	Immunization visit	Government health facility	Private health facility	Pharmacy	Shop/market	Community health volunteer/assistant	Religious institution	School	Street corner	Neighbor/friend/relative	Other	Don't know	Total	Number of mosquito nets
Type of net																
ITN ¹	82.5	4.5	1.6	0.2	0.1	0.1	6.1	0.0	0.1	0.0	2.8	1.6	0.2	0.0	100.0	9,513
Other ²	0.0	0.0	0.0	0.0	0.0	0.0	69.9	1.0	0.0	0.0	10.7	10.8	6.1	1.6	100.0	252
Residence																
Urban	72.8	3.9	1.5	0.1	0.2	0.1	12.8	0.1	0.1	0.1	5.4	2.5	0.4	0.1	100.0	5,055
Greater Monrovia	49.5	4.5	1.5	0.0	0.5	0.2	26.7	0.0	0.1	0.0	12.5	3.9	0.2	0.2	100.0	1,945
Other urban	87.3	3.5	1.5	0.2	0.0	0.0	4.2	0.1	0.0	0.1	1.0	1.5	0.5	0.0	100.0	3,111
Rural	88.6	5.0	1.7	0.2	0.1	0.0	2.2	0.1	0.1	0.0	0.4	1.2	0.4	0.0	100.0	4,709
Region																
North Western	86.5	5.3	1.0	0.3	0.1	0.0	3.6	0.0	0.4	0.0	0.6	1.6	0.5	0.0	100.0	1,025
South Central	63.7	5.2	1.6	0.2	0.3	0.2	17.0	0.1	0.1	0.1	8.0	3.0	0.4	0.1	100.0	3,353
South Eastern A	86.4	6.6	0.9	0.3	0.0	0.0	2.8	0.1	0.0	0.0	0.9	1.7	0.2	0.0	100.0	731
South Eastern B	87.1	6.6	1.6	0.1	0.1	0.0	2.0	0.0	0.0	0.0	0.7	1.8	0.1	0.0	100.0	579
North Central	90.6	2.9	1.9	0.1	0.0	0.0	2.8	0.0	0.0	0.0	0.2	1.0	0.4	0.1	100.0	4,077
County																
Bomi	90.9	2.8	0.3	0.0	0.0	0.1	4.1	0.0	0.0	0.0	0.5	1.0	0.4	0.0	100.0	389
Bong	90.0	2.9	1.9	0.2	0.1	0.0	2.2	0.0	0.0	0.0	0.0	1.9	0.7	0.1	100.0	1,123
Gbarpolu	88.2	3.8	1.1	0.2	0.5	0.0	2.2	0.0	0.5	0.0	0.5	1.3	1.7	0.0	100.0	220
Grand Bassa	85.6	5.8	3.1	0.0	0.0	0.0	1.3	0.4	0.0	0.0	1.6	0.9	1.2	0.0	100.0	636
Grand Cape Mount	81.6	8.3	1.7	0.6	0.0	0.0	3.9	0.0	0.8	0.0	0.7	2.3	0.0	0.0	100.0	416
Grand Gedeh	80.0	8.4	1.6	0.6	0.0	0.0	4.8	0.2	0.0	0.0	2.2	1.7	0.5	0.0	100.0	303
Grand Kru	86.2	6.6	2.5	0.3	0.0	0.0	1.5	0.0	0.0	0.0	1.6	1.1	0.3	0.0	100.0	147
Lofa	93.4	3.1	1.6	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.3	0.7	0.0	0.0	100.0	1,034
Margibi	84.5	4.2	0.8	1.6	0.2	0.0	5.8	0.0	0.0	0.6	0.8	1.3	0.3	0.0	100.0	512
Maryland	85.2	8.0	1.5	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.6	2.0	0.1	0.0	100.0	275
Montserrado	52.5	5.2	1.3	0.0	0.5	0.2	24.2	0.1	0.1	0.0	11.5	4.0	0.2	0.2	100.0	2,204
Nimba	89.5	2.8	2.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.3	0.6	0.6	0.1	100.0	1,921
River Cess	90.3	7.5	0.0	0.3	0.1	0.0	0.5	0.2	0.0	0.0	0.0	1.0	0.1	0.0	100.0	146
River Gee	91.4	4.2	0.9	0.1	0.2	0.0	1.0	0.0	0.0	0.0	0.3	2.0	0.0	0.0	100.0	157
Sinoe	91.2	4.1	0.6	0.1	0.0	0.0	1.8	0.0	0.0	0.0	0.1	2.0	0.0	0.0	100.0	282
Wealth quintile																
Lowest	87.2	5.4	2.2	0.3	0.0	0.0	3.0	0.0	0.0	0.0	0.4	0.9	0.5	0.1	100.0	2,011
Second	90.7	4.8	1.5	0.2	0.0	0.1	1.3	0.2	0.0	0.0	0.2	1.0	0.0	0.1	100.0	2,477
Middle	86.7	4.1	1.5	0.1	0.1	0.0	4.2	0.0	0.2	0.0	1.3	1.9	0.1	0.0	100.0	2,104
Fourth	74.5	3.6	1.6	0.1	0.1	0.2	11.7	0.0	0.0	0.2	4.5	2.5	0.9	0.0	100.0	1,745
Highest	51.0	3.9	1.2	0.2	0.7	0.0	25.9	0.0	0.2	0.0	12.3	3.7	0.6	0.3	100.0	1,427
Total	80.4	4.4	1.6	0.2	0.1	0.1	7.7	0.1	0.1	0.0	3.0	1.8	0.4	0.1	100.0	9,764

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).² Any net that is not an ITN

Table 12.3 Access to an insecticide-treated net (ITN)

Percent distribution of the de facto household population by number of ITNs the household owns, and percentage with access to an ITN, according to number of persons who stayed in the household the night before the survey, Liberia DHS 2019-20

Number of ITNs ¹	Number of persons who stayed in the household the night before the survey								Total
	1	2	3	4	5	6	7	8+	
0	58.6	51.4	46.4	44.3	40.6	37.0	41.4	39.7	42.1
1	33.5	33.5	32.3	28.0	21.7	17.3	18.8	12.7	21.2
2	5.6	10.7	14.3	18.7	22.6	22.5	18.3	13.6	17.2
3	1.5	3.0	5.5	6.0	10.9	16.2	11.8	16.8	11.4
4	0.6	0.8	1.0	2.0	2.2	4.9	6.7	11.3	5.2
5	0.1	0.3	0.4	0.5	0.9	1.5	1.0	3.2	1.4
6	0.0	0.3	0.0	0.4	0.8	0.4	2.1	1.1	0.8
7	0.1	0.0	0.1	0.1	0.2	0.1	0.0	1.7	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,236	2,255	3,875	5,442	6,221	5,887	4,811	10,475	40,202
Percentage of the de facto population with access to an ITN ^{1,2}	41.4	48.6	42.9	41.7	41.8	43.9	35.7	33.6	39.7

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).

² Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.4 Access to an ITN according to background characteristics

Percentage of the de facto population with access to an ITN in the household, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of the de facto population with access to an ITN ¹	Number of persons
Residence		
Urban	35.8	23,089
Greater Monrovia	25.7	12,159
Other urban	47.1	10,931
Rural	44.9	17,113
Region		
North Western	47.7	3,386
South Central	29.7	18,318
South Eastern A	46.2	2,544
South Eastern B	42.2	2,335
North Central	49.5	13,620
County		
Bomi	44.0	1,312
Bong	47.8	3,964
Gbarpolu	52.4	649
Grand Bassa	44.5	2,317
Grand Cape Mount	48.9	1,425
Grand Gedeh	52.7	887
Grand Kru	35.1	733
Lofa	48.7	3,473
Margibi	38.1	2,242
Maryland	42.9	1,122
Montserrado	25.9	13,759
Nimba	51.0	6,183
River Cess	38.9	635
River Gee	51.6	480
Sinoe	45.2	1,022
Wealth quintile		
Lowest	41.6	7,994
Second	50.5	8,008
Middle	42.3	8,030
Fourth	35.6	8,060
Highest	28.6	8,110
Total	39.7	40,202

¹ Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.5 Use of mosquito nets by persons in the household

Percentage of the de facto household population who slept the night before the survey under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among the de facto household population in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Household population			Household population in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of persons	Percentage who slept under an ITN ¹ last night	Number of persons
Age					
<5	45.2	44.3	5,903	71.7	3,644
5-14	34.9	34.1	12,089	58.7	7,019
15-34	36.4	35.0	12,055	65.2	6,483
35-49	47.5	46.3	5,461	78.2	3,235
50+	47.8	46.6	4,694	76.0	2,876
Sex					
Male	38.9	37.8	19,618	65.4	11,353
Female	41.2	40.1	20,584	69.3	11,905
Residence					
Urban	36.8	35.1	23,089	66.1	12,274
Greater Monrovia	27.6	25.0	12,159	60.3	5,050
Other urban	47.1	46.4	10,931	70.2	7,224
Rural	44.5	44.2	17,113	68.9	10,984
Region					
North Western	47.8	47.6	3,386	70.7	2,280
South Central	30.3	28.5	18,318	61.8	8,445
South Eastern A	45.0	44.6	2,544	71.9	1,577
South Eastern B	38.5	38.3	2,335	61.7	1,449
North Central	50.7	50.1	13,620	71.7	9,507
County					
Bomi	43.6	43.6	1,312	72.2	792
Bong	47.7	47.4	3,964	70.9	2,649
Gbarpolu	49.3	49.0	649	68.8	462
Grand Bassa	37.5	37.1	2,317	56.7	1,516
Grand Cape Mount	51.1	50.6	1,425	70.4	1,026
Grand Gedeh	54.8	53.9	887	77.3	619
Grand Kru	35.0	34.8	733	66.4	385
Lofa	51.1	50.9	3,473	74.6	2,369
Margibi	40.5	40.4	2,242	73.7	1,228
Maryland	36.3	36.1	1,122	55.3	733
Montserrado	27.4	25.1	13,759	60.6	5,701
Nimba	52.4	51.3	6,183	70.7	4,489
River Cess	40.6	40.6	635	76.6	336
River Gee	48.9	48.8	480	70.5	332
Sinoe	39.2	39.0	1,022	64.1	622
Wealth quintile					
Lowest	41.3	41.0	7,994	68.1	4,808
Second	51.0	50.7	8,008	71.2	5,706
Middle	43.0	42.2	8,030	70.7	4,795
Fourth	36.3	34.8	8,060	65.7	4,267
Highest	28.9	26.5	8,110	58.4	3,683
Total	40.1	39.0	40,202	67.4	23,258

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.6 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of existing ITNs ¹ used last night	Number of ITNs ¹
Residence		
Urban	76.8	4,840
Greater Monrovia	79.6	1,769
Other urban	75.1	3,070
Rural	72.6	4,673
Region		
North Western	70.6	1,020
South Central	75.3	3,159
South Eastern A	72.3	724
South Eastern B	70.9	577
North Central	76.3	4,033
County		
Bomi	68.4	387
Bong	77.4	1,117
Gbarpolu	68.7	219
Grand Bassa	60.6	629
Grand Cape Mount	73.7	414
Grand Gedeh	74.2	297
Grand Kru	78.7	146
Lofa	79.9	1,028
Margibi	79.7	511
Maryland	66.3	274
Montserrado	78.8	2,019
Nimba	73.6	1,889
River Cess	81.5	146
River Gee	71.6	157
Sinoe	65.5	281
Wealth quintile		
Lowest	72.1	1,999
Second	74.0	2,461
Middle	74.7	2,070
Fourth	77.1	1,674
Highest	77.1	1,309
Total	74.7	9,513

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.7 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among children under age 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Children under age 5 in all households			Children under age 5 in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of children	Percentage who slept under an ITN ¹ last night	Number of children
Age in months					
<12	54.5	52.8	1,198	78.8	803
12-23	46.1	45.2	1,081	72.9	670
24-35	44.1	43.7	1,094	71.7	667
36-47	41.2	40.1	1,279	66.2	775
48-59	40.6	40.0	1,251	68.7	729
Sex					
Male	44.8	43.5	2,934	70.3	1,816
Female	45.6	45.0	2,969	73.1	1,828
Residence					
Urban	43.8	42.3	3,144	72.3	1,839
Greater Monrovia	35.0	32.5	1,548	67.3	748
Other urban	52.3	51.7	1,597	75.7	1,091
Rural	46.9	46.5	2,759	71.1	1,805
Region					
North Western	51.3	51.0	510	72.4	359
South Central	36.8	35.2	2,459	68.1	1,272
South Eastern A	47.5	47.1	367	76.1	227
South Eastern B	43.1	43.0	333	68.1	210
North Central	53.0	52.4	2,234	74.3	1,576
County					
Bomi	50.6	50.6	177	76.0	118
Bong	49.7	49.4	631	72.9	427
Gbarpolu	54.2	53.4	103	72.4	76
Grand Bassa	39.5	39.3	367	60.1	240
Grand Cape Mount	50.6	50.2	231	69.9	166
Grand Gedeh	58.0	57.0	131	80.8	92
Grand Kru	41.8	41.7	117	73.8	66
Lofa	53.8	53.8	503	77.1	351
Margibi	44.8	44.8	306	79.0	174
Maryland	38.8	38.6	153	59.6	99
Montserrado	34.9	32.8	1,786	68.2	858
Nimba	54.5	53.5	1,100	73.8	797
River Cess	41.5	41.5	96	79.2	50
River Gee	55.8	55.8	63	78.6	45
Sinoe	41.7	41.5	141	69.2	84
Wealth quintile					
Lowest	41.7	41.2	1,410	66.8	870
Second	55.6	55.2	1,317	75.5	964
Middle	47.0	46.6	1,148	75.5	709
Fourth	41.4	40.2	1,043	69.7	601
Highest	38.2	35.6	985	70.1	501
Total	45.2	44.3	5,903	71.7	3,644

Note: Table is based on children who stayed in the household the night before the interview.

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.8 Use of mosquito nets by pregnant women

Percentage of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among pregnant women age 15-49 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Among pregnant women age 15-49 in all households			Among pregnant women age 15-49 in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of pregnant women	Percentage who slept under an ITN ¹ last night	Number of pregnant women
Residence					
Urban	47.7	45.3	333	79.1	191
Greater Monrovia	36.9	34.2	172	*	70
Other urban	59.2	57.1	161	76.2	121
Rural	48.2	48.1	267	77.2	166
Region					
North Western	57.5	57.5	54	86.6	36
South Central	37.2	35.4	258	76.8	119
South Eastern A	44.5	42.5	39	75.5	22
South Eastern B	42.0	42.0	42	75.2	23
North Central	60.6	59.1	208	78.2	157
County					
Bomi	(59.4)	(59.4)	17	*	11
Bong	49.8	49.8	72	(71.0)	51
Gbarpolu	(49.3)	(49.3)	12	(82.2)	7
Grand Bassa	(37.4)	(37.4)	33	(54.1)	23
Grand Cape Mount	(60.3)	(60.3)	25	(85.9)	18
Grand Gedeh	(56.5)	(50.1)	12	*	9
Grand Kru	(31.4)	(31.4)	15	*	7
Lofa	(60.2)	(60.2)	43	(84.4)	31
Margibi	(45.3)	(45.3)	34	(82.6)	19
Maryland	(50.4)	(50.4)	18	(76.0)	12
Montserrado	35.7	33.3	191	(82.0)	77
Nimba	(69.2)	(66.0)	92	(80.5)	76
River Cess	(48.3)	(48.3)	13	*	8
River Gee	(43.2)	(43.2)	8	*	4
Sinoe	(28.8)	(28.8)	13	*	5
Education					
No education	43.6	43.4	160	75.1	92
Elementary	57.7	55.0	183	80.6	125
Junior high	52.9	52.9	130	85.1	81
Senior high	37.3	34.3	104	(65.8)	54
Higher	*	*	23	*	5
Wealth quintile					
Lowest	44.8	44.8	147	73.3	90
Second	63.1	62.4	122	82.1	93
Middle	52.6	52.6	123	81.3	79
Fourth	39.2	35.1	111	(69.4)	56
Highest	(37.8)	(34.7)	98	*	39
Total	47.9	46.5	600	78.2	357

Note: Table is based on women who stayed in the household the night before the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2016 LMIS, 2013 LDHS, and 2011 LMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.9 Use of intermittent preventive treatment (IPTp) by women during pregnancy

Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy that resulted in the last live birth, received one or more doses of SP/Fansidar, received two or more doses of SP/Fansidar, and received three or more doses of SP/Fansidar, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who received one or more doses of SP/Fansidar	Percentage who received two or more doses of SP/Fansidar	Percentage who received three or more doses of SP/Fansidar	Number of women with a live birth in the 2 years preceding the survey
Residence				
Urban	90.1	69.2	37.7	1,129
Greater Monrovia	87.8	64.1	29.9	574
Other urban	92.4	74.5	45.8	555
Rural	90.6	71.2	43.4	967
Region				
North Western	88.3	70.7	45.8	184
South Central	88.2	64.4	34.3	926
South Eastern A	92.4	70.4	40.9	140
South Eastern B	90.7	73.2	38.5	112
North Central	93.0	76.8	46.8	733
County				
Bomi	94.8	81.1	60.2	58
Bong	89.8	69.9	26.5	231
Gbarpolu	80.3	65.0	32.2	37
Grand Bassa	88.9	56.8	38.1	151
Grand Cape Mount	87.4	66.3	42.0	90
Grand Gedeh	90.9	63.5	35.8	53
Grand Kru	85.7	61.6	31.8	43
Lofa	95.1	78.6	45.4	172
Margibi	89.0	70.4	44.2	119
Maryland	93.6	81.6	44.4	48
Montserrado	87.9	65.0	31.6	656
Nimba	94.2	80.7	61.6	330
River Cess	97.4	88.1	46.0	32
River Gee	94.0	77.4	38.9	22
Sinoe	91.0	66.8	42.8	55
Education				
No education	90.6	72.9	44.1	683
Elementary	89.7	69.9	40.7	565
Junior high	91.5	69.1	43.0	381
Senior high	87.4	66.3	34.2	388
Higher	(100.0)	(72.1)	(22.3)	78
Wealth quintile				
Lowest	88.4	69.8	45.7	507
Second	94.0	77.2	47.5	444
Middle	91.3	69.5	40.8	394
Fourth	88.6	70.6	34.6	411
Highest	89.2	61.8	29.4	340
Total	90.3	70.1	40.3	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 12.10 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey, and among children under age 5 with a fever, percentage for whom advice or treatment was sought, percentage for whom advice or treatment was sought the same or next day following the onset of fever, and percentage who had blood taken from a finger or heel for testing, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Children under age 5		Children under age 5 with fever			
	Percentage with a fever in the 2 weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought ¹	Percentage for whom advice or treatment was sought the same or next day ¹	Percentage who had blood taken from a finger or heel for testing	Number of children
Age in months						
<12	26.7	1,098	80.6	45.5	46.1	293
12-23	28.4	937	79.6	45.3	54.9	267
24-35	25.8	873	78.2	49.9	44.7	225
36-47	23.2	978	86.2	48.7	54.3	227
48-59	20.9	980	80.1	49.8	44.5	205
Sex						
Male	25.1	2,431	82.1	47.7	50.0	611
Female	24.9	2,434	79.7	47.5	48.1	606
Residence						
Urban	23.7	2,615	87.1	55.3	46.8	620
Greater Monrovia	23.8	1,326	90.3	57.8	40.4	316
Other urban	23.6	1,289	83.8	52.6	53.4	304
Rural	26.5	2,251	74.4	39.7	51.3	597
Region						
North Western	35.4	419	80.4	52.5	58.6	148
South Central	26.5	2,123	84.4	47.6	42.5	562
South Eastern A	33.7	302	85.5	43.2	59.6	102
South Eastern B	33.4	268	77.7	45.9	54.0	89
North Central	18.0	1,755	74.3	47.1	51.4	315
County						
Bomi	42.7	143	91.6	58.8	72.8	61
Bong	25.5	540	73.9	42.9	42.4	138
Gbarpolu	35.4	86	64.8	38.6	39.9	30
Grand Bassa	29.5	341	74.5	37.5	39.9	101
Grand Cape Mount	29.8	190	76.6	53.0	53.3	57
Grand Gedeh	30.0	111	85.8	43.9	65.3	33
Grand Kru	21.4	96	74.3	50.9	41.8	21
Lofa	11.4	375	(77.9)	(45.4)	(62.3)	43
Margibi	34.1	256	89.2	35.6	55.7	87
Maryland	40.6	123	77.2	39.3	57.7	50
Montserrado	24.6	1,526	85.9	53.2	40.1	375
Nimba	16.1	839	73.6	52.0	57.2	135
River Cess	36.3	74	90.0	37.1	75.9	27
River Gee	39.4	48	82.5	57.8	57.5	19
Sinoe	35.4	117	82.4	46.7	44.3	41
Mother's education						
No education	23.4	1,723	75.9	43.8	47.6	403
Elementary	25.6	1,236	78.8	42.0	45.4	317
Junior high	25.9	852	82.8	53.5	50.2	220
Senior high	27.7	866	88.3	54.0	52.3	240
Higher	19.3	189	*	*	*	36
Wealth quintile						
Lowest	23.2	1,169	70.5	33.5	45.8	271
Second	25.4	1,061	76.5	47.7	53.5	270
Middle	22.8	912	75.4	39.9	51.9	208
Fourth	27.6	913	89.1	57.3	41.4	252
Highest	26.7	811	95.1	61.2	53.5	216
Total	25.0	4,866	80.9	47.6	49.0	1,217

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, or black baggers/drug peddlers. Excludes advice or treatment from a traditional practitioner.

Table 12.11 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Liberia DHS 2019-20

Source	Percentage for whom advice or treatment was sought from each source:	
	Among children with fever	Among children with fever for whom advice or treatment was sought
Public sector	39.0	47.9
Government hospital	12.3	15.1
Government health center	3.4	4.2
Government health clinic	22.6	27.8
Mobile clinic	1.0	1.2
Private medical sector	38.7	47.5
Private hospital/center/clinic	10.2	12.5
Pharmacy	26.1	32.1
Private doctor	2.1	2.5
Mobile clinic	1.9	2.4
Other private medical sector	0.1	0.1
Other private sector	4.9	6.0
Shop	1.4	1.7
Traditional practitioner	0.5	0.6
Black bagger/drug peddler	3.0	3.7
Other	1.8	2.3
Number of children	1,217	990

Table 12.12 Type of antimalarial drugs used

Among children under age 5 with a fever in the 2 weeks preceding the survey who took any antimalarial medication, percentage who took specific antimalarial drugs, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of children who took:									Number of children with fever who took anti-malarial drug
	Any ACT	SP/ Fansidar	Chloroquine	Amodia- quine	Quinine pills	Quinine injection/IV	Artesunate rectal	Artesunate injection/IV	Other anti- malarial	
Age in months										
<6	(43.7)	(3.4)	(14.6)	(37.9)	(7.8)	(0.5)	(8.8)	(0.0)	(0.9)	42
6-11	37.1	8.1	2.7	34.7	14.8	0.9	0.4	4.1	1.6	69
12-23	43.3	8.9	1.6	40.9	4.1	0.1	1.1	7.2	1.1	139
24-35	43.7	3.7	0.4	39.9	11.4	2.0	1.4	4.1	0.5	127
36-47	36.2	5.5	1.0	57.7	1.5	0.5	3.5	0.3	0.2	140
48-59	43.4	7.0	2.4	45.4	3.3	0.0	4.6	2.5	4.9	117
Sex										
Male	43.8	7.3	1.3	42.1	4.0	0.2	1.2	4.0	2.6	322
Female	38.4	5.3	3.5	46.7	8.6	1.2	4.4	2.7	0.4	312
Residence										
Urban	44.2	4.7	1.6	43.7	8.6	0.2	3.6	4.5	2.8	291
Greater Monrovia	(52.6)	(4.1)	(0.0)	(47.7)	(11.2)	(0.0)	(7.3)	(1.7)	(0.0)	122
Other urban	38.1	5.2	2.8	40.8	6.7	0.3	1.0	6.5	4.8	168
Rural	38.6	7.7	3.0	44.9	4.3	1.1	2.0	2.4	0.4	343
Region										
North Western	44.8	16.2	0.0	39.4	4.7	2.0	0.3	0.8	0.2	88
South Central	49.2	4.8	3.4	37.9	8.2	0.3	4.4	4.0	1.3	250
South Eastern A	44.1	13.9	1.6	36.2	4.8	2.3	3.0	4.1	0.5	66
South Eastern B	30.8	0.8	3.1	56.8	3.5	0.6	1.6	4.5	0.3	50
North Central	30.0	2.3	2.2	55.2	5.6	0.0	2.0	3.2	3.2	181
Mother's education										
No education	43.5	8.2	4.2	40.0	3.9	1.6	3.0	2.9	0.2	226
Elementary	36.5	4.2	2.7	50.6	4.4	0.2	1.7	1.0	0.0	178
Junior high	32.2	2.5	0.9	52.1	10.7	0.0	1.2	2.3	0.3	107
Senior high	51.5	8.7	0.0	42.8	6.0	0.3	5.9	6.9	8.5	105
Higher	*	*	*	*	*	*	*	*	*	18
Wealth quintile										
Lowest	33.0	5.1	3.9	49.1	5.9	0.5	2.2	1.0	0.3	151
Second	36.2	9.1	1.1	50.2	4.2	0.4	0.9	2.5	0.6	167
Middle	36.7	6.0	5.9	41.8	3.5	0.7	3.8	3.4	5.0	115
Fourth	45.8	2.5	0.6	46.8	9.5	1.6	0.2	4.8	1.9	111
Highest	64.0	8.2	0.0	25.9	9.9	0.3	9.1	7.1	0.2	90
Total	41.2	6.3	2.4	44.4	6.2	0.7	2.8	3.4	1.5	634

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

ACT = Artemisinin-based combination therapy

Table 12.13 Coverage of testing for anemia in children

Percentage of eligible children age 6-59 months who were tested for anemia, according to background characteristics (unweighted), Liberia DHS 2019-20

Background characteristic	Percentage tested for anemia	Number of children
Age in months		
6-8	89.5	200
9-11	94.0	151
12-17	96.2	319
18-23	94.6	277
24-35	92.6	592
36-47	93.1	669
48-59	93.7	635
Sex		
Male	93.4	1,404
Female	93.5	1,439
Mother's interview status		
Interviewed	95.0	2,263
Not interviewed but in household	61.9	84
Not interviewed and not in the household ¹	91.7	496
Region		
North Western	91.1	440
South Central	90.4	707
South Eastern A	96.0	447
South Eastern B	96.9	484
North Central	93.9	765
Mother's education²		
No education	93.0	1,033
Elementary	94.8	1,050
Junior high	93.2	222
Senior high	(90.2)	41
Higher	nc	0
Missing	*	1
Wealth quintile		
Lowest	95.9	938
Second	94.5	788
Middle	91.4	582
Fourth	88.9	325
Highest	90.5	210
Total	93.4	2,843

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

nc = No unweighted cases

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.14 Hemoglobin <8.0 g/dl in children

Percentage of children age 6-59 months with hemoglobin lower than 8.0 g/dl, by background characteristics, Liberia DHS 2019-20

Background characteristic	Hemoglobin <8.0 g/dl	Number of children
Age in months		
6-8	6.1	172
9-11	5.6	151
12-17	13.6	281
18-23	15.6	239
24-35	10.4	513
36-47	7.3	598
48-59	5.8	571
Sex		
Male	8.6	1,238
Female	9.2	1,286
Mother's interview status		
Interviewed	8.8	2,028
Not interviewed but in household	7.5	56
Not interviewed and not in the household ¹	9.7	440
Residence		
Urban	7.8	1,311
Greater Monrovia	6.6	664
Other urban	9.0	647
Rural	10.1	1,213
Region		
North Western	11.2	226
South Central	9.2	1,055
South Eastern A	7.1	172
South Eastern B	10.7	144
North Central	8.0	926
County		
Bomi	15.2	85
Bong	8.3	283
Gbarpolu	6.2	45
Grand Bassa	14.6	175
Grand Cape Mount	10.1	96
Grand Gedeh	10.1	60
Grand Kru	14.4	51
Lofa	1.5	190
Margibi	12.0	127
Maryland	9.4	66
Montserrado	7.5	754
Nimba	10.5	453
River Cess	1.9	46
River Gee	6.8	26
Sinoe	7.9	67
Mother's education²		
No education	9.3	775
Elementary	11.3	914
Junior high	1.7	303
Senior high	(1.7)	92
Higher	nc	0
Missing	*	1
Wealth quintile		
Lowest	11.4	626
Second	9.3	562
Middle	9.2	506
Fourth	9.3	458
Highest	3.3	373
Total	8.9	2,524

Note: Table is based on children who stayed in the household the night before the interview. Prevalence of anemia is based on hemoglobin levels and is adjusted for altitude using CDC formulas (CDC 1998). Hemoglobin is measured in grams per deciliter (g/dl). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

nc = No unweighted cases

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Key Findings

- **Knowledge about HIV transmission and prevention:** 33% of women and 35% of men age 15-49 have comprehensive knowledge about the modes of HIV transmission and prevention.
- **Knowledge of mother-to-child transmission of HIV:** 53% of women and 42% of men know that HIV can be transmitted during pregnancy, labor/delivery, or breastfeeding. Additionally, 54% of women and 40% of men know that the risk of mother-to-child transmission can be reduced by the mother taking special drugs.
- **Discriminatory attitudes:** 53% of women and 50% of men think that children living with HIV should not be able to attend school with children who are HIV negative; 62% of women and 54% of men would not buy fresh vegetables from a shopkeeper with HIV.
- **Sexual partners:** Among respondents who had sex in the past 12 months with a partner who neither was their spouse nor lived with them, 15% of women and 31% of men used a condom during their last sexual intercourse with such a partner.
- **Knowledge about HIV transmission and prevention among young people:** 32% of young women and 30% of young men age 15-24 have comprehensive knowledge of HIV.

Acquired immunodeficiency syndrome (AIDS) is one of the most serious public health and development challenges facing the world today. AIDS is caused by the human immunodeficiency virus (HIV). HIV weakens the immune system, making the body susceptible to secondary infections and opportunistic diseases. In Liberia, the main routes of HIV transmission are heterosexual contact and transmission from mother to child during pregnancy, childbirth, and breastfeeding.

The future course of Liberia's HIV epidemic depends on many variables: provision and uptake of HIV testing, access to care and antiretroviral therapy (ART), levels of HIV-related knowledge among the general population, social stigmatization, risk behavior modification, and access to high-quality services for sexually transmitted infections (STIs). The principal objective of this chapter is to assess the prevalence of relevant knowledge, attitudes, and behaviors at the national level as well as within geographic and socioeconomic subpopulations. This information will help the National AIDS Control Program in Liberia better target those groups of individuals most in need of information and testing and treatment services.

13.1 HIV KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

The 2019-20 LDHS included a series of questions to measure respondents' knowledge and attitudes regarding HIV. Women and men age 15-49 were first asked whether they had heard of HIV. Those who reported having heard of HIV were asked additional questions regarding the various modes of prevention, including whether it is possible to reduce the chances of getting HIV by having just one faithful sex partner and using a condom during every sexual encounter.

Ninety-five percent of women and 96% of men age 15-49 have heard of HIV (data not shown). Seventy-three percent of women know that using condoms reduces the risk of HIV transmission, and 79% know that the risk of transmission can be reduced by having one uninfected sexual partner. Among men, 83% know that using condoms reduces the risk of transmission, while 85% know that the risk of HIV transmission can be reduced by having only one uninfected sexual partner. Two-thirds of women and 77% of men know both of these methods for reducing the risk of HIV (**Table 13.1**).

Trends: Among women, there has been little change in knowledge of prevention methods since 2013. However, knowledge among men has increased. In 2013, 68% of men knew that consistent use of condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV, as compared with 77% in 2019-20.

Patterns by background characteristics

- Among both women and men, knowledge of prevention methods is lowest in the youngest age group (15-19 years).
- Among women, knowledge of HIV prevention methods varies only minimally across urban and rural areas. However, among men, knowledge is lowest in rural areas (67% know both methods) and highest in Greater Monrovia (87%).
- By county, knowledge of both methods ranges from 58% in Bomi to 85% in Sinoe among women and from 49% in Grand Cape Mount to 86% in Montserrado and Sinoe among men.
- The level of knowledge of HIV prevention methods generally increases with increasing education among both women and men. Among women, there is little variance in knowledge of prevention methods according to household wealth. Among men, however, knowledge of both prevention methods is lowest in the bottom two wealth quintiles (69% each) and highest in the fourth quintile (88%).

Comprehensive knowledge of HIV

Knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Sample: Women and men age 15-24 and 15-49

The two most common local misconceptions about HIV transmission in Liberia are that HIV can be transmitted through mosquitoes and sharing of food. The survey results showed that 33% of women and 35% of men age 15-49 have comprehensive knowledge of HIV (**Table 13.2**).

Trends: Among women, after a large increase from 19% in 2007 to 37% in 2013, comprehensive knowledge decreased to 33% in 2019-20. A different pattern is observed in men, among whom comprehensive knowledge increased slightly from 32% in 2007 to 35% in 2019-20.

13.2 KNOWLEDGE ABOUT MOTHER-TO-CHILD TRANSMISSION

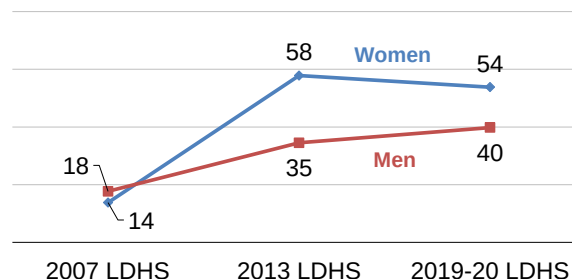
Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents were asked whether HIV can be transmitted from a mother to her child during pregnancy, during delivery, or by breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs during pregnancy.

Roughly two-thirds of women age 15-49 know that HIV can be transmitted from mother to child during pregnancy, during delivery, or through breastfeeding; 53% are familiar with all three modes of mother-to-child transmission. Knowledge of MTCT is somewhat lower among men, with slightly more than half of men age 15-49 knowing each of the three modes of transmission and 42% knowing all three. Fifty-four percent of women and 40% of men know that the risk of MTCT can be prevented by the mother taking special drugs (**Table 13.3**).

Trends: Knowledge of medications to prevent MTCT increased from 2007 to 2013 among both women and men. However, while continuing to increase between 2013 and 2019-20 among men (from 35% to 40%), knowledge decreased among women (from 58% to 54%) (**Figure 13.1**).

Figure 13.1 Trends in knowledge of mother-to-child transmission (MTCT)

Percentage of women and men age 15-49 who know that the risk of MTCT can be reduced by mother taking special drugs



13.3 DISCRIMINATORY ATTITUDES TOWARDS PEOPLE LIVING WITH HIV

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and their adherence to ART. Thus, reduction of stigma and discrimination in a population is an important indicator of the success of programs targeting HIV prevention and control.

Discriminatory attitudes towards people living with HIV

Women and men are asked two questions to assess discriminatory attitudes towards people living with HIV. Respondents with discriminatory attitudes towards people living with HIV are those who say that they would not buy fresh vegetables from a shopkeeper or vendor if they knew that person had HIV or who say that children living with HIV should not be allowed to attend school with children who do not have HIV.

Sample: Women and men age 15-49 who have heard of HIV or AIDS

Discriminatory attitudes towards people living with HIV are high in Liberia. More than half of women age 15-49 who have heard of HIV do not think that children living with HIV should attend school with children who are HIV negative (53%), and 62% would not buy fresh vegetables from a shopkeeper who has HIV (**Table 13.4**). Among men age 15-49 who have heard of HIV, half do not think that children living with HIV should

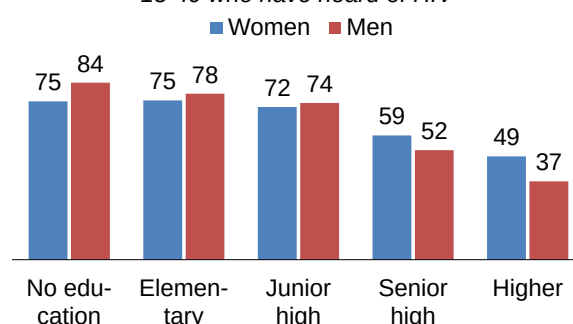
attend school with children who are HIV negative, and 54% would not buy fresh vegetables from a shopkeeper who has HIV. More than two-thirds of women (69%) and 64% of men have one or both of these discriminatory attitudes.

Patterns by background characteristics

- Discriminatory attitudes towards people living with HIV are more common in rural areas than in urban areas. Two-thirds of urban women (67%) have discriminatory attitudes, as compared with 73% of rural women. Among men, 58% of those in urban areas have discriminatory attitudes towards people living with HIV, compared with 73% of those in rural areas.
- There are sizable variations by county in the percentages of women and men who have discriminatory attitudes towards people living with HIV. Among women, the percentage with discriminatory attitudes ranges from 51% in Maryland to 87% in Grand Kru. Among men, the lowest percentage is found in Bomi (44%) and the highest in Grand Cape Mount (85%).
- Discriminatory attitudes tend to decrease with increasing levels of wealth and education. For example, discriminatory attitudes decrease from 84% among men with no formal education to 37% among men with a higher education (**Figure 13.2**).

Figure 13.2 Discriminatory attitudes towards people living with HIV by education

Percentage among women and men age 15-49 who have heard of HIV



Note: Respondents have discriminatory attitudes if they do not think that children living with HIV should be able to attend school with children who are HIV negative or would not buy fresh vegetables from a shopkeeper who has HIV.

13.4 MULTIPLE SEXUAL PARTNERS

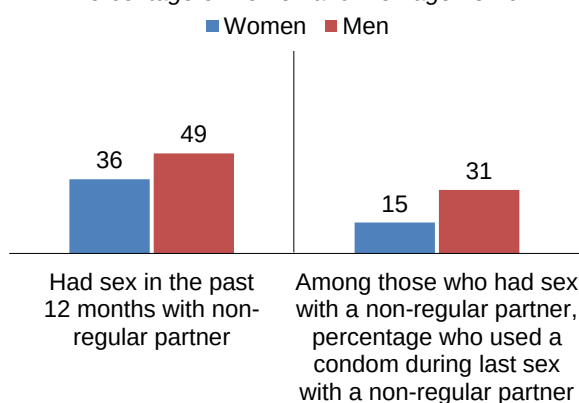
Given that most HIV infections in Liberia are acquired through heterosexual intercourse, information on number of sexual partners and use of safe sex practices is important in designing and monitoring HIV prevention programs.

Table 13.5.1 shows that 7% of women age 15-49 had two or more sexual partners in the 12 months preceding the survey, among whom 17% reported using a condom during their last sexual intercourse. More than one-third of women (36%) had sex in the past 12 months with a partner who neither was their husband nor lived with them, and among these women 15% used a condom during their last sexual intercourse with such a partner (**Figure 13.3**). The mean number of lifetime sexual partners among women is 5.2.

Table 13.5.2 shows that 24% of men age 15-49 reported having two or more sexual partners in the 12 months prior to the survey, among whom 21% reported using a condom during their last sexual intercourse. Forty-nine percent of men reported having sexual intercourse in the past 12 months with a partner who neither was their wife

Figure 13.3 Sex and condom use with high-risk partners

Percentage of women and men age 15-49



nor lived with them, and among these men 31% reported using a condom during their last sexual intercourse with such a partner (**Figure 13.3**). The mean number of lifetime sexual partners among men is 14.4.

Trends: The percentage of women who used a condom during their last sexual intercourse with a partner who neither was their husband nor lived with them increased from 14% in 2007 to 20% in 2013 before decreasing to 15% in 2019-20. The percentage of men who used a condom during last sex with a partner who neither was their wife nor lived with them increased from 26% in 2007 to 42% in 2013, but has since declined to 31% in 2019-2020. Mean numbers of lifetime sexual partners have increased since 2007 among both women (from 4.1 to 5.2) and men (from 10.6 to 14.4).

Patterns by background characteristics

- By marital status, condom use at last sex with a nonmarital, noncohabiting partner is lowest among women and men who are divorced, separated, or widowed. Among men, condom use with nonmarital, noncohabiting partners is higher among those who have never been married than among those who are married or living together with a partner as though married (34% versus 28%). Conversely, among women, condom use with nonmarital, noncohabiting partners is lower among women who have never been married than among those who are married or living together with a partner (16% versus 21%).
- Condom use at last sex with a nonmarital, noncohabiting partner is higher in urban than in rural areas. Ten percent of rural women used a condom during their last sexual intercourse with a nonmarital, noncohabiting partner, as compared with 17% of their urban counterparts. Among men, 20% of those in rural areas used a condom at last sex with a nonmarital, noncohabiting partner, compared with 37% of those in urban areas.
- Condom use at last sex with a nonmarital, noncohabiting partner generally increases with increasing wealth among both women and men, but there is no specific pattern by education. Among women, condom use at last sex with a nonmarital, noncohabiting partner increases from 7% among those with no education to 24% among those with a senior high education before decreasing to 16% among those with a higher education. Among men, use of a condom at last sex with a nonmarital, noncohabiting partner drops from 29% among those with no education to 18% among those with an elementary education before rising steadily to 40% among those with a higher education.

13.5 PAID SEX

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections (STIs) because of compromised power relations and the likelihood of having multiple partners.

Ten percent of men age 15-49 report ever having paid for sexual intercourse, and 5% report that they paid for sexual intercourse in the 12 months preceding the survey. Two-thirds (67%) of those who paid for sexual intercourse in the 12 months preceding the survey reported using a condom during their last paid sexual intercourse (**Table 13.6**).

Trends: There has been little change over time in the percentage of men who pay for sex and who report using a condom at last paid sex. In both 2013 and 2019-2020, 10% of men reported having ever paid for sex and 5% reported paying for sex in the past 12 months. The percentage of men who used a condom at last paid sex in the past 12 months increased from 61% in 2013 to 67% in 2019-2020.

Patterns by background characteristics

- The percentage of men who paid for sex in the 12 months preceding the survey is higher among those age 20-29 (8%) than among those in other age groups (4% or lower).

13.6 COVERAGE OF HIV TESTING SERVICES

Identifying people living with HIV through testing is one of the most important aspects of the response to the HIV epidemic. Diagnosing people with HIV enables them to access treatment services. Use of ART reduces viral loads, which improves individuals' health and life expectancy and greatly reduces their chances of transmitting the virus to others. At a population level, comprehensive testing and treatment programs can reduce HIV incidence. In addition, knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain free of infection.

13.6.1 Awareness of HIV Testing Services and Experience with HIV Testing

Figure 13.4 shows that half of women age 15-49 have ever been tested for HIV and received the results of the last test, while 22% have been tested for HIV in the 12 months preceding the survey and received the results of the last test. Thirty-two percent of men age 15-49 have ever been tested for HIV and received the results of the last test, and 21% have been tested for HIV in the 12 months preceding the survey and received the results of the last test. Forty-five percent of women and 66% of men have never had an HIV test (**Tables 13.7.1 and 13.7.2**).

Trends: Coverage of HIV testing services increased markedly between 2007 and 2013 and then gradually from 2013 to 2019-20. Among women, the percentage who were tested for HIV in the past 12 months and received the results increased from 2% in 2007 to 19% in 2013 and 22% in 2019-20. Among men, the percentage increased from 2% in 2007 to 12% in 2013 and 21% in 2019-20 (**Figure 13.5**).

Patterns by background characteristics

- The percentage of women who have been tested for HIV in the past 12 months and received the results is highest among those age 25-29 (31%) and lowest among those age 15-19 (15%). Among men, those age 25-49 are more likely than those age 15-24 to have been tested for HIV in the past 12 months and to have received the results (28% versus 8%-14%).
- Women and men in rural areas are somewhat less likely than their counterparts in urban areas to have been tested for HIV in the past 12 months and to have received the results. Twenty percent of women and 19%

Figure 13.4 HIV testing

Percentage of women and men age 15-49

■ Women ■ Men

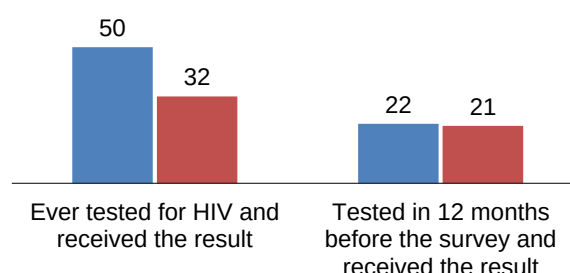
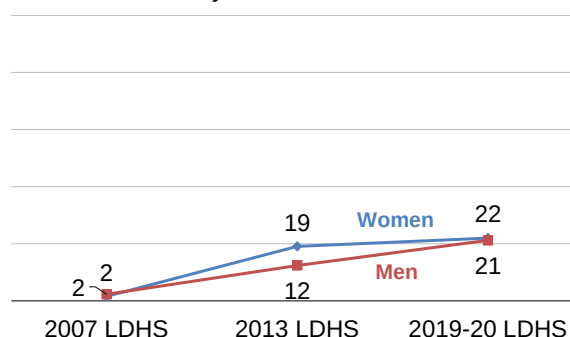


Figure 13.5 Trends in recent HIV testing

Percentage of women and men age 15-49 who were tested for HIV in the year before the survey and received the results



of men in rural areas have been tested for HIV in the past 12 months and received the results, as compared with 23% of women and men in urban areas.

- There are variations in coverage of HIV testing by county. Among women, the percentage who have been tested for HIV in the past 12 months and received the results ranges from 15% in Sinoe to 30% in Bomi (Figure 13.6). Among men, this percentage is lowest in Grand Kru (6%) and highest in Margibi (29%) (Figure 13.7).

Figure 13.6 Recent HIV testing among women by county

Percentage of women age 15-49 who were tested for HIV in the year before the survey and received results

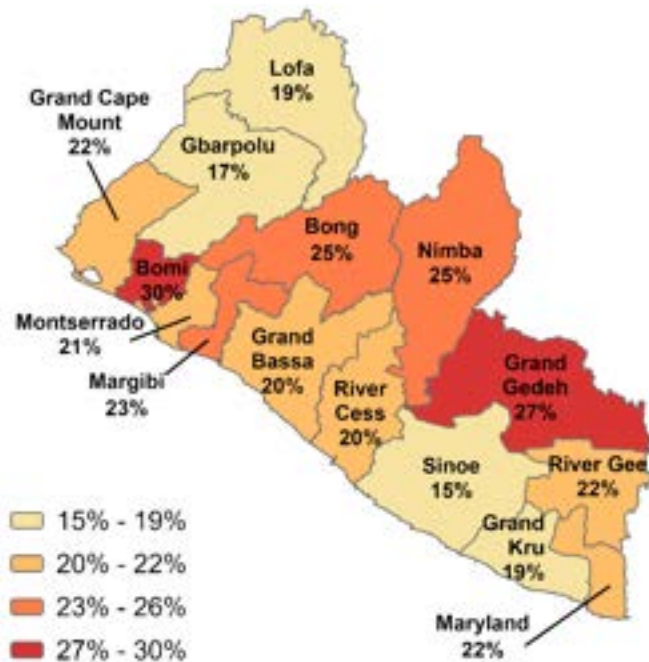
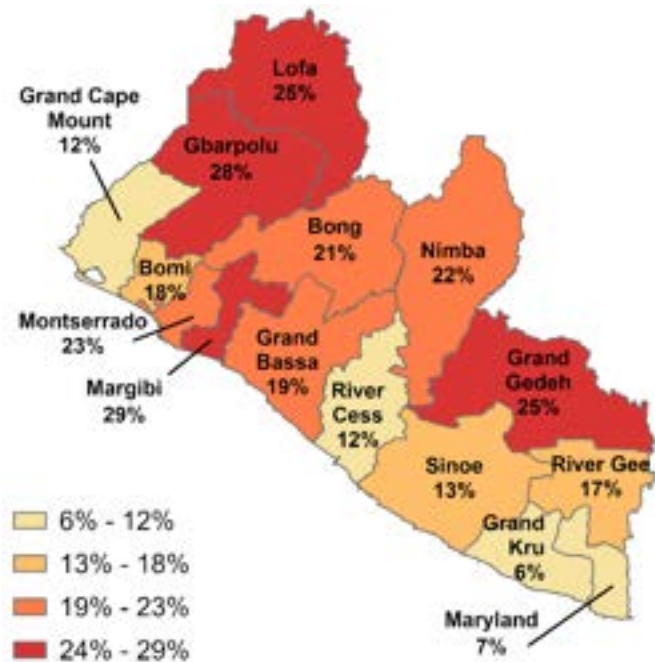


Figure 13.7 Recent HIV testing among men by county

Percentage of men age 15-49 who were tested for HIV in the year before the survey and received results



13.6.2 HIV Testing of Pregnant Women

Testing pregnant women for HIV is a key strategy in diagnosing the HIV status of women to provide them with access to ART and to prevent transmission of HIV to their babies. In Liberia, 56% of women who gave birth in the 2 years preceding the survey received HIV counseling during prenatal care, meaning that someone talked with them about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for HIV (Table 13.8). Thirty-five percent of women were tested for HIV during pregnancy and received the results and post-test counseling. An additional 25% were tested during prenatal care and received the results but did not receive post-test counseling. Thus, a total of 60% of women were tested during prenatal care and received the results. A few women who were not tested during prenatal care were tested during labor and received the results, and thus a total of 63% of women who gave birth in the 2 years before the survey were tested for HIV and received the results either during pregnancy or during labor.

Trends: The percentage of women who were tested for HIV and received the results during prenatal care or labor has changed only minimally over time (64% in 2013 versus 63% in 2019-20).

Patterns by background characteristics

- Although there are slight variations by age in testing for HIV during prenatal care or labor, there is no clear pattern. Coverage of HIV testing during prenatal care or labor is lowest among women age 20-24 (58%) and highest among women age 30-39 (68%).
- By county, coverage of HIV testing during prenatal care or labor ranges from 50% in Grand Kru to over 80% in River Cess and Grand Gedeh.
- Coverage of HIV testing during prenatal care or labor generally increases with increasing education and wealth. For example, the percentage of women who were tested for HIV and received the results during prenatal care or labor increases from 54% among those in the lowest wealth quintile to 71% among those in the highest wealth quintile.

13.6.3 HIV Self-testing

In order to increase uptake of HIV testing services, especially for populations with low access and those at higher risk that would otherwise not get tested, HIV self-testing has recently been introduced as an additional testing strategy. HIV self-testing is when a person collects his or her own specimen (oral fluid or blood), performs an HIV test, and interprets the result, often in a private setting, either alone or with someone he or she trusts (WHO 2016). However, if the result of the test is positive, further testing is required to confirm HIV positivity.

Table 13.9 shows the percentage of women and men age 15-49 who have heard of HIV self-test kits and the percentage who have ever used them. Thirteen percent of men have heard of HIV self-test kits, as compared with 10% of women. Two percent of women and 1% of men reported using HIV self-test kits.

Patterns by background characteristics

- Awareness of HIV self-testing differs between urban and rural areas among women but not men; 11% of women in urban areas have ever heard of HIV self-test kits, compared with 8% of women in rural areas.
- Knowledge of HIV self-testing kits generally increases with increasing education. Among women, knowledge increases from 6% among those with no education to 34% among those with a higher education. Among men, knowledge increases from 7% among those with no education to 22% among those with a higher education.

13.7 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) and symptoms

Respondents who have ever had sex are asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.

Sample: Women and men age 15-49 who have ever had sex

STIs have been found to increase susceptibility to HIV infection (CDC 2014). Overall, 48% of women and 24% of men age 15-49 reported having had an STI or symptoms of an STI in the 12 months prior to the survey (**Table 13.10**). Fifty-six percent of women and 46% of men who had an STI or STI symptoms sought advice or treatment from a clinic, hospital, private doctor, or other health professional (**Table 13.11**). Roughly one-third of women and men with an STI or symptoms sought advice or medicine from a shop or pharmacy.

13.8 HIV/AIDS-RELATED KNOWLEDGE AND BEHAVIOR AMONG YOUNG PEOPLE

This section addresses knowledge related to HIV or AIDS among young people age 15-24 and also assesses the extent to which young people are engaged in behaviors that may place them at risk of acquiring HIV.

13.8.1 Knowledge

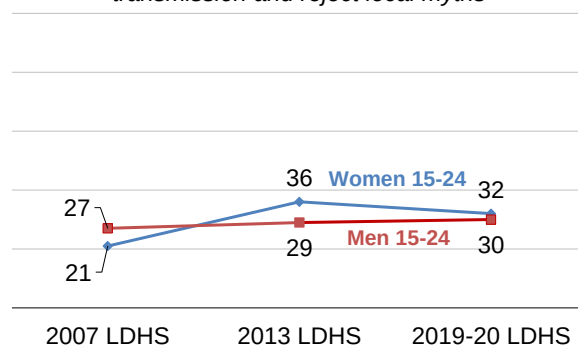
Knowledge of how HIV is transmitted is crucial to enabling people to avoid HIV infection, and this is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviors.

The percentage of young people age 15-24 with comprehensive knowledge about HIV is 32% among young women and 30% among young men (**Table 13.12**).

Trends: Trends in comprehensive knowledge among young people age 15-24 mirror those among respondents age 15-49. The percentage of young women with comprehensive knowledge increased from 21% in 2007 to 36% in 2013 before decreasing to 32% in 2019-2020. Comprehensive knowledge among young men has changed little over time, increasing slightly from 28% in 2007 to 30% in 2019-20 (**Figure 13.8**).

Figure 13.8 Trends in comprehensive HIV knowledge among youth

Percentage of young women and men age 15-24 who know how to prevent HIV transmission and reject local myths



13.8.2 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or acquiring HIV or another STI than young people who initiate sex later. Consistent condom use can reduce such risks.

In Liberia, women tend to initiate sexual activity at younger ages than do men. As shown in **Table 13.13**, 21% of young women age 15-24 had sexual intercourse by age 15, as compared with 11% of their male counterparts. Eighty percent of young women and 60% of young men age 18-24 had sexual intercourse by age 18.

Trends: Among young women age 15-24, the percentage who initiated sexual intercourse before age 15 increased from 17% in 2007 to 23% in 2013 before decreasing slightly to 21% in 2019-20. Among young men age 15-24, 9% had sexual intercourse before age 15 in 2007 and 2013, as compared with 11% in 2019-20.

Patterns by background characteristics

- Young women in rural areas are more likely than their urban counterparts to have sex before age 15 and age 18. Conversely, young men in urban areas are more likely to have sex before age 15 and age 18 than those in rural areas.
- The percentage of young women age 15-24 who had sexual intercourse by age 15 is 14% in Greater Monrovia, as compared with 22% in other urban areas. The trend is reversed among young men age 15-24, with 13% of those in Greater Monrovia having had sexual intercourse by age 15, compared with 10% of those in other urban areas.

- Among young women, there is a strong inverse relationship between level of education and likelihood of having had sex by age 15 or age 18. For example, 34% of young women with no education had sexual intercourse by age 15, as compared with just 7% of those with a higher education. Among young men, the pattern is largely reversed. Thirty-eight percent of young men with no education had sexual intercourse by age 18, compared with 58%-69% of those with an elementary, junior high, or senior high education.

13.8.3 Premarital Sex

As shown in **Table 13.14**, one quarter of never-married women and 38% of never-married men age 15-24 have never had sexual intercourse. These percentages decrease markedly with age; for example, among young men who have never been married, the percentage who have never had sex decreases from 71% among those age 15-17 to just 1% among those age 23-24.

13.8.4 Multiple Sexual Partners

As shown in **Tables 13.15.1** and **13.15.2**, 8% of young women and 20% of young men age 15-24 had two or more sexual partners in the 12 months preceding the survey. Among young people with two or more sexual partners in the past 12 months, 22% of young women and 31% of young men used a condom during their last sexual intercourse.

Just over half of young women (52%) and 57% of young men had sexual intercourse in the past 12 months with a partner who neither was their spouse nor lived with them. Among young people who had sex in the past 12 months with a partner who neither was their spouse nor lived with them, 17% of young women and 34% of young men used a condom the last time they had sex with such a partner.

Condom use at last sex with a nonmarital, noncohabiting partner is much higher among young people in urban areas than among those in rural areas. Among women who had sex with a nonmarital, noncohabiting partner in the past 12 months, 21% of those in urban areas used a condom the last time they had sex with such a partner, as compared with just 8% of those in rural areas. Among men, 41% of those in urban areas used a condom at last sex with a nonmarital, noncohabiting partner, compared with 17% of those in rural areas.

13.8.5 Coverage of HIV Testing Services

Seeking an HIV test may be more difficult for young people than adults because many young people lack experience in accessing health services for themselves and because there are often barriers to young people obtaining services.

Among young people age 15-24 who have had sexual intercourse in the past 12 months, 23% of young women and 12% of young men were tested for HIV in the 12 months preceding the survey and received the results of their last HIV test (**Table 13.16**).

Among young women, those who have ever been married are more likely than those who have never been married to have been tested for HIV in the past 12 months and to have received the results (29% versus 19%). However, there are only minimal differences among young men (13% versus 12%).

Trends: After large increases in the coverage of recent HIV testing among young people from 2007 to 2013, coverage has since stagnated. Among young women who had sex in the 12 months preceding the survey, the percentage who were tested for HIV in the past 12 months and received the results was 21% in 2013 and 23% in 2019-20. The corresponding percentages among young men are 10% and 12%.

LIST OF TABLES

For more information on knowledge, attitudes, and behavior related to HIV or AIDS, see the following tables:

- **Table 13.1** Knowledge of HIV prevention methods
- **Table 13.2** Comprehensive knowledge about HIV
- **Table 13.3** Knowledge of prevention of mother-to-child transmission of HIV
- **Table 13.4** Discriminatory attitudes towards people living with HIV
- **Table 13.5.1** Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women
- **Table 13.5.2** Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men
- **Table 13.6** Payment for sexual intercourse and condom use at last paid sexual intercourse
- **Table 13.7.1** Coverage of prior HIV testing: Women
- **Table 13.7.2** Coverage of prior HIV testing: Men
- **Table 13.8** Pregnant women counseled and tested for HIV
- **Table 13.9** Knowledge and coverage of self-testing for HIV
- **Table 13.10** Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms
- **Table 13.11** Women and men seeking treatment for STIs
- **Table 13.12** Comprehensive knowledge about HIV among young people
- **Table 13.13** Age at first sexual intercourse among young people
- **Table 13.14** Premarital sexual intercourse among young people
- **Table 13.15.1** Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women
- **Table 13.15.2** Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men
- **Table 13.16** Recent HIV tests among young people

Table 13.1 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, by background characteristics, Liberia DHS 2019-20

Background characteristic	Women				Men			
	Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ^{1,2}	Number of women	Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ^{1,2}	Number of men
Age								
15-24	69.9	73.6	63.0	3,163	77.0	78.6	69.9	1,533
15-19	64.2	68.0	57.0	1,657	68.0	69.8	58.8	876
20-24	76.2	79.8	69.7	1,506	88.8	90.4	84.8	658
25-29	75.6	81.6	69.6	1,375	86.9	89.9	82.0	558
30-39	76.7	83.5	70.9	2,132	86.7	91.0	82.3	981
40-49	68.8	81.3	64.0	1,395	85.6	88.8	81.1	748
Residence								
Urban	73.3	78.4	67.1	5,023	87.5	90.7	83.5	2,313
Greater Monrovia	71.5	75.7	65.4	2,866	89.7	93.8	87.3	1,368
Other urban	75.6	82.0	69.4	2,157	84.3	86.3	77.9	944
Rural	71.2	79.8	65.2	3,042	75.0	77.4	67.2	1,508
Region								
North Western	65.9	77.4	59.0	621	73.8	69.9	63.1	301
South Central	72.6	76.3	66.0	4,105	86.4	90.6	83.1	1,932
South Eastern A	82.9	91.7	79.4	458	83.9	84.2	76.5	254
South Eastern B	75.5	83.7	69.1	441	82.3	81.8	75.4	226
North Central	71.6	80.4	66.1	2,439	78.1	81.6	70.8	1,107
County								
Bomi	66.8	78.2	57.6	249	81.5	79.2	76.1	118
Bong	73.5	81.1	67.7	796	77.4	76.0	66.8	324
Gbarpolu	66.7	82.1	61.8	112	74.5	82.2	70.0	53
Grand Bassa	79.2	77.5	69.3	467	78.4	78.5	69.3	197
Grand Cape Mount	64.8	74.6	59.2	260	66.6	56.5	48.6	130
Grand Gedeh	81.4	87.6	76.1	172	74.3	71.5	61.6	92
Grand Kru	68.1	74.0	62.1	136	80.4	82.3	74.0	67
Lofa	76.2	82.9	69.1	658	73.2	78.1	65.8	287
Margibi	69.3	73.0	62.6	441	78.3	85.0	74.6	209
Maryland	78.9	88.7	72.7	215	84.3	84.5	78.7	110
Montserrado	72.0	76.6	65.9	3,197	88.6	93.0	86.0	1,525
Nimba	66.9	78.1	62.7	985	81.3	87.2	76.4	496
River Cess	76.2	94.3	74.5	104	86.5	89.7	82.1	52
River Gee	78.8	86.3	71.1	91	80.6	75.4	70.1	50
Sinoe	88.2	94.1	85.3	182	90.6	92.2	86.4	110
Education								
No education	64.7	74.7	58.5	2,474	68.9	74.0	62.1	498
Elementary	69.0	74.6	62.3	1,911	71.6	71.5	61.7	877
Junior high	76.3	82.0	68.8	1,445	82.8	86.9	77.4	738
Senior high	80.8	85.1	76.4	1,761	92.5	94.6	89.1	1,303
Higher	84.8	86.2	79.6	474	90.8	97.6	89.4	405
Wealth quintile								
Lowest	69.0	79.0	63.2	1,379	75.8	78.9	69.4	657
Second	70.2	78.2	63.8	1,431	77.3	78.1	68.9	663
Middle	73.9	81.2	68.9	1,517	78.1	82.8	70.8	743
Fourth	73.2	78.6	65.9	1,829	90.2	93.9	87.6	838
Highest	74.9	77.8	69.2	1,910	88.0	89.8	83.8	920
Total 15-49	72.5	78.9	66.4	8,065	82.6	85.4	77.1	3,821
50-59	na	na	na	na	83.8	86.2	78.3	428
Total 15-59	na	na	na	na	82.7	85.5	77.2	4,249

na = Not applicable

¹ Using condoms every time they have sexual intercourse

² Partner who has no other partners

Table 13.2 Comprehensive knowledge about HIV

Percentage of women and men age 15-49 who say that a healthy-looking person can have HIV and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV, and percentage with comprehensive knowledge about HIV, according to age, Liberia DHS 2019-20

Age	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have HIV and who reject the two most common local misconceptions ¹	Percentage with comprehensive knowledge about HIV ²	Number of respondents
	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	HIV cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has HIV			
WOMEN							
15-24	69.0	63.9	73.2	65.5	42.0	31.6	3,163
15-19	62.7	60.3	69.1	60.0	37.0	25.9	1,657
20-24	75.9	67.7	77.6	71.6	47.4	37.8	1,506
25-29	76.5	66.5	76.3	74.6	48.7	38.7	1,375
30-39	75.3	63.4	76.8	70.9	44.7	36.1	2,132
40-49	68.7	56.4	71.5	65.0	35.9	28.5	1,395
Total 15-49	71.9	62.9	74.4	68.4	42.8	33.4	8,065
MEN							
15-24	67.7	53.0	75.1	62.8	34.7	29.5	1,533
15-19	58.3	47.4	67.0	53.9	27.5	21.6	876
20-24	80.3	60.4	85.9	74.5	44.2	40.1	658
25-29	83.9	54.8	88.0	76.7	42.6	36.7	558
30-39	84.3	58.1	88.9	80.8	47.4	42.0	981
40-49	79.8	54.8	84.1	72.0	40.7	35.5	748
Total 15-49	76.7	54.9	82.3	71.2	40.3	34.9	3,821
50-59	79.2	53.2	82.0	74.8	39.9	34.6	428
Total 15-59	77.0	54.7	82.3	71.6	40.2	34.9	4,249

¹ Two most common local misconceptions: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

² Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Table 13.3 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, by breastfeeding, and by all three means, and percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, according to age, Liberia DHS 2019-20

Age	Percentage who know that HIV can be transmitted from mother to child:				Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Number of respondents
	During pregnancy	During delivery	By breastfeeding	By all three means		
WOMEN						
15-24	56.2	56.8	62.0	46.7	48.9	3,163
15-19	50.5	49.5	55.7	41.0	42.9	1,657
20-24	62.5	64.9	69.0	52.9	55.6	1,506
25-29	65.5	67.5	71.8	56.3	59.6	1,375
30-39	67.5	70.6	71.9	56.9	58.4	2,132
40-49	67.5	70.6	70.5	57.9	52.0	1,395
Total 15-49	62.7	64.7	67.8	52.9	53.8	8,065
MEN						
15-24	51.6	48.4	55.8	38.8	34.8	1,533
15-19	47.9	41.3	51.6	34.4	29.3	876
20-24	56.6	57.7	61.3	44.6	42.1	658
25-29	60.1	61.6	55.5	42.8	41.8	558
30-39	59.2	61.4	60.6	44.1	44.6	981
40-49	58.0	59.1	61.7	45.8	42.2	748
Total 15-49	56.1	55.7	58.2	42.1	39.8	3,821
50-59	59.9	62.9	60.6	48.6	44.0	428
Total 15-59	56.5	56.5	58.4	42.8	40.2	4,249

Table 13.4 Discriminatory attitudes towards people living with HIV

Among women and men age 15-49 who have heard of HIV or AIDS, percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative, percentage who would not buy fresh vegetables from a shopkeeper who has HIV, and percentage with discriminatory attitudes towards people living with HIV, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women				Men			
	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV ¹	Number of respondents who have heard of HIV or AIDS	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV ¹	Number of respondents who have heard of HIV or AIDS
Age								
15-24	54.3	63.4	70.5	2,932	57.1	61.3	73.3	1,424
15-19	55.0	66.6	73.8	1,497	60.1	68.3	77.7	784
20-24	53.6	60.1	67.1	1,435	53.5	52.7	67.8	640
25-29	54.5	62.3	69.9	1,312	48.1	54.5	61.8	545
30-39	50.7	60.3	68.0	2,046	44.0	45.2	55.0	966
40-49	51.0	58.9	67.2	1,332	43.7	51.5	60.3	737
Marital status								
Never married	49.8	60.8	67.2	2,946	54.9	59.4	70.1	1,574
Ever had sex	49.7	60.6	67.1	2,491	52.8	55.9	67.0	1,138
Never had sex	50.4	61.7	67.9	455	60.5	68.6	78.4	436
Married or living together	55.8	62.2	70.6	3,973	46.3	49.9	59.7	1,870
Divorced/separated/ widowed	48.5	61.8	69.1	702	40.9	51.6	59.3	228
Residence								
Urban	48.5	59.9	66.6	4,776	42.4	49.2	58.4	2,264
Greater Monrovia	48.1	62.2	67.5	2,738	35.6	45.7	53.5	1,353
Other urban	48.9	56.7	65.5	2,038	52.3	54.2	65.8	911
Rural	60.1	64.5	73.4	2,846	61.4	62.0	73.4	1,408
Region								
North Western	55.0	53.4	64.9	573	51.4	53.6	65.2	265
South Central	48.5	61.2	67.3	3,898	40.2	46.3	56.3	1,897
South Eastern A	49.7	57.8	64.0	456	55.0	56.9	68.0	250
South Eastern B	51.9	59.5	66.2	430	60.3	58.4	70.8	212
North Central	60.4	65.6	75.1	2,266	62.8	66.6	75.9	1,048
County								
Bomi	58.0	52.4	65.9	239	29.3	36.1	44.0	104
Bong	60.9	70.1	76.0	758	58.9	58.0	72.5	299
Gbarpolu	68.5	71.1	78.4	108	52.8	58.5	64.9	47
Grand Bassa	61.4	65.4	73.1	444	58.7	57.1	70.1	192
Grand Cape Mount	45.2	45.9	57.2	226	70.9	67.7	84.6	114
Grand Gedeh	36.8	50.3	54.7	170	48.0	53.7	61.8	88
Grand Kru	71.7	83.0	87.4	128	65.5	61.6	73.7	62
Lofa	58.1	57.5	72.0	637	61.2	62.7	73.8	271
Margibi	48.3	54.5	65.8	395	51.8	53.1	69.3	202
Maryland	39.6	42.6	51.2	212	57.9	55.1	69.0	102
Montserrado	46.7	61.5	66.6	3,059	36.3	44.1	52.8	1,503
Nimba	61.8	67.6	76.5	870	66.1	74.3	79.3	478
River Cess	49.7	52.6	62.5	103	57.4	64.0	70.7	52
River Gee	52.6	65.8	71.3	90	58.3	61.3	70.6	47
Sinoe	61.9	67.6	73.5	182	59.6	56.2	71.7	109
Education								
No education	60.1	66.2	74.8	2,236	69.7	72.0	83.6	443
Elementary	59.0	67.5	75.2	1,780	66.1	69.6	78.4	801
Junior high	57.6	63.7	72.1	1,403	58.5	61.5	74.0	723
Senior high	40.0	52.3	58.7	1,732	37.8	41.9	51.7	1,300
Higher	27.9	45.4	48.8	470	17.4	29.7	37.0	405
Wealth quintile								
Lowest	63.8	68.6	77.0	1,273	68.0	68.9	79.9	616
Second	63.0	67.9	76.8	1,320	58.9	63.1	73.9	616
Middle	54.9	58.0	67.5	1,422	57.6	58.0	71.3	707
Fourth	48.9	60.7	67.7	1,764	42.5	43.7	53.4	829
Highest	40.0	55.9	60.8	1,843	31.1	44.3	51.0	903
Total 15-49	52.8	61.6	69.1	7,622	49.6	54.1	64.2	3,672
50-59	na	na	na	na	48.2	56.3	64.5	416
Total 15-59	na	na	na	na	49.5	54.3	64.2	4,088

na = Not applicable

¹ Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or would not buy fresh vegetables from a shopkeeper who has HIV

Table 13.5.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women

Among all women age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Liberia DHS 2019-20

Background characteristic	All women			Women who had 2+ partners in the past 12 months		Women who had intercourse in the past 12 months with a person who neither was their husband nor lived with them		Women who ever had sexual intercourse ¹	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Age									
15-24	8.3	52.4	3,163	22.2	261	16.7	1,657	3.4	2,578
15-19	5.6	51.2	1,657	25.1	93	14.7	849	2.3	1,137
20-24	11.2	53.7	1,506	20.6	169	18.8	808	4.2	1,441
25-29	9.0	39.8	1,375	16.8	124	16.0	547	5.3	1,317
30-39	5.4	22.4	2,132	8.6	114	11.2	478	6.3	2,030
40-49	3.6	17.4	1,395	7.5	51	9.5	242	6.8	1,289
Marital status									
Never married	9.4	69.9	3,129	23.9	296	15.9	2,188	5.2	2,497
Married or living together	4.3	6.5	4,216	7.7	181	20.9	274	5.0	4,044
Divorced/separated/widowed	10.2	64.1	721	10.7	74	7.6	462	6.1	672
Residence									
Urban	8.1	41.8	5,023	20.1	405	17.2	2,099	5.7	4,420
Greater Monrovia	9.2	46.7	2,866	22.8	264	18.6	1,338	5.9	2,563
Other urban	6.5	35.3	2,157	15.1	141	14.8	762	5.3	1,857
Rural	4.8	27.1	3,042	7.5	145	9.6	825	4.4	2,793
Region									
North Western	6.6	28.1	621	8.2	41	12.9	175	3.6	568
South Central	8.5	42.8	4,105	19.0	351	16.6	1,756	5.1	3,646
South Eastern A	7.3	30.2	458	7.9	33	11.5	138	5.1	418
South Eastern B	6.2	38.0	441	19.9	27	14.0	168	4.0	419
North Central	4.0	28.2	2,439	14.8	97	12.7	687	5.9	2,162
County									
Bomi	8.5	32.4	249	(8.7)	21	14.2	81	3.1	225
Bong	5.9	31.6	796	(20.6)	47	16.5	252	3.3	732
Gbarpolu	4.0	23.6	112	*	5	7.9	26	3.9	106
Grand Bassa	8.7	31.9	467	(1.8)	41	8.7	149	3.8	416
Grand Cape Mount	5.9	25.9	260	(9.8)	15	13.3	67	3.9	237
Grand Gedeh	3.5	26.8	172	*	6	25.7	46	4.8	161
Grand Kru	2.8	35.1	136	*	4	7.7	48	4.1	128
Lofa	1.8	27.8	658	*	12	5.7	183	3.0	589
Margibi	5.7	36.4	441	(0.0)	25	5.6	161	3.0	381
Maryland	9.2	41.3	215	21.8	20	17.2	89	4.1	205
Montserrado	8.9	45.2	3,197	23.1	285	18.7	1,446	5.6	2,849
Nimba	3.9	25.7	985	(12.2)	38	13.9	253	10.3	841
River Cess	11.3	33.1	104	(8.2)	12	4.6	34	4.6	96
River Gee	4.3	34.4	91	*	4	14.3	31	3.6	86
Sinoe	8.5	31.7	182	(3.3)	16	4.3	58	5.8	161
Education									
No education	4.1	19.2	2,474	7.4	102	7.0	476	4.7	2,310
Elementary	4.8	33.3	1,911	13.1	92	11.3	635	5.2	1,585
Junior high	7.6	46.5	1,445	6.9	110	12.0	671	5.0	1,272
Senior high	12.0	52.3	1,761	28.8	211	23.8	921	5.4	1,609
Higher	7.4	46.4	474	*	35	16.4	220	7.2	438
Wealth quintile									
Lowest	4.5	23.8	1,379	2.7	62	7.0	327	4.8	1,286
Second	4.7	28.8	1,431	5.2	68	10.2	412	5.6	1,302
Middle	6.2	35.9	1,517	15.8	94	9.7	545	4.6	1,317
Fourth	9.2	45.4	1,829	19.4	168	18.4	830	5.1	1,642
Highest	8.3	42.4	1,910	25.2	158	21.1	810	5.7	1,667
Total	6.8	36.3	8,065	16.8	550	15.1	2,924	5.2	7,213

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Means are calculated excluding respondents who gave non-numeric responses.

Table 13.5.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men

Among all men age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Liberia DHS 2019-20

Background characteristic	All men			Men who had 2+ partners in the past 12 months		Men who had intercourse in the past 12 months with a person who neither was their wife nor lived with them		Men who ever had sexual intercourse ¹	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Age									
15-24	20.2	56.9	1,533	31.0	309	34.3	872	7.3	984
15-19	9.4	40.4	876	30.1	82	33.1	354	4.9	387
20-24	34.5	78.7	658	31.4	227	35.1	518	8.9	597
25-29	36.3	69.3	558	23.5	203	29.9	387	13.4	489
30-39	23.5	39.1	981	14.4	231	27.8	384	18.0	839
40-49	22.6	30.8	748	7.0	169	26.5	230	21.3	642
Marital status									
Never married	19.5	64.5	1,684	31.9	329	33.5	1,086	8.6	1,120
Married or living together	26.9	30.8	1,906	11.1	512	28.1	587	17.8	1,629
Divorced/separated/widowed	30.5	86.4	231	38.1	71	26.7	200	18.7	205
Type of union									
In polygynous union	70.6	29.3	83	3.6	59	(18.9)	24	20.1	73
In non-polygynous union	24.9	30.9	1,823	12.1	454	28.5	563	17.7	1,556
Not currently in union	20.9	67.1	1,915	33.0	400	32.5	1,285	10.2	1,325
Residence									
Urban	23.6	52.4	2,313	27.3	545	37.1	1,212	13.3	1,787
Greater Monrovia	21.5	48.6	1,368	27.0	295	39.4	665	11.9	1,054
Other urban	26.5	57.9	944	27.6	250	34.4	547	15.3	733
Rural	24.3	43.8	1,508	10.9	367	20.0	661	16.1	1,167
Region									
North Western	15.5	34.8	301	13.3	47	15.9	105	9.3	241
South Central	22.5	48.8	1,932	23.1	434	36.0	943	12.9	1,476
South Eastern A	35.3	56.1	254	16.9	90	26.3	143	22.4	198
South Eastern B	24.5	51.4	226	14.2	56	22.5	116	8.4	177
North Central	25.8	51.1	1,107	20.6	286	28.8	566	17.8	861
County									
Bomi	17.7	30.5	118	(15.4)	21	(25.3)	36	10.1	94
Bong	21.1	45.1	324	31.4	68	28.5	146	8.0	238
Gbarpolu	16.1	44.2	53	*	9	14.9	24	12.6	50
Grand Bassa	38.5	57.9	197	13.1	76	25.3	114	26.5	165
Grand Cape Mount	13.3	34.8	130	*	17	9.0	45	6.9	97
Grand Gedeh	42.1	60.6	92	21.4	39	36.7	56	18.3	83
Grand Kru	34.5	50.7	67	14.9	23	23.3	34	10.2	53
Lofa	17.4	38.2	287	(6.5)	50	22.8	110	14.2	231
Margibi	24.0	47.8	209	20.1	50	31.1	100	12.0	136
Maryland	13.9	50.0	110	(9.8)	15	21.9	55	7.4	91
Montserrado	20.2	47.8	1,525	26.1	308	38.3	729	11.0	1,175
Nimba	33.9	62.6	496	20.4	168	31.0	310	26.0	392
River Cess	21.6	48.1	52	(5.0)	11	12.2	25	8.4	39
River Gee	34.6	55.2	50	17.2	17	22.8	27	8.1	33
Sinoe	36.0	56.2	110	15.8	40	22.5	62	34.0	76
Education									
No education	17.9	32.5	498	15.4	89	28.7	162	15.2	404
Elementary	19.5	40.1	877	13.4	171	18.0	352	14.3	550
Junior high	25.4	54.5	738	19.5	188	26.6	402	11.7	549
Senior high	27.3	56.3	1,303	25.2	356	37.8	733	15.2	1,103
Higher	26.8	55.4	405	23.7	108	39.5	224	15.4	347
Wealth quintile									
Lowest	23.6	44.3	657	9.3	155	18.3	291	16.2	534
Second	26.5	48.2	663	14.1	176	25.2	319	19.0	515
Middle	26.7	53.7	743	24.7	198	28.8	399	12.4	555
Fourth	26.3	50.7	838	27.3	220	35.7	425	11.7	653
Highest	17.6	47.6	920	24.8	162	41.6	438	13.8	697
Total 15-49	23.9	49.0	3,821	20.7	912	31.1	1,873	14.4	2,954
50-59	24.4	27.1	428	16.8	104	21.5	116	25.9	329
Total 15-59	23.9	46.8	4,249	20.3	1,016	30.5	1,989	15.6	3,283

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Means are calculated excluding respondents who gave non-numeric responses.

Table 13.6 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, Liberia DHS 2019-20

Age	Among all men:			Among men who paid for sex in the past 12 months:	
	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
15-24	8.8	5.7	1,533	67.1	87
15-19	5.5	3.8	876	(67.3)	34
20-24	13.2	8.1	658	(67.0)	53
25-29	14.5	8.1	558	(72.4)	45
30-39	10.5	2.6	981	(69.5)	26
40-49	8.8	2.5	748	*	19
Total 15-49	10.1	4.6	3,821	67.1	177
50-59	6.3	1.1	428	*	5
Total 15-59	9.7	4.3	4,249	66.8	181

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.7.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women by testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the past 12 months and received the results of the last test, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested ¹				
Age								
15-24	61.3	35.8	4.1	60.1	100.0	39.9	19.4	3,163
15-19	48.1	23.2	2.0	74.8	100.0	25.2	14.5	1,657
20-24	75.7	49.7	6.4	43.9	100.0	56.1	24.8	1,506
25-29	80.9	65.0	4.6	30.4	100.0	69.6	30.8	1,375
30-39	82.4	63.6	4.5	31.9	100.0	68.1	23.8	2,132
40-49	73.9	48.1	4.3	47.6	100.0	52.4	16.7	1,395
Marital status								
Never married	63.4	39.2	2.9	57.9	100.0	42.1	19.4	3,129
Ever had sex	71.0	46.7	3.5	49.8	100.0	50.2	22.9	2,578
Never had sex	27.9	4.0	0.0	96.0	100.0	4.0	3.1	551
Married or living together	77.7	57.2	5.0	37.8	100.0	62.2	23.6	4,216
Divorced/separated/widowed	80.0	57.9	6.7	35.4	100.0	64.6	24.1	721
Residence								
Urban	73.0	52.8	4.2	43.1	100.0	56.9	23.2	5,023
Greater Monrovia	70.5	53.0	3.9	43.1	100.0	56.9	21.5	2,866
Other urban	76.4	52.5	4.5	43.0	100.0	57.0	25.4	2,157
Rural	71.3	46.2	4.6	49.2	100.0	50.8	20.2	3,042
Region								
North Western	73.8	50.7	3.2	46.2	100.0	53.8	24.3	621
South Central	70.7	51.3	4.1	44.6	100.0	55.4	21.2	4,105
South Eastern A	82.5	56.1	2.4	41.5	100.0	58.5	20.4	458
South Eastern B	81.2	50.8	2.4	46.7	100.0	53.3	21.1	441
North Central	71.4	47.3	5.7	47.0	100.0	53.0	23.3	2,439
County								
Bomi	78.0	50.8	3.9	45.3	100.0	54.7	30.1	249
Bong	76.3	49.6	6.6	43.9	100.0	56.1	24.5	796
Gbarpolu	67.6	41.8	5.9	52.3	100.0	47.7	16.6	112
Grand Bassa	67.5	47.6	2.8	49.6	100.0	50.4	20.0	467
Grand Cape Mount	72.5	54.3	1.3	44.4	100.0	55.6	22.2	260
Grand Gedeh	82.2	63.1	2.5	34.3	100.0	65.7	26.6	172
Grand Kru	68.5	35.9	3.2	60.9	100.0	39.1	18.8	136
Lofa	69.5	42.3	5.1	52.5	100.0	47.5	18.9	658
Margibi	69.1	45.8	3.4	50.8	100.0	49.2	23.1	441
Maryland	87.6	58.2	0.6	41.2	100.0	58.8	22.4	215
Montserrado	71.3	52.5	4.4	43.1	100.0	56.9	21.1	3,197
Nimba	68.6	48.9	5.4	45.8	100.0	54.2	25.1	985
River Cess	88.4	59.1	2.7	38.2	100.0	61.8	20.2	104
River Gee	85.3	55.8	5.6	38.5	100.0	61.5	21.5	91
Sinoe	79.5	47.7	2.2	50.2	100.0	49.8	14.6	182
Education								
No education	67.5	45.9	5.0	49.1	100.0	50.9	18.7	2,474
Elementary	67.7	44.7	4.0	51.3	100.0	48.7	20.5	1,911
Junior high	68.8	46.8	4.0	49.1	100.0	50.9	21.1	1,445
Senior high	81.9	58.7	4.3	36.9	100.0	63.1	24.8	1,761
Higher	92.5	74.7	3.2	22.1	100.0	77.9	38.2	474
Wealth quintile								
Lowest	68.7	43.4	4.5	52.1	100.0	47.9	20.0	1,379
Second	70.8	46.0	5.2	48.8	100.0	51.2	21.0	1,431
Middle	72.3	49.6	4.5	45.9	100.0	54.1	23.3	1,517
Fourth	74.4	55.1	4.1	40.9	100.0	59.1	21.3	1,829
Highest	74.3	54.4	3.6	41.9	100.0	58.1	24.0	1,910
Total	72.4	50.3	4.3	45.4	100.0	54.6	22.0	8,065

¹ Includes "don't know/missing"

Table 13.7.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men by testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested ¹				
Age								
15-24	52.2	14.3	1.5	84.2	100.0	15.8	10.8	1,533
15-19	42.6	10.5	1.0	88.5	100.0	11.5	8.2	876
20-24	65.1	19.4	2.2	78.4	100.0	21.6	14.2	658
25-29	71.7	40.3	1.7	58.0	100.0	42.0	28.4	558
30-39	76.1	45.6	1.2	53.2	100.0	46.8	27.9	981
40-49	73.5	44.7	2.1	53.2	100.0	46.8	28.2	748
Marital status								
Never married	55.5	18.5	1.4	80.1	100.0	19.9	13.5	1,684
Ever had sex	64.4	22.9	1.6	75.5	100.0	24.5	16.0	1,164
Never had sex	35.6	8.8	0.9	90.3	100.0	9.7	8.0	520
Married or living together	74.0	43.6	1.9	54.5	100.0	45.5	27.4	1,906
Divorced/separated/widowed	65.7	35.7	1.1	63.3	100.0	36.7	25.1	231
Residence								
Urban	67.9	33.5	1.3	65.2	100.0	34.8	22.6	2,313
Greater Monrovia	63.7	34.8	1.0	64.1	100.0	35.9	23.4	1,368
Other urban	74.1	31.6	1.6	66.8	100.0	33.2	21.6	944
Rural	61.4	29.9	2.1	68.0	100.0	32.0	18.9	1,508
Region								
North Western	53.8	26.4	2.0	71.7	100.0	28.3	17.3	301
South Central	66.0	34.7	1.3	64.0	100.0	36.0	22.9	1,932
South Eastern A	73.0	34.3	4.8	60.9	100.0	39.1	17.0	254
South Eastern B	60.1	17.0	0.9	82.1	100.0	17.9	8.6	226
North Central	66.7	31.6	1.5	66.9	100.0	33.1	22.7	1,107
County								
Bomi	55.8	30.0	2.5	67.5	100.0	32.5	18.2	118
Bong	60.2	26.7	1.5	71.7	100.0	28.3	20.6	324
Gbarpolu	55.6	38.3	2.0	59.7	100.0	40.3	28.1	53
Grand Bassa	64.6	31.5	2.0	66.4	100.0	33.6	19.4	197
Grand Cape Mount	51.2	18.1	1.5	80.4	100.0	19.6	12.0	130
Grand Gedeh	66.3	37.7	4.0	58.3	100.0	41.7	25.3	92
Grand Kru	44.5	18.8	1.9	79.2	100.0	20.8	5.6	67
Lofa	57.6	34.1	0.8	65.1	100.0	34.9	25.4	287
Margibi	78.4	36.2	2.1	61.6	100.0	38.4	28.5	209
Maryland	66.2	11.8	0.0	88.2	100.0	11.8	6.5	110
Montserrado	64.4	34.9	1.0	64.0	100.0	36.0	22.6	1,525
Nimba	76.3	33.3	1.8	64.9	100.0	35.1	22.4	496
River Cess	82.7	35.2	0.9	64.0	100.0	36.0	11.8	52
River Gee	67.7	26.1	1.7	72.2	100.0	27.8	17.3	50
Sinoe	74.1	31.1	7.2	61.6	100.0	38.4	12.6	110
Education								
No education	51.9	23.2	1.6	75.3	100.0	24.7	14.7	498
Elementary	46.8	18.7	1.7	79.6	100.0	20.4	13.3	877
Junior high	61.8	21.2	1.5	77.3	100.0	22.7	13.7	738
Senior high	76.6	42.0	1.6	56.5	100.0	43.5	27.5	1,303
Higher	92.4	59.9	1.7	38.4	100.0	61.6	39.4	405
Wealth quintile								
Lowest	58.9	24.8	1.8	73.4	100.0	26.6	15.9	657
Second	61.1	30.5	2.5	67.0	100.0	33.0	18.9	663
Middle	65.9	27.8	1.6	70.6	100.0	29.4	18.6	743
Fourth	67.7	34.9	1.3	63.8	100.0	36.2	23.5	838
Highest	70.5	39.3	1.0	59.7	100.0	40.3	26.5	920
Total 15-49	65.3	32.1	1.6	66.3	100.0	33.7	21.2	3,821
50-59	73.1	39.8	3.1	57.1	100.0	42.9	21.5	428
Total 15-59	66.1	32.9	1.7	65.4	100.0	34.6	21.2	4,249

¹ Includes "don't know/missing"

Table 13.8 Pregnant women counseled and tested for HIV

Among all women age 15-49 who gave birth in the 2 years preceding the survey, percentage who received counseling on HIV during prenatal care, percentage who received an HIV test during prenatal care for their most recent birth by whether they received their results and post-test counseling, and percentage who received an HIV test during prenatal care or labor for their most recent birth by whether they received their test results, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who received counseling on HIV during prenatal care ¹	Percentage who were tested for HIV during prenatal care and who:			Percentage who received counseling on HIV and an HIV test during prenatal care, and the results	Percentage who had an HIV test during prenatal care or labor and who: ²		Number of women who gave birth in the past 2 years ³
		Received results and		Did not receive results		Received results	Did not receive results	
		Received post-test counseling	Did not receive post-test counseling					
Age								
15-24	50.9	32.2	23.7	7.4	40.2	58.7	7.2	891
15-19	46.5	33.8	22.2	5.4	35.9	59.8	4.5	316
20-24	53.3	31.4	24.5	8.5	42.6	58.1	8.6	575
25-29	58.3	37.1	25.0	8.4	49.1	66.3	5.3	506
30-39	60.6	37.9	28.0	5.9	49.1	67.5	5.4	558
40-49	54.4	31.7	22.3	12.6	39.8	61.9	6.4	141
Marital status								
Never married	54.0	30.9	34.0	4.6	44.8	67.5	3.9	601
Married or living together	56.7	36.5	22.0	8.4	45.4	61.9	6.5	1,355
Divorced/separated/ widowed	50.0	35.7	16.0	12.3	37.6	56.3	13.1	139
Residence								
Urban	55.0	31.7	31.6	8.5	45.7	66.3	7.4	1,129
Greater Monrovia	56.4	17.2	45.5	10.3	45.7	66.9	8.1	574
Other urban	53.6	46.7	17.3	6.7	45.8	65.8	6.6	555
Rural	56.1	38.6	17.4	6.5	43.5	59.4	4.8	967
Region								
North Western	58.6	41.4	21.7	2.3	51.1	64.3	2.7	184
South Central	55.5	27.4	34.5	8.6	45.1	65.2	6.9	926
South Eastern A	69.3	57.9	18.3	2.0	62.3	77.0	1.2	140
South Eastern B	64.1	49.8	11.1	5.0	54.2	62.8	3.9	112
North Central	50.9	36.0	17.4	9.1	37.8	57.6	7.4	733
County								
Bomi	57.9	32.1	31.3	3.3	46.9	65.7	4.3	58
Bong	56.8	42.4	12.6	5.6	41.9	57.2	6.6	231
Gbarpolu	59.9	40.6	14.8	3.6	46.5	55.9	3.6	37
Grand Bassa	62.7	52.7	3.0	5.1	45.9	57.9	3.7	151
Grand Cape Mount	58.5	47.9	18.1	1.1	55.6	66.9	1.4	90
Grand Gedeh	69.9	54.8	28.3	2.7	61.8	85.2	0.6	53
Grand Kru	56.1	34.4	13.6	5.6	43.8	49.6	4.0	43
Lofa	58.6	33.4	27.1	14.2	45.5	68.6	7.5	172
Margibi	56.5	42.3	20.2	4.6	50.7	65.0	4.1	119
Maryland	63.4	60.6	6.7	1.3	59.6	68.1	1.3	48
Montserrado	53.6	18.9	44.3	10.1	43.9	66.9	8.2	656
Nimba	42.7	32.8	15.8	8.9	30.9	52.2	7.9	330
River Cess	84.3	71.4	10.4	1.7	76.1	81.7	1.7	32
River Gee	81.0	56.1	15.7	11.8	62.5	76.8	9.3	22
Sinoe	59.9	53.2	13.1	1.5	54.8	66.3	1.5	55
Education								
No education	50.3	32.7	20.4	6.1	40.7	55.6	5.0	683
Elementary	55.5	39.0	18.1	7.5	42.9	59.4	7.5	565
Junior high	51.4	34.5	29.2	5.8	44.1	68.8	4.3	381
Senior high	68.8	35.1	33.7	12.4	55.0	73.3	8.2	388
Higher	(54.9)	(25.0)	(53.2)	(6.6)	(44.5)	(78.2)	(6.6)	78
Wealth quintile								
Lowest	50.5	36.6	13.6	6.4	36.9	53.6	5.6	507
Second	54.1	36.0	17.4	8.8	41.0	57.0	6.8	444
Middle	57.4	42.8	24.8	4.5	51.6	69.5	4.1	394
Fourth	55.6	29.9	35.6	8.7	45.6	68.5	7.7	411
Highest	62.4	27.8	39.7	10.1	52.2	71.3	7.0	340
Total	55.5	34.9	25.1	7.6	44.7	63.1	6.2	2,096

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ In this context, counseling means that someone talked with the respondent about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for HIV.

² Women were asked whether they received an HIV test during labor only if they gave birth in a health facility.

³ Denominator for percentages includes women who did not receive prenatal care for their last birth in the past 2 years.

Table 13.9 Knowledge and coverage of self-testing for HIV

Percentage of women and men age 15-49 who have ever heard of HIV self-test kits, and percentage who have ever used an HIV self-test kit, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women			Men		
	Ever heard of HIV self-test kits	Ever used an HIV self-test kit	Number of women	Ever heard of HIV self-test kits	Ever used an HIV self-test kit	Number of men
Residence						
Urban	11.4	1.7	5,023	12.8	1.1	2,313
Greater Monrovia	11.4	1.9	2,866	11.0	0.7	1,368
Other urban	11.4	1.5	2,157	15.4	1.6	944
Rural	7.9	1.1	3,042	12.7	1.2	1,508
Education						
No education	5.7	0.8	2,474	7.0	1.1	498
Elementary	8.7	1.1	1,911	7.8	0.7	877
Junior high	8.2	0.9	1,445	12.7	0.3	738
Senior high	12.9	1.5	1,761	15.6	1.5	1,303
Higher	33.6	8.7	474	21.6	2.9	405
Wealth quintile						
Lowest	6.6	0.5	1,379	10.8	0.8	657
Second	8.2	1.5	1,431	10.8	1.0	663
Middle	10.2	1.0	1,517	12.4	1.5	743
Fourth	9.0	1.1	1,829	14.8	0.8	838
Highest	14.9	3.1	1,910	14.0	1.6	920
Total 15-49	10.1	1.5	8,065	12.8	1.1	3,821
50-59	na	na	na	14.1	2.1	428
Total 15-59	na	na	na	12.9	1.2	4,249

na = Not applicable

Table 13.10 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual inter-course	STI	Bad-smelling/ abnormal discharge from penis	Genital sore or ulcer	STI/ abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual inter-course
Age										
15-24	33.7	42.0	33.3	51.2	2,616	19.8	19.1	15.1	29.8	1,020
15-19	30.1	39.5	29.4	47.8	1,145	15.4	14.7	14.3	24.4	396
20-24	36.4	44.0	36.3	53.7	1,472	22.7	21.9	15.6	33.3	625
25-29	38.1	41.5	33.3	51.1	1,373	23.0	23.2	14.6	29.4	553
30-39	35.1	42.1	29.0	49.8	2,130	15.6	11.4	9.6	20.7	980
40-49	24.4	28.9	21.4	36.1	1,395	10.3	7.5	5.4	14.6	747
Marital status										
Never married	34.8	41.3	33.5	49.8	2,578	17.5	16.9	12.0	25.9	1,164
Married or living together	32.7	38.9	27.9	47.3	4,216	17.1	13.3	10.8	22.1	1,906
Divorced/separated/ widowed	30.1	36.5	28.2	45.4	721	12.8	18.0	10.4	23.8	231
Residence										
Urban	36.9	42.3	33.3	51.6	4,637	19.7	16.8	12.7	27.3	1,999
Greater Monrovia	41.7	45.0	35.5	54.1	2,653	19.5	18.5	12.0	28.3	1,177
Other urban	30.5	38.7	30.2	48.4	1,984	20.0	14.5	13.6	25.8	822
Rural	27.1	35.0	24.3	42.0	2,878	12.7	11.9	8.9	17.9	1,302
Region										
North Western	26.9	38.5	20.5	42.1	578	8.4	8.1	6.4	11.4	246
South Central	37.7	41.2	32.3	50.5	3,778	18.6	16.4	11.6	26.4	1,665
South Eastern A	34.5	39.4	32.0	46.1	438	19.9	16.4	14.2	25.7	228
South Eastern B	31.6	38.6	21.3	49.4	419	8.8	11.6	8.2	17.5	190
North Central	27.3	37.1	29.3	45.3	2,300	17.3	14.2	11.5	22.6	971
County										
Bomi	22.9	30.8	17.7	35.3	230	6.1	3.9	3.3	6.8	94
Bong	30.2	35.9	30.5	42.4	747	19.4	13.6	11.1	24.5	285
Gbarpolu	37.5	42.2	33.3	45.4	108	12.3	13.6	8.4	16.9	50
Grand Bassa	29.8	33.4	30.8	43.6	432	15.6	10.4	13.5	24.3	176
Grand Cape Mount	26.0	44.2	17.3	47.0	241	8.5	9.4	8.2	12.9	102
Grand Gedeh	42.6	41.6	34.4	49.5	166	28.4	22.2	17.8	34.7	84
Grand Kru	45.4	44.3	20.5	55.3	128	7.5	12.8	11.1	20.8	57
Lofa	24.5	30.9	21.8	38.3	607	7.9	8.8	7.2	12.0	242
Margibi	20.8	27.7	24.6	39.2	405	21.3	13.6	12.7	25.9	174
Maryland	25.6	36.7	19.8	48.5	205	7.1	9.6	5.8	12.6	91
Montserrado	41.1	44.2	33.6	53.1	2,942	18.6	17.6	11.3	26.7	1,314
Nimba	26.9	42.0	33.2	52.0	946	21.0	17.6	14.1	27.1	444
River Cess	31.8	41.3	28.9	45.6	99	12.7	9.1	7.5	17.1	44
River Gee	25.2	34.7	26.0	42.9	87	14.4	14.3	9.4	23.7	42
Sinoe	28.2	36.2	31.4	43.1	174	16.0	14.8	14.3	21.9	100
Education										
No education	27.9	33.8	24.0	40.1	2,419	9.8	9.6	6.3	13.2	449
Elementary	31.6	39.8	31.3	49.4	1,650	14.1	11.8	11.9	21.3	597
Junior high	35.6	42.0	30.2	52.5	1,306	18.3	17.2	13.0	25.1	609
Senior high	41.0	47.4	37.2	56.3	1,685	20.4	17.2	12.1	27.3	1,240
Higher	30.6	32.1	27.5	40.5	455	16.7	14.7	10.0	25.0	405
Wealth quintile										
Lowest	27.6	36.4	26.8	42.6	1,338	13.5	11.9	9.6	19.1	584
Second	26.8	34.5	25.8	41.9	1,360	18.3	16.6	11.3	24.1	577
Middle	32.2	41.3	29.0	50.0	1,400	15.6	11.5	12.0	19.4	631
Fourth	37.6	43.1	32.6	52.3	1,701	15.3	13.6	12.8	24.3	729
Highest	38.8	40.8	33.5	51.0	1,714	21.1	19.8	10.1	29.2	779
Total 15-49	33.1	39.5	29.9	48.0	7,514	16.9	14.9	11.2	23.6	3,300
50-59	na	na	na	na	na	5.4	5.3	2.9	9.3	426
Total 15-59	na	na	na	na	na	15.6	13.8	10.2	22.0	3,726

na = Not applicable

Table 13.11 Women and men seeking treatment for STIs

Percentage of women and men age 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, Liberia DHS 2019-20

Source of advice or treatment	Women	Men
Clinic/hospital/private doctor/ other health professional	56.1	45.8
Advice or medicine from shop/pharmacy	35.6	34.5
Advice or treatment from any other source	1.8	3.9
No advice or treatment	15.3	19.9
Number with STI or symptoms of STI	3,603	778

Table 13.12 Comprehensive knowledge about HIV among young people

Percentage of young women and young men age 15-24 with comprehensive knowledge about HIV, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women		Men	
	Percentage with comprehensive knowledge of HIV ¹	Number of respondents	Percentage with comprehensive knowledge of HIV ¹	Number of respondents
Age				
15-19	25.9	1,657	21.6	876
15-17	21.0	973	16.9	554
18-19	32.8	684	29.7	321
20-24	37.8	1,506	40.1	658
20-22	37.9	941	39.1	442
23-24	37.6	565	42.1	216
Marital status				
Never married	32.6	2,211	29.1	1,347
Ever had sex	37.1	1,664	36.0	834
Never had sex	18.8	547	17.9	513
Ever married	29.2	952	32.9	187
Residence				
Urban	34.9	2,079	36.4	1,009
Greater Monrovia	36.7	1,131	40.6	566
Other urban	32.8	948	31.0	443
Rural	25.1	1,084	16.3	524
Education				
No education	16.3	395	12.0	105
Elementary	18.4	995	10.8	503
Junior high	36.8	895	36.6	409
Senior high	46.6	767	44.5	467
Higher	57.8	112	*	50
Total	31.6	3,163	29.5	1,533

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV. The components of comprehensive knowledge are presented in Tables 13.1 and 13.2.

Table 13.13 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women				Men			
	Percentage who had sexual inter-course before age 15	Number of respondents (15-24)	Percentage who had sexual inter-course before age 18	Number of respondents (18-24)	Percentage who had sexual inter-course before age 15	Number of respondents (15-24)	Percentage who had sexual inter-course before age 18	Number of respondents (18-24)
Age								
15-19	18.5	1,657	na	na	9.4	876	na	na
15-17	21.3	973	na	na	8.1	554	na	na
18-19	14.5	684	80.5	684	11.8	321	63.1	321
20-24	23.0	1,506	79.3	1,506	12.6	658	58.9	658
20-22	22.1	941	80.5	941	13.6	442	61.7	442
23-24	24.3	565	77.4	565	10.6	216	53.2	216
Residence								
Urban	17.4	2,079	76.1	1,484	11.2	1,009	63.3	666
Greater Monrovia	13.9	1,131	72.7	854	12.6	566	60.7	383
Other urban	21.5	948	80.7	630	9.5	443	66.8	284
Rural	26.9	1,084	87.3	707	9.9	524	54.0	313
Education								
No education	33.8	395	86.7	307	7.3	105	37.7	65
Elementary	25.7	995	90.4	518	7.8	503	58.2	182
Junior high	18.7	895	83.4	571	10.5	409	68.5	262
Senior high	11.4	767	70.7	683	16.2	467	60.0	421
Higher	7.4	112	46.6	112	*	50	*	50
Total	20.6	3,163	79.7	2,191	10.8	1,533	60.3	979

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 13.14 Premarital sexual intercourse among young people

Among never-married women and men age 15-24, percentage who have never had sexual inter-course, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women age 15-24		Men age 15-24	
	Percentage who have never had sexual inter-course	Number of never-married women	Percentage who have never had sexual inter-course	Number of never-married men
Age				
15-19	35.8	1,431	55.9	858
15-17	49.4	910	70.7	552
18-19	12.0	521	29.3	306
20-24	4.4	780	6.8	489
20-22	3.1	553	9.2	343
23-24	7.6	227	1.2	146
Residence				
Urban	24.8	1,556	34.3	912
Greater Monrovia	23.8	894	37.3	513
Other urban	26.0	662	30.5	398
Rural	24.7	655	46.0	435
Education				
No education	31.3	175	55.7	81
Elementary	37.7	689	61.0	458
Junior high	21.1	660	35.3	360
Senior high	12.9	585	15.3	403
Higher	(17.2)	102	*	45
Total	24.7	2,211	38.1	1,347

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.15.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women

Among all young women age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among young women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women age 15-24			Women age 15-24 who had 2+ partners in the past 12 months		Women age 15-24 who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women
Age							
15-19	5.6	51.2	1,657	25.1	93	14.7	849
15-17	4.3	42.6	973	(19.9)	42	10.4	414
18-19	7.5	63.5	684	29.2	51	18.8	435
20-24	11.2	53.7	1,506	20.6	169	18.8	808
20-22	12.1	59.1	941	21.4	114	18.9	556
23-24	9.7	44.7	565	(19.1)	55	18.7	252
Marital status							
Never married	8.6	66.6	2,211	26.8	189	16.9	1,474
Ever married	7.6	19.3	952	10.0	72	15.5	183
Residence							
Urban	9.6	55.5	2,079	25.9	200	20.6	1,154
Greater Monrovia	11.0	58.6	1,131	(34.6)	124	24.9	663
Other urban	8.0	51.7	948	11.7	76	14.7	490
Rural	5.6	46.4	1,084	10.1	61	7.8	503
Education							
No education	5.2	31.3	395	*	21	5.5	124
Elementary	4.9	42.1	995	12.9	48	9.0	419
Junior high	7.5	57.1	895	9.1	68	12.6	511
Senior high	14.9	69.2	767	34.1	115	28.5	531
Higher	9.4	65.5	112	*	11	(23.4)	73
Total	8.3	52.4	3,163	22.2	261	16.7	1,657

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.15.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men

Among all young men age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among young men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Men age 15-24			Men age 15-24 who had 2+ partners in the past 12 months		Men age 15-24 who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men
Age							
15-19	9.4	40.4	876	30.1	82	33.1	354
15-17	5.7	24.9	554	(47.3)	32	35.1	138
18-19	15.8	67.3	321	19.4	51	31.8	216
20-24	34.5	78.7	658	31.4	227	35.1	518
20-22	34.2	78.3	442	32.6	151	32.8	346
23-24	35.1	79.6	216	29.0	76	39.7	172
Marital status							
Never married	18.0	57.2	1,347	34.3	243	36.6	770
Ever married	35.8	54.7	187	19.1	67	17.2	102
Residence							
Urban	21.6	61.1	1,009	36.7	218	41.3	616
Greater Monrovia	22.2	58.5	566	(35.5)	126	47.9	331
Other urban	20.9	64.4	443	38.4	93	33.7	286
Rural	17.4	48.8	524	17.4	91	17.4	256
Education							
No education	9.9	35.5	105	*	10	(28.1)	37
Elementary	12.0	36.9	503	19.0	60	19.4	185
Junior high	19.9	60.9	409	31.0	81	31.7	249
Senior high	30.0	75.9	467	36.8	140	42.0	354
Higher	*	*	50	*	17	*	46
Total	20.2	56.9	1,533	31.0	309	34.3	872

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.16 Recent HIV tests among young people

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, percentage who were tested for HIV in the past 12 months and received the results of the last test, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15-19	19.4	1,019	8.6	356
15-17	16.8	466	7.0	138
18-19	21.6	553	9.6	218
20-24	24.9	1,307	14.7	592
20-22	23.5	815	10.0	383
23-24	27.4	492	23.4	209
Marital status				
Never married	18.7	1,474	12.2	770
Ever married	29.2	852	13.4	178
Total	22.5	2,326	12.4	948

ADULT AND MATERNAL MORTALITY

Key Findings

- **Adult mortality:** One hundred seventy-three of every 1,000 women and 189 of every 1,000 men age 15 are expected to die before age 50.
- **Lifetime risk of maternal death:** At current fertility and mortality rates, three out of every 100 Liberian women will die from maternal causes.
- **Maternal mortality ratio:** The estimated maternal mortality ratio for the 7-year period before the 2019-20 LDHS is 742 maternal deaths per 100,000 live births.
- **Pregnancy-related mortality ratio:** The estimated pregnancy-related mortality ratio for the 7-year period preceding the 2019-20 LDHS is 913 deaths per 100,000 live births.

Adult and maternal mortality indicators can be used to assess the health status of a population. In Liberia, maternal mortality is a core indicator of national health performance. Recovering from 14 years of civil conflict and the largest Ebola virus disease outbreak recorded to date, the Liberian government placed priority on reproductive, maternal, newborn, child, and adolescent health (RMNCAH). Liberia is a signatory to the Every Woman, Every Child initiative with a commitment to spend at least 10% of the health sector allotment on RMNCAH. In addition, Liberia is a signatory to the 2030 Sustainable Development Goals (SDGs), FP 2020, the African Health Strategy, the Paris Declaration, the Maputo Call to Action, and the UN Secretary General's Global Strategy for RMNCH Accountability and Results (MOH 2016).

Estimation of mortality rates requires complete and accurate data on adult and maternal deaths. In the 2019-20 LDHS, data were collected from all female respondents on the survival of their sisters and brothers to obtain an estimate of adult mortality. Questions were included to determine if any of the sisters' deaths were maternity-related, which permits an estimation of maternal mortality—a key indicator of maternal health and well-being.

This chapter presents information on the levels of and trends in adult mortality and maternal mortality in Liberia. It includes a summary measure ($_{35q15}$) that represents the probability of dying between exact ages 15 and 50—that is, between the 15th and 50th birthdays.

14.1 DATA

The 2019-20 LDHS collected sibling histories by asking each female respondent to list all children born to her biological mother, starting with the first born. The respondent was then asked whether each of these siblings was still alive. For living siblings, the interviewer asked the current age of each sibling. For deceased siblings,

age at death and number of years since death were recorded. When a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were accepted.

For every sibling who had died, the respondent was asked whether the death was due to an accident or violence. Estimates of maternal mortality are refined by excluding deaths due to accidents or violence; however, other incidental deaths, such as HIV-related deaths, are not identified and are therefore not excluded. For sisters who died at age 12 or older, three questions were asked to determine whether the death was maternity-related: “Was (NAME) pregnant when she died?” and, if the response was negative, “Did (NAME) die during childbirth?” and, if not, “Did (NAME) die within 2 months after the end of a pregnancy or childbirth?”

14.2 DIRECT ESTIMATES OF ADULT MORTALITY

Adult mortality rate

The number of adult deaths per 1,000 population age 15-49. Adult mortality rates by 5-year age groups are calculated as follows: the number of deaths to respondents’ siblings in each age group are divided by the number of person-years of exposure to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of siblings (brothers or sisters) reported as having died within the 7 years preceding the survey. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).

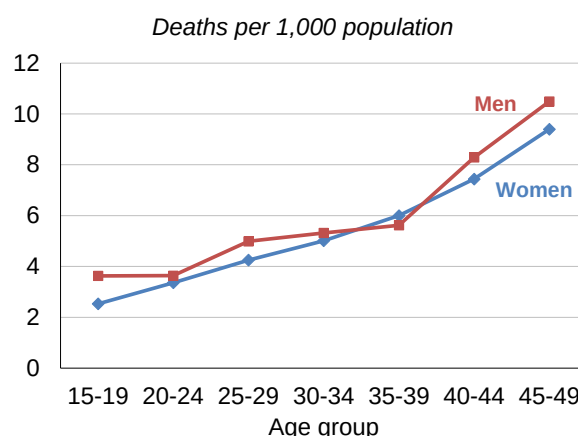
Sample: Siblings (both living and dead) who were age 15-49 in the 7 years preceding the survey, by sex and 5-year age groups

Evaluating the plausibility and stability of overall adult mortality is one way to assess the quality of the data used to estimate maternal mortality. If the estimated rates of overall adult mortality are implausible, rates based on a subset of deaths (maternal deaths in particular) may have serious problems.

The reported ages at death and years since death of the respondents’ brothers and sisters are used to make direct estimates of adult mortality. Because of differentials in exposure to the risk of dying, this report presents age- and sex-specific death rates. To ensure a sufficiently large number of adult deaths to generate a robust estimate, rates are calculated for the 7-year period before the survey (roughly late 2012 and early 2013 to late 2019 and early 2020). Nevertheless, age-specific mortality rates obtained in this manner are subject to considerable sampling variation. The 7-year period is a compromise between the desire for the most recent data and the need to minimize sampling error.

Table 14.1 and **Figure 14.1** show age-specific mortality rates among women and men age 15-49 for the 7 years before the 2019-20 LDHS. Overall, the adult mortality rate is higher among men (5.32 deaths per 1,000 population) than among women (4.76 deaths per 1,000 population). Adult mortality rates increase with increasing age. Mortality rates are higher for men than for women in all age groups except age 35-39 (**Figure 14.1**).

Figure 14.1 Adult mortality rates by age



14.3 TRENDS IN ADULT MORTALITY

Table 14.2 shows the probability of dying between exact ages 15 and 50 ($_{35}q_{15}$); $_{35}q_{15}$ is the probability that a woman or man who survived to age 15 will die before age 50, applying the age-specific death rates in the 7 years before each of the last three LDHS surveys. The 2019-20 LDHS data show that women have a lower probability of dying than men: 173 of 1,000 women age 15 and 189 of 1,000 men age 15 would be expected to die before age 50.

Among women, the estimated probability of dying by age 50 has fluctuated slightly over time, increasing from 164 per 1,000 before the 2007 survey to 176 per 1,000 before the 2013 survey and then decreasing to 173 per 1,000 before the 2019-20 survey. Among men, the probability declined from 186 per 1,000 before the 2007 survey to 151 per 1,000 before the 2013 survey and then increased to 189 per 1,000 before the 2019-20 survey. These fluctuations are not statistically significant; there is no significant evidence of a trend (**Appendix Table B.10**).

14.4 DIRECT ESTIMATES OF MATERNAL MORTALITY

Maternal mortality rate

The number of maternal deaths per 1,000 women age 15-49. Maternal mortality rates by 5-year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey either during pregnancy or delivery, or in the 42 days following the delivery or termination of a pregnancy, by their age group at the time of death; deaths due to accidents or violence are excluded. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

Maternal mortality ratio

The number of maternal deaths per 100,000 live births. The maternal mortality ratio is calculated by dividing the age-standardized maternal mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period.

Maternal deaths are a subset of all female deaths. They are defined as any deaths that occur during pregnancy or childbirth or within 42 days after the birth or termination of a pregnancy, not including deaths due to accidents or violence. Two methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997).

Table 14.3 presents age-specific direct estimates of maternal mortality from the reported survivorship of sisters for the 7-year period prior to the 2019-20 LDHS. These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the lower boundary for

eligibility among women interviewed in the survey is 15 years, and the upper boundary is 49 years), the overall rate for women age 15-49 was standardized by the age distribution of survey respondents.

The mortality rate associated with pregnancy and childbearing in Liberia is 1.07 maternal deaths per 1,000 woman-years of exposure.

The estimated age-specific mortality rate is highest among women age 20-24 (1.63) and lowest among those age 15-19 (0.51).

Maternal deaths represent 23% of all deaths among women age 15-49 during the 7-year period preceding the survey.

The maternal mortality ratio for the 7-year period before the 2019-20 LDHS is estimated at 742 maternal deaths per 100,000 live births. That is, for every 1,000 births in Liberia, about seven women die during pregnancy, during childbirth, or within 42 days of the end of a pregnancy from causes other than accidents or violence (**Table 14.4**). The confidence interval surrounding the maternal mortality estimate is 485 to 1,000 deaths per 100,000 live births.

At current fertility and mortality rates, 3% of Liberian women will die from maternal causes while in the reproductive age range (age 15-49).

14.5 TRENDS IN PREGNANCY-RELATED MORTALITY

Pregnancy-related mortality rate

The number of pregnancy-related deaths per 1,000 women age 15-49. Pregnancy-related mortality rates by 5-year age groups are calculated by dividing the number of pregnancy-related deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey either during pregnancy or delivery, or in the 2 months following the delivery or termination of a pregnancy, by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

Pregnancy-related mortality ratio

The number of pregnancy-related deaths per 100,000 live births. The pregnancy-related mortality ratio is calculated by dividing the age-standardized pregnancy-related mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period.

The previous LDHS surveys used a definition of maternal mortality that included deaths due to accidents or violence; therefore, the results of those surveys cannot be compared with the 2019-20 LDHS maternal mortality estimate presented in section 14.4. To allow a comparison with estimates from previous LDHS surveys, the 2019-20 LDHS defines a pregnancy-related death as the death of a woman during pregnancy or

childbirth or within 2 months of delivery or termination of a pregnancy, irrespective of the cause of death. What the current LDHS defines as a pregnancy-related death was labeled a maternal death in earlier LDHS surveys. Estimates of pregnancy-related mortality are therefore based solely on the timing of the death in relation to the pregnancy. This definition deviates slightly from the WHO definition of a pregnancy-related death, which limits the window to 42 days.

Comparing MMR and PRMR

Maternal mortality (MMR)

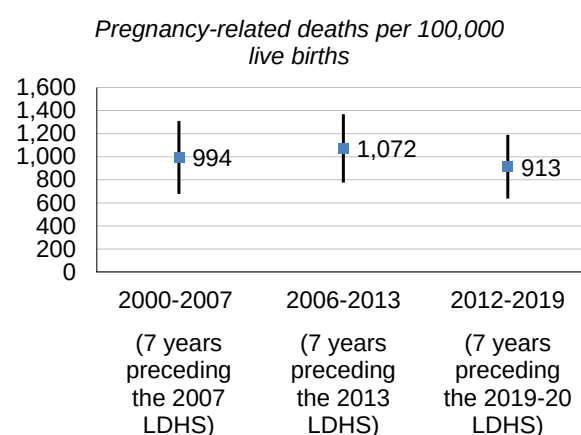
Women who died when pregnant, during delivery, or within **42 days** of delivery or the termination of a pregnancy, **except** when death was due to an accident or violence

Pregnancy-related mortality (PRMR)

Women who died when pregnant, during delivery, or within **2 months** of delivery or the termination of a pregnancy, **including** deaths due to accidents or violence

Table 14.5 and **Figure 14.2** present estimates of the pregnancy-related mortality ratio (PRMR) with confidence intervals for the 2019-20 LDHS and previous LDHS surveys. The pregnancy-related maternal mortality ratio for the 2019-20 LDHS is 913 (CI: 638-1,189) deaths per 100,000 live births, meaning that for every 1,000 births in Liberia about nine women die during pregnancy or within 2 months of the end of a pregnancy from any cause, including accidents or violence. The PRMR in Liberia has fluctuated since 2007. However, the confidence intervals surrounding the 2013 and 2019-20 PRMR estimates overlap, meaning that the PRMR between the two surveys could have remained the same; there is no significant evidence of a trend.

Figure 14.2 Trends in the pregnancy-related mortality ratio (PRMR) with confidence intervals



LIST OF TABLES

For more information on adult and maternal mortality, see the following tables:

- **Table 14.1 Adult mortality rates**
- **Table 14.2 Adult mortality probabilities**
- **Table 14.3 Maternal mortality**
- **Table 14.4 Maternal mortality ratio**
- **Table 14.5 Pregnancy-related mortality trends**

Table 14.1 Adult mortality rates

Direct estimates of female and male mortality rates for the 7 years preceding the survey, by 5-year age groups, Liberia DHS 2019-20

Age	Deaths	Exposure years	Mortality rate ¹
FEMALE			
15-19	38	15,104	2.53
20-24	54	16,195	3.36
25-29	66	15,581	4.25
30-34	72	14,352	5.01
35-39	68	11,315	6.00
40-44	55	7,365	7.44
45-49	41	4,382	9.40
Total 15-49	395	84,294	4.76 ^a
MALE			
15-19	52	14,253	3.63
20-24	56	15,457	3.64
25-29	77	15,352	4.99
30-34	73	13,707	5.32
35-39	62	11,061	5.62
40-44	62	7,448	8.29
45-49	49	4,707	10.49
Total 15-49	431	81,985	5.32 ^a

¹ Expressed per 1,000 population

^a Age-adjusted rate

Table 14.2 Adult mortality probabilities

The probability of dying between ages 15 and 50 for women and men during the 7 years preceding the survey, Liberia DHS 2019-20

Survey	Female _{35Q15} ¹	Male _{35Q15} ¹
2019-20 LDHS	173	189
2013 LDHS	176	151
2007 LDHS	164	186

¹ The probability of dying between exact ages 15 and 50, expressed per 1,000 persons at age 15

Table 14.3 Maternal mortality

Direct estimates of maternal mortality rates for the 7 years preceding the survey, by 5-year age groups, Liberia DHS 2019-20

Age	Percentage of female deaths that are maternal	Maternal deaths ¹	Exposure years	Maternal mortality rate ²
15-19	20.1	8	15,104	0.51
20-24	48.7	26	16,195	1.63
25-29	18.4	12	15,581	0.78
30-34	21.8	16	14,352	1.09
35-39	23.3	16	11,315	1.40
40-44	19.8	11	7,365	1.47
45-49	7.8	3	4,382	0.74
Total 15-49	23.3	92	84,294	1.07 ^a

¹ A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause except accidents or violence.

² Expressed per 1,000 woman-years of exposure

^a Age-adjusted rate

Table 14.4 Maternal mortality ratio

Total fertility rate, general fertility rate, maternal mortality ratio, and lifetime risk of maternal death for the 7 years preceding the survey, Liberia DHS 2019-20

Total fertility rate (TFR)	4.5
General fertility rate (GFR) ¹	144
Maternal mortality ratio (MMR) ²	742 (CI: 485-1,000)
Lifetime risk of maternal death ³	0.033

CI: Confidence interval

¹ Age-adjusted rate, expressed per 1,000 women age 15-49

² Expressed per 100,000 live births; calculated as the age-adjusted maternal mortality rate (shown in Table 14.3) times 100 divided by the age-adjusted general fertility rate

³ Calculated as $1 - (1 - \text{MMR})^{\text{TFR}}$, where TFR represents the total fertility rate for the 7 years preceding the survey

Table 14.5 Pregnancy-related mortality trends

Direct estimates of pregnancy-related mortality rates for the 7 years preceding each survey, by 5-year age groups, Liberia DHS 2019-20

Age	Pregnancy-related mortality rates ^{1,2}		
	2012-2019	2006-2013	2000-2007
15-19	0.69	0.92	1.60
20-24	1.98	1.46	1.10
25-29	1.01	2.19	1.77
30-34	1.38	2.14	2.13
35-39	1.89	1.56	1.77
40-44	1.52	3.12	2.51
45-49	0.74	1.77	1.51
Total 15-49 ^a	1.31	1.74	1.70
Total fertility rate (TFR)	4.5	5.1	5.5
General fertility rate (GFR) ³	144	162	171
Pregnancy-related mortality ratio (PRMR) ⁴	913	1,072	994
Confidence interval	(638-1,189)	(776-1,368)	(678-1,310)
Lifetime risk of pregnancy-related death ⁵	0.041	0.053	0.054

¹ Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy, from any cause including accidents or violence.

² Expressed per 1,000 woman-years of exposure

³ Age-adjusted rate, expressed per 1,000 women age 15-49

⁴ Expressed per 100,000 live births; calculated as the age-adjusted pregnancy-related mortality rate times 100 divided by the age-adjusted general fertility rate

⁵ Calculated as $1 - (1 - \text{PRMR})^{\text{TFR}}$, where TFR represents the total fertility rate for the 7 years preceding the survey

^a Age-adjusted rate

Key Findings

- **Employment and cash earnings of currently married women and men:** 76% of currently married women and 97% of currently married men were employed in the past 12 months. Sixty-five percent of employed women received cash for their work, as compared with 80% of employed men.
- **Control over women's earnings:** 89% of currently married employed women with cash earnings participate in decisions about the use of their earnings alone or jointly with their husband, an increase from 76% in 2007.
- **Ownership and use of bank accounts and mobile phones:** Only 12% of women and 21% of men have an account in a bank or financial institution that they use. Forty-seven percent of women and 61% of men have a mobile phone.
- **Attitudes towards wife beating:** 37% of women agree that a husband is justified in beating his wife in at least one of five specified circumstances, as compared with 25% of men.
- **Female genital cutting:** 83% of women age 15-49 have heard of female circumcision. Among women who have heard of female circumcision, 38% say that they have been circumcised.

Liberia is contributing to the global dialogue on women's issues, as seen by the country staging the International Women's Colloquium (CSF 2011) in 2009 and having two Nobel Laureates in 2011 (The Nobel Prize 2011) who were awarded on the basis of their contributions to women's empowerment. This chapter explores women's empowerment in terms of employment, earnings, control over earnings, magnitude of earnings relative to those of their partners, household decision making, empowering attitudes, property ownership, and female genital cutting (FGC). Wherever relevant, gender differences are also shown. These indicators provide information about the status of women and shed light on the context in which women make family and health choices. In addition, responses to specific questions are used to define two indicators of women's empowerment: their participation in household decision making and their attitudes towards wife beating.

15.1 MARRIED WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: Currently married women and men age 15-49

Earning cash for employment

Respondents are asked if they are paid for their labor in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women and men age 15-49 employed in the 12 months before the survey

Seventy-six percent of currently married women and 97% of currently married men are employed. Among those employed, women are twice as likely as men to be unpaid (34% versus 17%). Fifty-two percent of employed women and 69% of employed men receive only cash for their work, and another 13% of women and 10% of men are paid in cash and in-kind (**Table 15.1**).

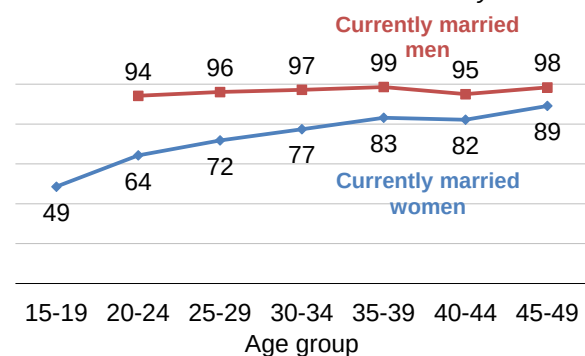
Trends: The percentage of currently married women who are employed decreased from 76% in 2007 to 66% in 2013 before once again rising to 76% in 2019-20. The percentage who received cash for their work (including those paid in cash and in-kind) rose from 61% in 2007 to 68% in 2013 before declining slightly to 65% in 2019-20.

Patterns by background characteristics

- Employment generally increases with age among currently married women (from 49% among those age 15-19 to 89% among those age 45-49) but varies little by age among men (**Table 15.1** and **Figure 15.1**).
- The percentage of employed women who earn cash (cash only or cash and in-kind) is highest (71%) among those age 30-34 and lowest (56%) among those age 15-19. Among men, by contrast, the percentage who earn cash varies little by age. Notably, in every age group, employed men are much more likely than employed women to earn cash.

Figure 15.1 Employment by age

Percentage of currently married women and men who were employed at any time in the 12 months before the survey



15.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

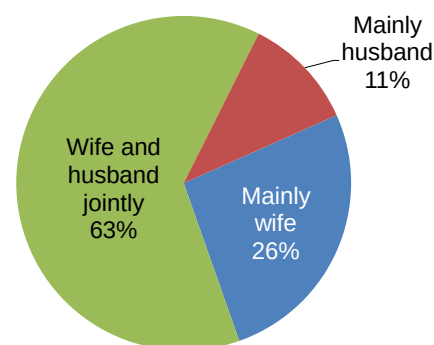
Sample: Currently married women and men age 15-49 who received cash earnings (cash only or cash and in-kind) for employment during the 12 months before the survey

Women's access to financial resources is a key mechanism for reducing poverty (SDG 1). To be empowered, women must have a stake in decision making about the use of their own earnings. Twenty-six percent of currently married women who have earnings mainly decide alone how their earnings are used, 63% decide jointly with their husbands, and 11% report that their husbands are the main decision maker (**Table 15.2.1** and **Figure 15.2**).

Among currently married women who are employed and have cash earnings, 11% earn more than their husbands, 13% earn about the same as their husbands, and 67% earn less than their husbands. Six percent of currently married women who earn cash say that their husbands do not have any cash earnings.

Figure 15.2 Control over women's earnings

Percent distribution of currently married women with cash earnings by the person who decides how their earnings are used*



* Includes women who worked in the 12 months before the survey.

Trends: The percentage of currently married women who participate alone or jointly with their husbands in decisions about the use of their earnings has risen steadily over time, from 76% in 2007 to 89% in 2019-20. Among women who have cash earnings, the percentage who earn less than their husbands increased from 59% in 2007 to 67% in 2019-20.

Patterns by background characteristics

- By county, the percentage of women who make decisions about their own earnings alone is highest in Maryland (36%), the percentage who make decisions jointly with their husbands is highest in Margibi and River Cess (80% each), and the percentage who report that their husbands mainly make these decisions is highest in Grand Kru (26%) (**Table 15.2.1**).
- The percentage of currently married women with cash earnings who participate in decisions about the use of their earnings alone or jointly with their husbands varies little by education or wealth. At least 8 in 10 women in all education and wealth categories participate in decisions about their own earnings.

15.3 CONTROL OVER MEN'S EARNINGS

Twenty-eight percent of currently married men age 15-49 with earnings report that they themselves mainly make decisions about the use of their own earnings, and 57% say that they make these decisions jointly with their wives. By contrast, 24% of currently married women whose husbands have earnings report that their

husbands make these decisions mainly alone and 63% report that these decisions are made jointly (**Table 15.2.2**).

For information on how women's control over their own earnings and their husbands' earnings varies according to whether they earn more or less than their husbands, see **Table 15.3**.

15.4 WOMEN'S AND MEN'S OWNERSHIP OF ASSETS

Ownership of a house or land

Respondents who own a house or land, whether alone or jointly with someone else.

Sample: Women and men age 15-49

Ownership of and control over assets are key for financial empowerment. In Liberia, ownership of assets in the form of a house and land is somewhat more common among men than women. Overall, 31% of men and 24% of women own a house, while 28% of men and 14% of women own land (**Figure 15.3**). Women are also less likely than men to own a house alone (10% versus 16%) and land alone (5% versus 14%) (**Tables 15.4.1** and **15.4.2**).

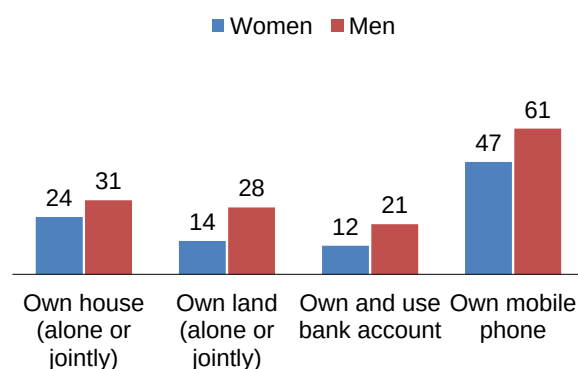
Trends: The percentage of women who own a house declined from 30% in 2013 to 24% in 2019-20.

Patterns by background characteristics

- House and land ownership increase sharply with age among both women and men. For example, house ownership ranges from 3% among women age 15-19 to 57% among women age 45-49 and from 8% among men age 15-19 to 63% among men age 45-49 (**Tables 15.4.1** and **15.4.2**).
- Women and men in rural areas are more likely to own a house (38% and 43%, respectively) than those in urban areas (15% and 23%, respectively). Similarly, rural women and men are more likely to own land (23% and 42%, respectively) than urban women and men (8% and 20%, respectively). Furthermore, within urban areas, women and men in Greater Monrovia are much less likely than those in other urban areas to own either a house or land.
- Home ownership (alone or jointly) among women ranges from 11% in Montserrado to 48% in River Cess, while land ownership among women is least common in Montserrado and Margibi (5% and 6%, respectively) and most common in Sinoe (28%). Men living in Nimba have the highest percentage of both home and land ownership (60% and 70%, respectively), while men in Montserrado are least likely to own a home or land (17% and 10%, respectively).
- House and land ownership among women tend to have a U-shaped relationship with education and wealth, initially declining and then increasing among women at the highest levels of education and wealth. Among men, however, house and land ownership vary inconsistently with education and wealth.

Figure 15.3 Ownership of assets

Percentage of women and men age 15-49 by ownership of specific items



15.5 POSSESSION OF TITLE OR DEED FOR A HOUSE OR LAND

Women and men who said that they owned a house or land were asked if they had a title or deed for the property and whether their name was on the title or deed. Overall, 18% of women and 19% of men who own a house have a title or deed with their name on it, and 72% of women and 74% of men who own a house say that they do not have a title or deed. Similarly, 16% each of women and men who own land have a title or deed with their name on it, and 76% of women and 78% of men who own land do not have a title or deed (**Tables 15.5.1, 15.5.2, 15.6.1, and 15.6.2**). Notably, a higher proportion of women (3% for house ownership and 4% for land ownership) than men (less than 1% for house ownership and 1% for land ownership) have missing information on whether they have a title or deed to the house or land they own or know that they have a title or deed but do not know if their name is on it.

Patterns by background characteristics

- Although women and men in urban areas are less likely to own either a house or land than their rural counterparts, they are much more likely to have a title or deed to the property with their name on it. For example, 35% of urban women and 28% of urban men who own land have a title or deed with their name on it, as compared with 4% of rural women and 7% of rural men who own land.
- Property deeds or titles for houses owned by women are common only in Montserrado (73%), and property deeds or titles for houses owned by men are common only in Margibi (75%) and Montserrado (66%). In all other counties, women and men have titles or deeds for fewer than 40% of properties.
- For both women and men who own property, having a title or deed to the property with their name on it tends to increase sharply with increasing education and wealth. For example, 83% of women and 52% of men in the highest wealth quintile who own land have a title or deed with their name on it, compared with 2% of women and 5% of men in the lowest wealth quintile.

15.6 OWNERSHIP AND USE OF BANK ACCOUNTS AND MOBILE PHONES

Ownership of bank accounts

Respondents who have an account in a bank or other financial institution that they themselves use.

Sample: Women and men age 15-49

Ownership of a mobile phone

Respondents who own a mobile phone.

Sample: Women and men age 15-49

In Liberia, only 12% of women and 21% of men have an account in a bank or other financial institution that they use, and 47% of women and 61% of men own a mobile phone (**Figure 15.3**). Among those with a mobile phone, 52% of women and 50% of men use their phone for financial transactions (**Tables 15.7.1 and 15.7.2**).

Patterns by background characteristics

- Women and men in urban areas are more likely than women and men in rural areas to have an account in a bank or financial institution or to own a mobile phone. For example, 16% of urban women and 6% of rural women have a bank account, while 61% of urban women and 23% of rural women own a mobile phone (**Table 15.7.1**).

- Bank account use is highest among women and men in Montserrado (19% and 30%, respectively) and lowest among women in River Cess and Grand Kru (1% each) and men in Grand Cape Mount (3%). Mobile phone ownership also varies by county, from 16% among women in Gbarpolu to 67% among women in Montserrado and from 38% among men in River Cess to 78% among men in Montserrado.
- Fifty-one percent of women and 67% of men with a higher education have an account in a bank or other financial institution, as compared with 7% or less of women and 12% or less of men with a junior high education, an elementary education, or no education. Similarly, 93% of women and 97% of men with a higher education own a mobile phone, compared with 29% of women and 32%-39% of men with an elementary education or no education. The percentages of women and men who own a mobile phone and use their phone for financial transactions increase sharply with increasing education.
- Although women and men who have an account in a bank or other financial institution increases with wealth, only 25% of women and 42% of men even in the highest wealth quintile have an account in a bank or other financial institution. In general, the percentages of women and men who own a mobile phone and use their phone for financial transactions increase steadily with increasing wealth.

15.7 WOMEN'S PARTICIPATION IN DECISION MAKING

Participation in major household decisions

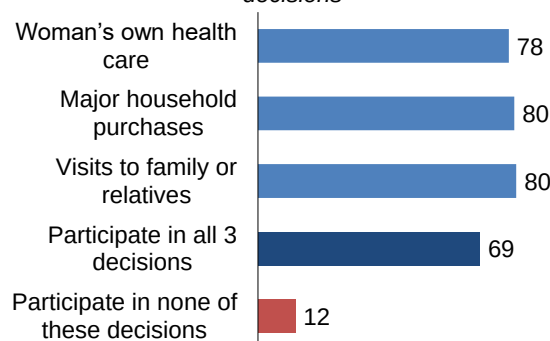
Women are considered to participate in household decisions if they make decisions alone or jointly with their husbands in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.

Sample: Currently married women age 15-49

About 8 in 10 women participate in each of the three specified decisions (regarding their own health care, major household purchases, and visits to their family or relatives) (**Table 15.8** and **Table 15.9.1**). Women are much more likely to make each of these decisions jointly with their husbands than alone (**Table 15.8**). However, more women make decisions mainly alone about major household purchases (28%) than about their own health care (20%) and visits to their family or relatives (22%). Overall, 69% of currently married women participate in all three specified household decisions either alone or jointly with their husbands, and 12% do not participate in any of the three decisions (**Table 15.9.1** and **Figure 15.4**).

Figure 15.4 Women's participation in decision making

Percentage of currently married women age 15-49 participating in specific decisions



Currently married men were asked about decision making regarding their own health care and making major household purchases. Overall, 75% of men say that they participate alone or jointly with their wives in decisions about their own health care, and 67% say that they participate alone or jointly with their wives in decisions about major household purchases. Fifteen percent of men say that they do not participate in either decision (**Table 15.9.2**).

Trends: The percentage of currently married women who participate alone or jointly with their husband in all three of the specified decisions increased slightly from 66% in 2013 to 69% in 2019-20. However, there was also an increase in the percentage who do not participate in any of the three decisions, from 9% to 12%.

Patterns by background characteristics

- Women's participation in household decision making increases with age and number of living children.
- Women who are employed, whether for cash or not for cash, are more likely to participate in all three specified decisions (72% and 75%, respectively) than women who are not employed (56%) (**Table 15.9.1**).
- Women's participation in all three specified decisions varies by county, from a low of 51% in Grand Cape Mount to a high of 83% each in River Cess and River Gee.
- The percentage of women who participate in all three specified decisions is higher among those with a senior high or higher education (72% and 86%, respectively) than among those who have no education or less education (65%-69%). There are only minimal variations by wealth in women's participation in the three specified decisions.

15.8 ATTITUDES TOWARD WIFE BEATING

Attitudes toward wife beating

Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

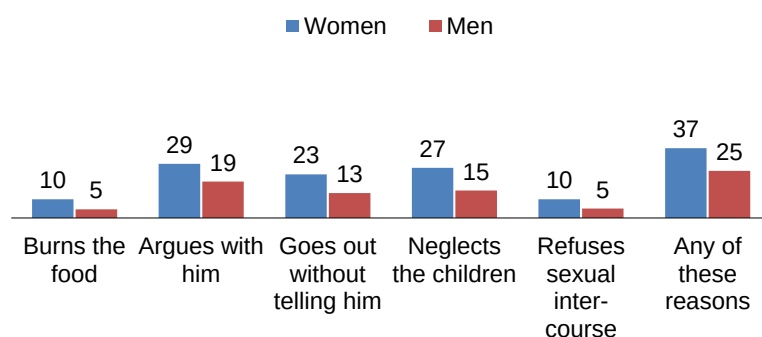
Sample: Women and men age 15-49

The 2019-20 Liberia DHS collected information on women's and men's attitudes toward wife beating in five separate circumstances. Overall, 37% of women believe that a husband is justified in beating his wife in at least one of the five specified circumstances, as compared with 25% of men (**Tables 15.10.1 and 15.10.2**).

Twenty-nine percent of women agree that wife beating is justified if a wife argues with her husband, 27% agree that it is justified if she neglects the children, 23% agree that it is justified if she goes out without telling him, and 10% each agree that it is justified if she refuses to have sexual intercourse with him and if she burns the food (**Table 15.10.1 and Figure 15.5**). Men are less likely than women to agree with each of the five specified reasons for wife beating.

Figure 15.5 Attitudes towards wife beating

Percentage of women and men age 15-49 who agree that a husband is justified in beating his wife for specific reasons



Trends: The percentage of women who agree that wife beating is justified in at least one of the five specified circumstances has declined substantially over time, from 59% in 2007 to 37% in 2019-20. The percentage of men justifying wife beating in at least one of the specified circumstances declined from 30% in 2007 to 24% in 2013 and remained almost unchanged at 25% in 2019-20.

Patterns by background characteristics

- Women who are employed but are not paid in cash are more likely to agree that wife beating is justified in at least one of the five specified circumstances (48%) than women who are not employed (33%) and women who are employed for cash (35%) (**Table 15.10.1**).
- Forty-six percent of rural women agree that wife beating is justified for at least one of the specified reasons, as compared with 32% of urban women. Within urban areas, 22% of women in Greater Monrovia and 44% of women in other urban areas agree with at least one of the specified reasons for wife beating.
- Women's agreement with wife beating for at least one of the specified reasons is highest in River Gee (62%) and Grand Bassa (60%) and lowest in Montserrado (23%).
- Agreement with wife beating is much lower among women with a senior high education (23%) or a higher education (12%) than among women with no education or less education (41%-49%).
- Agreement with at least one of the specified reasons for wife beating declines sharply with increasing wealth, from 49% among women in the lowest wealth quintile to 24% among women in the highest wealth quintile.

15.9 NEGOTIATING SEXUAL RELATIONS

To assess attitudes toward negotiating safer sexual relations with husbands, women and men were asked whether they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women and asking that he use a condom if she knows he has an STI.

Similar proportions of women and men age 15-49 agree that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sex with other women (73% and 72%, respectively); however, a higher proportion of men (86%) than women (76%) agree that a woman is justified in asking her husband to use a condom if he has an STI (**Table 15.11**).

To assess women's ability to actually negotiate safer sexual relations with their husbands, currently married women were asked whether they can say no to their husbands if they do not want to have sexual intercourse and whether they can ask their husbands to use a condom. Eighty-two percent of women indicated that they can say no to their husbands if they do not want to have sexual intercourse, but a smaller proportion (59%) said that they can ask their husbands to use a condom (**Table 15.12**).

Patterns by background characteristics

- Eighty-two percent each of urban and rural women are able to say no to their husband if they do not want to have sexual intercourse; however, only 52% of rural women say that they can ask their husband to use a condom, as compared with 65% of urban women (**Table 15.12**).
- Women's ability to negotiate safer sex with their husband varies by county. The proportion of women who can say no to their husbands if they do not want to have sexual intercourse ranges from 65% in Grand

Cape Mount to 91% in Grand Gedeh. The proportion of women who can ask their husbands to use a condom ranges from 41% in River Cess to 72% in Montserrado.

- The proportion of women who can say no to their husbands if they do not want to have sexual relations does not vary consistently with education and does not vary by wealth. However, the proportion of women who can ask their husbands to use a condom tends to increase sharply with increasing education and wealth.

For more information on how indicators of women's empowerment, namely their participation in household decision making and their agreement with wife beating, relate to each other and to selected demographic and health indicators, see **Tables 15.13-15.17**.

15.10 FEMALE GENITAL CUTTING

FGC, also known as female genital mutilation (FGM) or female circumcision, is defined by the WHO as any procedure that involves partial or total removal of the external genitalia and/or injury to the female genital organs for any non-therapeutic reason. FGC, widely recognized as a violation of human rights, is deeply rooted in traditional beliefs and perceptions shared across generations.

In Liberia, FGC is typically implemented as part of the initiation rituals of the Sande society or other women's bush societies. The rituals involve taking girls into the bush to initiate them into adulthood by teaching them local customs, sex and sexual etiquette, female hygiene, and housekeeping skills. As part of these initiation rituals, girls are also typically circumcised. The form of circumcision practiced in Liberia involves the removal of part or all of the clitoris. Before leaving office, President Ellen Johnson Sirleaf placed a temporary ban on circumcising girls below age 18. However, this ban expired in February 2019. The Government of President George Manneh Weah suspended the activities of the bush schools that conduct the practice for an additional year (FrontPageAfrica 2019), with this suspension being involuntarily extended with the emergence of Covid-19 restrictions.

The 2019-20 Liberia DHS asked women age 15-49 questions on their knowledge of and membership in the Sande society or bush societies, as was done in the 2007 and 2013 LDHS surveys. However, unlike the prior surveys, the 2019-20 LDHS also included questions that directly asked about FGC. Women were asked if they had ever heard of female circumcision and whether they had been circumcised. In addition, they were asked questions on age at circumcision and attitudes toward the continuation of the practice.

15.10.1 Knowledge of and Membership in Sande Secret Society

In Liberia, 83% of women age 15-49 have heard of the Sande society or women's bush societies. Among women who have heard of these societies, 35% say that they are members (**Table 15.18**). In general, it is assumed that women who are members of these societies are also circumcised.

Trends: The percentage of women who have heard of the Sande society or other women's bush societies fell from 89% in 2007 and 2013 to 83% in 2019-20. Membership in these societies shows a sharp decline over time, from 66% in 2007 and 50% in 2013 to 35% in 2019-20.

15.10.2 Knowledge and Prevalence of Female Genital Cutting

In Liberia, 83% of women age 15-49 have heard of female circumcision, and among women who have heard of female circumcision, 38% say that they have been circumcised (**Table 15.19**). A comparison with women's membership in the Sande society or other women's bush societies shows that the percentage of women who report being members is lower than the percentage of women who report being circumcised.

Patterns by background characteristics

- Knowledge and prevalence of circumcision vary inversely with women's age. The percentage of women who have heard of female circumcision declines from 91% among those age 45-49 to 73% among those age 15-19 (**Table 15.19**).
- Among women who have heard of circumcision, the prevalence of circumcision declines from 60% among those age 45-49 to 26%-28% among those age 15-24 (**Figure 15.6**).
- Christian women are less likely than women of other religions to be circumcised. Nonetheless, even among Christian women, 35% of those who have heard of female circumcision say that they are circumcised.
- Knowledge of circumcision varies only minimally by urban or rural residence; however, urban women are much less likely to be circumcised (30%) than rural women (52%).
- By county, the prevalence of female circumcision varies from a low of 2% in River Gee and 3% each in Maryland and Grand Kru to a high of 78% in Gbarpolu and 71% in Grand Cape Mount (**Figure 15.7**).
- Although there are only minimal differences in knowledge of circumcision by education or wealth, the prevalence of circumcision declines sharply with increasing education and wealth.

Women who said they were circumcised were asked the age at which they were cut. Among women who are circumcised, 25% were circumcised before age 5, 17% at age 5-9, 33% at age 10-14, and 22% at age 15 or above (**Table 15.20**).

Figure 15.6 Female circumcision by age

Percentage of women age 15-49 who are circumcised

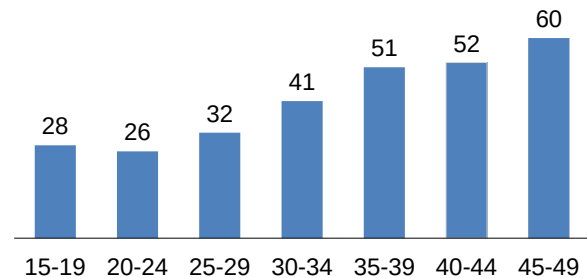
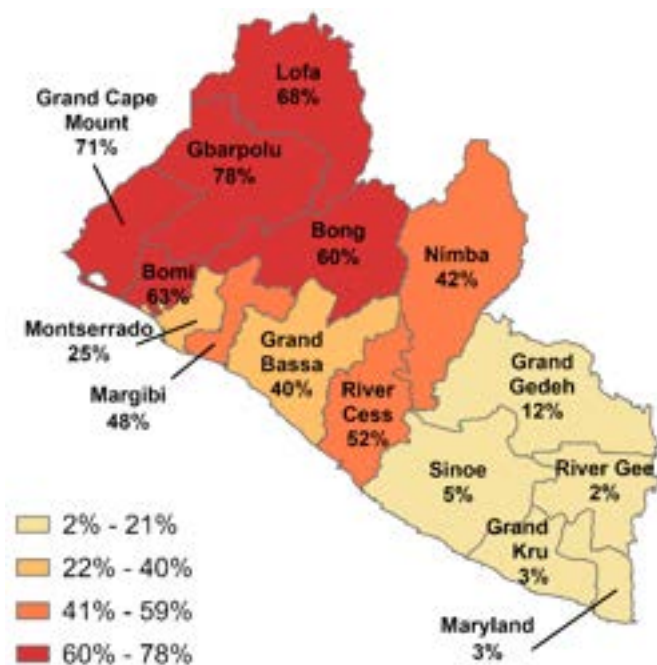


Figure 15.7 Female circumcision by county

Percentage of women age 15-49 who are circumcised



15.10.3 Opinions about the Continuation of the Practice of FGC

Women who had heard of female circumcision were asked their opinion on whether the practice of FGC should continue. The majority of women (64%) said that the practice should not be continued; only 20% said that the practice should be continued, and 16% either did not know or said that it depends (**Table 15.21**).

Patterns by background characteristics

- Among women who have heard of FGC, opinions regarding the continuation of the practice vary greatly by whether or not women are themselves circumcised. Forty-four percent of women who are circumcised say that the practice should not continue, as compared with 76% of women who are not circumcised.
- Christian women are more likely than women of other religions to not want the practice to continue.
- Among women who have heard of FGC, 73% of those in urban areas and 48% of those in rural areas do not want the practice to continue.
- The percentage of women who do not want the practice to continue is highest in Grand Kru (84%) and lowest in Grand Cape Mount (25%).
- The percentage of women who say that the practice of FGC should not continue increases sharply with increasing education and wealth. Nonetheless, almost half of women with no education (49%) and 43% of women in the lowest wealth quintile say that the practice should not continue.

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- **Table 15.21** **Opinions of women about whether the practice of circumcision should continue**

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Liberia DHS 2019-20

Age	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings					Number of respondents
	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Total	
WOMEN								
15-19	48.6	204	44.9	11.3	4.9	38.9	100.0	99
20-24	64.3	625	50.4	10.9	2.7	36.0	100.0	402
25-29	71.8	788	54.6	9.9	1.7	33.8	100.0	565
30-34	77.4	819	57.7	12.8	0.6	28.9	100.0	634
35-39	83.2	785	51.7	13.5	1.7	33.1	100.0	653
40-44	82.2	545	49.4	14.5	1.4	34.8	100.0	448
45-49	89.1	449	47.3	14.5	1.4	36.8	100.0	400
Total 15-49	76.0	4,216	52.1	12.6	1.6	33.6	100.0	3,202
MEN								
15-19	*	12	*	*	*	*	*	12
20-24	94.2	141	65.0	14.2	3.8	17.0	100.0	132
25-29	96.1	308	69.8	10.8	5.7	13.7	100.0	296
30-34	97.2	367	73.1	10.2	3.3	13.5	100.0	357
35-39	98.6	429	68.5	9.6	2.8	19.2	100.0	423
40-44	95.0	357	68.4	9.5	3.5	18.6	100.0	339
45-49	98.4	293	69.2	9.7	3.8	17.4	100.0	288
Total 15-49	96.9	1,906	69.3	10.2	3.8	16.8	100.0	1,847
50-59	94.7	358	60.1	16.0	4.8	19.2	100.0	339
Total 15-59	96.5	2,264	67.9	11.1	3.9	17.2	100.0	2,186

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Person who decides how the wife's cash earnings are used:				Wife's cash earnings compared with husband's cash earnings:							Total	Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	More	Less	About the same	Husband has no earnings	Don't know	Missing		
Age													
15-19	21.9	50.5	24.2	3.5	100.0	13.3	73.7	6.9	6.2	0.0	0.0	100.0	56
20-24	22.5	59.7	17.8	0.0	100.0	6.8	79.5	8.7	2.3	2.7	0.0	100.0	246
25-29	30.1	63.1	6.7	0.1	100.0	9.8	72.6	11.2	3.6	2.7	0.0	100.0	365
30-34	25.7	63.4	10.6	0.3	100.0	10.2	68.8	10.9	5.6	4.4	0.0	100.0	447
35-39	25.1	66.1	8.7	0.1	100.0	10.5	64.3	13.8	9.0	2.4	0.0	100.0	426
40-44	27.6	62.0	10.5	0.0	100.0	12.8	57.2	16.5	6.2	7.2	0.0	100.0	286
45-49	26.5	60.7	12.4	0.4	100.0	13.4	56.8	15.6	9.5	4.7	0.0	100.0	247
Number of living children													
0	23.6	67.8	6.7	1.9	100.0	16.4	57.9	18.8	4.8	2.2	0.0	100.0	76
1-2	29.7	58.0	12.2	0.1	100.0	10.6	70.3	9.9	4.0	5.2	0.0	100.0	769
3-4	25.3	64.2	10.3	0.2	100.0	9.4	67.4	12.2	8.6	2.5	0.0	100.0	727
5+	22.7	66.5	10.5	0.3	100.0	11.5	62.4	16.1	6.0	4.0	0.0	100.0	502
Residence													
Urban	27.5	61.3	11.0	0.2	100.0	10.2	70.9	8.6	7.2	3.2	0.0	100.0	1,268
Greater Monrovia	34.7	52.6	12.6	0.2	100.0	9.2	72.4	5.2	10.2	3.0	0.0	100.0	738
Other urban	17.4	73.4	8.8	0.3	100.0	11.6	68.9	13.2	3.0	3.4	0.0	100.0	530
Rural	24.3	64.6	10.8	0.2	100.0	11.3	60.7	18.7	4.5	4.9	0.0	100.0	806
Region													
North Western	23.7	58.9	16.7	0.7	100.0	14.8	55.0	14.5	8.3	7.5	0.0	100.0	202
South Central	30.8	57.5	11.5	0.1	100.0	11.1	69.8	8.2	7.9	2.9	0.0	100.0	1,052
South Eastern A	20.1	75.2	4.7	0.0	100.0	12.6	61.5	22.2	1.5	2.2	0.0	100.0	159
South Eastern B	29.0	54.9	15.0	1.1	100.0	10.0	67.4	11.9	5.1	5.6	0.0	100.0	95
North Central	19.8	71.1	8.9	0.2	100.0	7.8	67.2	17.1	3.4	4.4	0.0	100.0	565
County													
Bomi	19.3	62.6	18.1	0.0	100.0	20.1	53.6	15.9	5.1	5.3	0.0	100.0	85
Bong	22.5	67.8	9.7	0.0	100.0	8.6	68.9	16.5	3.3	2.7	0.0	100.0	153
Gbarpolu	18.7	64.4	16.9	0.0	100.0	6.5	57.9	20.4	12.7	2.6	0.0	100.0	47
Grand Bassa	30.6	57.8	11.7	0.0	100.0	11.9	58.5	26.0	0.7	2.9	0.0	100.0	99
Grand Cape Mount	32.6	50.6	14.7	2.1	100.0	14.0	54.6	8.9	9.1	13.4	0.0	100.0	70
Grand Gedeh	22.7	71.3	5.9	0.0	100.0	10.2	81.8	5.5	1.3	1.3	0.0	100.0	57
Grand Kru	19.9	53.9	26.2	0.0	100.0	7.9	64.7	17.4	3.1	7.0	0.0	100.0	34
Lofa	34.1	57.3	7.8	0.8	100.0	6.2	60.7	14.7	9.7	8.6	0.0	100.0	119
Margibi	11.2	79.6	9.2	0.0	100.0	19.7	70.3	7.8	1.8	0.4	0.0	100.0	132
Maryland	36.3	51.6	10.0	2.0	100.0	9.5	69.3	9.3	6.1	5.8	0.0	100.0	52
Montserrado	34.0	54.0	11.9	0.1	100.0	9.6	71.1	6.2	9.8	3.3	0.0	100.0	820
Nimba	12.7	78.3	9.0	0.0	100.0	8.0	69.0	18.4	1.0	3.6	0.0	100.0	293
River Cess	10.7	79.5	9.8	0.0	100.0	12.2	33.2	49.5	4.0	1.2	0.0	100.0	25
River Gee	(22.1)	(76.9)	(1.0)	(0.0)	(100.0)	(20.4)	(66.5)	(5.9)	(7.2)	(0.0)	(0.0)	100.0	9
Sinoe	21.2	76.7	2.1	0.0	100.0	14.6	55.7	25.8	0.8	3.1	0.0	100.0	78
Education													
No education	24.6	63.2	12.1	0.2	100.0	10.9	64.8	15.8	4.4	4.1	0.0	100.0	833
Elementary	23.3	61.8	14.6	0.3	100.0	10.3	69.7	14.4	3.7	1.8	0.0	100.0	419
Junior high	21.9	70.1	7.4	0.5	100.0	6.9	68.1	11.2	10.3	3.5	0.0	100.0	280
Senior high	35.7	56.2	8.1	0.0	100.0	11.0	68.1	5.8	8.7	6.4	0.0	100.0	434
Higher	23.5	67.7	8.8	0.0	100.0	18.0	64.3	10.2	7.5	0.0	0.0	100.0	107
Wealth quintile													
Lowest	24.0	61.6	13.9	0.4	100.0	7.3	62.2	22.2	5.6	2.7	0.0	100.0	339
Second	20.4	68.8	10.3	0.5	100.0	8.0	61.4	20.4	3.8	6.5	0.0	100.0	388
Middle	22.3	65.6	11.8	0.3	100.0	11.6	69.3	11.5	3.1	4.5	0.0	100.0	349
Fourth	30.9	60.4	8.7	0.1	100.0	12.3	68.7	6.8	8.8	3.4	0.0	100.0	490
Highest	30.4	58.5	11.1	0.0	100.0	12.6	70.9	6.3	7.8	2.5	0.0	100.0	507
Total	26.2	62.6	10.9	0.2	100.0	10.6	66.9	12.5	6.1	3.8	0.0	100.0	2,073

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how the husband's cash earnings are used, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Men						Women					
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number
Age												
15-19	*	*	*	*	100.0	6	9.9	55.3	33.7	1.0	100.0	190
20-24	18.2	40.0	41.7	0.0	100.0	105	12.7	59.2	27.7	0.4	100.0	596
25-29	16.0	54.4	29.4	0.2	100.0	238	13.0	62.8	24.1	0.1	100.0	758
30-34	15.2	53.7	30.6	0.6	100.0	297	15.2	61.2	23.6	0.0	100.0	779
35-39	13.1	56.0	30.9	0.0	100.0	330	12.2	66.5	21.3	0.0	100.0	734
40-44	15.8	63.5	20.7	0.0	100.0	264	11.1	66.2	22.7	0.0	100.0	523
45-49	12.9	65.0	22.1	0.0	100.0	227	10.6	68.7	20.7	0.0	100.0	415
Number of living children												
0	26.9	38.3	34.8	0.0	100.0	83	13.3	56.3	28.8	1.6	100.0	239
1-2	16.2	44.7	38.8	0.3	100.0	507	14.7	59.1	26.1	0.1	100.0	1,432
3-4	14.1	58.8	27.0	0.1	100.0	491	13.0	65.2	21.8	0.0	100.0	1,272
5+	11.2	74.0	14.6	0.3	100.0	387	9.1	68.5	22.5	0.0	100.0	1,052
Residence												
Urban	17.5	47.3	35.2	0.1	100.0	844	13.6	61.4	24.8	0.1	100.0	2,143
Greater Monrovia	22.0	32.3	45.7	0.0	100.0	545	18.4	55.4	26.0	0.3	100.0	1,056
Other urban	9.2	74.6	16.0	0.2	100.0	299	9.0	67.3	23.7	0.0	100.0	1,087
Rural	11.1	69.7	18.8	0.4	100.0	623	11.4	65.6	22.9	0.1	100.0	1,851
Region												
North Western	4.3	70.5	25.2	0.0	100.0	132	9.9	55.7	34.4	0.0	100.0	371
South Central	18.1	44.4	37.4	0.1	100.0	773	15.9	60.5	23.4	0.2	100.0	1,698
South Eastern A	5.9	78.3	15.0	0.9	100.0	112	6.0	79.0	14.6	0.4	100.0	293
South Eastern B	25.0	55.2	19.0	0.8	100.0	80	9.3	53.9	36.6	0.2	100.0	238
North Central	12.0	71.6	16.2	0.3	100.0	370	11.2	67.2	21.5	0.1	100.0	1,395
County												
Bomi	5.5	64.1	30.4	0.0	100.0	61	10.0	69.6	20.4	0.0	100.0	142
Bong	23.1	60.9	16.0	0.0	100.0	111	16.8	63.8	19.2	0.2	100.0	397
Gbarpolu	2.6	81.4	16.0	0.0	100.0	29	6.3	57.5	36.2	0.0	100.0	74
Grand Bassa	15.1	56.7	27.4	0.8	100.0	69	12.3	66.9	20.8	0.0	100.0	252
Grand Cape Mount	3.6	72.3	24.0	0.0	100.0	42	11.7	42.1	46.2	0.0	100.0	156
Grand Gedeh	6.0	66.4	27.5	0.0	100.0	32	5.2	81.1	12.7	1.0	100.0	115
Grand Kru	37.3	42.1	20.6	0.0	100.0	31	7.8	45.9	46.4	0.0	100.0	72
Lofa	3.8	67.6	28.5	0.0	100.0	93	8.3	62.1	29.5	0.0	100.0	335
Margibi	10.2	77.2	12.6	0.0	100.0	93	7.2	72.6	20.2	0.0	100.0	236
Maryland	2.8	82.3	14.8	0.0	100.0	30	8.0	52.0	39.9	0.2	100.0	110
Montserrado	19.7	38.0	42.3	0.0	100.0	611	18.4	56.8	24.6	0.2	100.0	1,210
Nimba	9.0	80.9	9.5	0.6	100.0	166	9.3	71.8	18.9	0.0	100.0	664
River Cess	6.6	83.5	8.2	1.7	100.0	25	6.6	80.3	13.1	0.0	100.0	64
River Gee	39.3	35.0	22.6	3.2	100.0	19	13.8	68.0	17.5	0.7	100.0	55
Sinoe	5.4	82.7	10.9	1.0	100.0	55	6.5	76.1	17.4	0.0	100.0	113
Education												
No education	13.6	58.1	28.3	0.0	100.0	249	11.1	62.9	26.0	0.0	100.0	1,738
Elementary	11.3	59.5	28.9	0.2	100.0	246	11.0	64.9	23.9	0.2	100.0	899
Junior high	12.2	58.1	28.6	1.1	100.0	224	17.0	63.6	19.4	0.0	100.0	544
Senior high	19.9	50.5	29.5	0.0	100.0	546	15.2	61.7	22.6	0.5	100.0	638
Higher	9.3	67.4	23.3	0.0	100.0	203	12.0	65.3	22.7	0.0	100.0	175
Wealth quintile												
Lowest	12.0	71.5	16.1	0.4	100.0	248	11.0	65.5	23.4	0.1	100.0	888
Second	11.8	68.3	19.7	0.2	100.0	266	11.3	65.6	22.8	0.2	100.0	859
Middle	16.5	64.7	18.6	0.3	100.0	264	11.3	64.7	24.1	0.0	100.0	774
Fourth	12.6	47.6	39.7	0.0	100.0	323	14.4	59.6	26.0	0.0	100.0	735
Highest	19.5	40.9	39.4	0.2	100.0	367	15.5	60.4	23.8	0.4	100.0	739
Total 15-49	14.8	56.8	28.2	0.2	100.0	1,467	12.6	63.3	23.9	0.1	100.0	3,995
50-59	13.5	64.2	22.3	0.0	100.0	258	na	na	na	na	na	na
Total 15-59	14.6	57.9	27.3	0.2	100.0	1,725	na	na	na	na	na	na

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Liberia DHS 2019-20

Woman's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:					Number of women	Person who decides how husband's cash earnings are used:					Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total		Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	
More than husband	32.9	59.8	7.3	0.0	100.0	220	17.2	64.9	17.9	0.0	100.0	220
Less than husband	27.0	60.4	12.3	0.3	100.0	1,387	13.3	66.1	20.6	0.0	100.0	1,387
Same as husband	8.4	80.3	10.9	0.3	100.0	259	4.3	84.1	11.6	0.0	100.0	259
Husband has no cash earnings or did not work	24.5	69.1	6.4	0.0	100.0	127	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0	13.8	65.9	20.3	0.1	100.0	1,105
Woman did not work	na	na	na	na	na	0	11.6	51.9	36.1	0.4	100.0	943
Total ¹	26.2	62.6	10.9	0.2	100.0	2,073	12.6	63.3	23.9	0.1	100.0	3,995

na = Not applicable

¹ Includes cases where a woman does not know whether she earned more or less than her husband

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who own a house:					Percentage who own land:					Number
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	
Age											
15-19	0.6	2.5	0.2	96.7	100.0	0.2	1.4	0.0	98.3	100.0	1,657
20-24	2.2	5.2	1.1	91.5	100.0	1.4	4.1	0.4	94.1	100.0	1,506
25-29	4.6	10.3	2.1	83.1	100.0	2.2	6.6	1.1	90.1	100.0	1,375
30-34	8.9	16.7	5.6	68.7	100.0	7.0	10.6	1.1	81.3	100.0	1,112
35-39	9.2	25.6	4.8	60.4	100.0	6.2	14.4	2.0	77.4	100.0	1,020
40-44	16.4	26.0	6.7	51.0	100.0	9.2	13.8	2.3	74.6	100.0	769
45-49	17.3	31.7	8.5	42.6	100.0	11.1	20.4	3.2	65.3	100.0	626
Residence											
Urban	4.3	8.2	2.5	85.1	100.0	2.9	4.6	0.8	91.7	100.0	5,023
Greater Monrovia	2.2	5.0	1.8	91.0	100.0	1.8	2.6	0.5	95.1	100.0	2,866
Other urban	7.0	12.3	3.4	77.2	100.0	4.4	7.4	1.1	87.2	100.0	2,157
Rural	10.5	22.9	4.6	62.0	100.0	6.2	14.5	1.8	77.5	100.0	3,042
Region											
North Western	9.5	21.1	6.1	63.4	100.0	6.6	12.5	2.7	78.2	100.0	621
South Central	3.6	8.1	2.4	85.9	100.0	2.1	4.3	0.8	92.7	100.0	4,105
South Eastern A	10.5	26.9	2.3	60.3	100.0	6.0	16.0	0.8	77.2	100.0	458
South Eastern B	8.7	24.0	3.1	64.3	100.0	4.0	9.1	1.9	84.9	100.0	441
North Central	10.0	17.0	4.2	68.8	100.0	6.7	12.5	1.2	79.5	100.0	2,439
County											
Bomi	15.5	17.4	3.7	63.5	100.0	9.6	8.1	2.2	80.1	100.0	249
Bong	9.2	12.5	7.0	71.2	100.0	5.6	10.3	1.6	82.5	100.0	796
Gbarpolu	5.6	15.6	9.9	68.9	100.0	4.9	3.9	4.3	87.0	100.0	112
Grand Bassa	9.9	18.3	6.6	65.3	100.0	5.5	12.9	3.4	78.1	100.0	467
Grand Cape Mount	5.4	26.9	6.9	60.9	100.0	4.4	20.5	2.5	72.6	100.0	260
Grand Gedeh	13.7	20.9	3.8	61.5	100.0	8.7	12.0	1.5	77.8	100.0	172
Grand Kru	11.1	26.0	2.6	60.3	100.0	5.7	5.0	1.8	87.5	100.0	136
Lofa	5.9	24.6	2.8	66.6	100.0	5.0	14.5	0.3	80.2	100.0	658
Margibi	3.6	11.2	3.1	82.1	100.0	1.7	3.8	0.5	94.0	100.0	441
Maryland	5.0	25.3	2.0	67.7	100.0	2.9	9.2	2.4	85.5	100.0	215
Montserrado	2.6	6.2	1.7	89.5	100.0	1.7	3.1	0.5	94.7	100.0	3,197
Nimba	13.3	15.5	2.8	68.3	100.0	8.8	13.1	1.5	76.7	100.0	985
River Cess	14.5	30.6	3.2	51.8	100.0	4.0	9.8	0.6	85.5	100.0	104
River Gee	13.7	17.9	6.4	62.0	100.0	4.0	15.1	1.1	79.8	100.0	91
Sinoe	5.3	30.4	0.5	63.8	100.0	4.5	23.3	0.2	72.0	100.0	182
Education											
No education	11.0	23.1	5.7	60.2	100.0	7.0	14.5	1.8	76.6	100.0	2,474
Elementary	5.8	13.1	2.9	78.3	100.0	4.2	7.5	1.2	87.1	100.0	1,911
Junior high	4.0	8.5	1.3	86.2	100.0	1.7	5.6	0.6	92.2	100.0	1,445
Senior high	4.1	6.3	1.6	88.0	100.0	2.4	3.9	0.5	93.2	100.0	1,761
Higher	5.1	10.8	4.4	79.7	100.0	2.8	5.1	1.6	90.5	100.0	474
Wealth quintile											
Lowest	14.6	22.8	4.7	58.0	100.0	8.5	14.7	1.7	75.1	100.0	1,379
Second	8.7	21.5	4.4	65.3	100.0	6.1	14.0	2.2	77.7	100.0	1,431
Middle	6.5	13.3	3.1	77.0	100.0	4.1	10.2	1.0	84.6	100.0	1,517
Fourth	3.4	5.8	1.4	89.5	100.0	1.6	2.9	0.7	94.8	100.0	1,829
Highest	2.5	9.2	3.4	84.9	100.0	2.1	3.4	0.5	94.0	100.0	1,910
Total	6.6	13.7	3.3	76.4	100.0	4.2	8.4	1.1	86.3	100.0	8,065

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who own a house:					Percentage who own land:					Number
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	
Age											
15-19	2.2	5.2	0.6	92.1	100.0	3.4	5.0	0.3	91.3	100.0	876
20-24	9.1	9.0	0.1	81.8	100.0	9.3	9.3	0.7	80.6	100.0	658
25-29	13.2	11.5	1.8	73.4	100.0	15.8	15.3	1.4	67.5	100.0	558
30-34	13.9	14.5	3.7	67.8	100.0	16.2	17.1	1.6	65.1	100.0	494
35-39	21.9	24.4	4.6	49.1	100.0	19.8	20.7	1.6	57.9	100.0	487
40-44	24.9	25.2	5.6	44.4	100.0	15.9	23.6	2.2	58.2	100.0	418
45-49	27.1	31.3	4.8	36.8	100.0	18.8	22.4	3.4	55.4	100.0	330
Residence											
Urban	10.6	10.7	1.8	76.9	100.0	10.2	8.7	0.7	80.4	100.0	2,313
Greater Monrovia	6.4	9.6	0.9	83.1	100.0	4.3	4.7	0.3	90.8	100.0	1,368
Other urban	16.8	12.1	3.2	67.9	100.0	18.8	14.5	1.4	65.3	100.0	944
Rural	18.3	21.3	3.6	56.8	100.0	16.5	23.0	2.3	58.2	100.0	1,508
Region											
North Western	13.8	18.7	7.4	60.2	100.0	14.5	18.5	3.4	63.6	100.0	301
South Central	7.6	10.5	0.9	81.0	100.0	5.6	7.3	0.3	86.8	100.0	1,932
South Eastern A	21.2	18.8	3.1	56.9	100.0	16.2	17.2	0.3	66.4	100.0	254
South Eastern B	13.6	14.2	5.0	67.1	100.0	9.2	11.5	2.8	76.5	100.0	226
North Central	22.3	20.7	3.4	53.5	100.0	24.5	25.5	2.6	47.5	100.0	1,107
County											
Bomi	11.3	30.3	3.6	54.8	100.0	14.5	36.5	3.6	45.5	100.0	118
Bong	7.9	18.5	9.9	63.7	100.0	9.2	21.0	6.3	63.6	100.0	324
Gbarpolu	27.1	12.3	13.6	46.9	100.0	30.1	5.6	2.8	61.5	100.0	53
Grand Bassa	14.3	12.0	2.0	71.8	100.0	14.3	20.6	0.5	64.6	100.0	197
Grand Cape Mount	10.6	10.7	8.2	70.5	100.0	8.1	7.5	3.5	80.9	100.0	130
Grand Gedeh	24.5	15.2	7.3	53.0	100.0	18.8	15.6	0.3	65.3	100.0	92
Grand Kru	35.3	8.6	0.0	56.1	100.0	15.5	10.4	0.0	74.0	100.0	67
Lofa	14.6	20.1	0.4	64.9	100.0	19.9	20.0	0.6	59.6	100.0	287
Margibi	7.5	16.0	0.0	76.5	100.0	3.3	9.7	0.0	86.9	100.0	209
Maryland	4.6	13.9	7.7	73.8	100.0	4.1	7.0	3.0	85.8	100.0	110
Montserrado	6.8	9.6	0.8	82.8	100.0	4.8	5.2	0.3	89.6	100.0	1,525
Nimba	36.2	22.5	1.0	40.2	100.0	37.1	31.6	1.3	30.0	100.0	496
River Cess	2.9	37.5	2.1	57.4	100.0	1.2	37.2	0.8	60.8	100.0	52
River Gee	4.5	22.4	5.9	67.2	100.0	11.7	22.8	6.2	59.3	100.0	50
Sinoe	27.2	12.8	0.0	60.0	100.0	21.1	9.0	0.0	69.9	100.0	110
Education											
No education	21.4	16.9	3.9	57.8	100.0	17.2	20.2	2.1	60.5	100.0	498
Elementary	11.2	14.9	2.6	71.3	100.0	10.8	14.5	2.4	72.4	100.0	877
Junior high	16.5	13.1	1.9	68.5	100.0	15.7	15.8	0.6	67.8	100.0	738
Senior high	10.9	14.6	2.4	72.1	100.0	10.5	12.0	1.1	76.4	100.0	1,303
Higher	13.0	16.7	2.1	68.2	100.0	12.7	11.7	0.4	75.2	100.0	405
Wealth quintile											
Lowest	24.2	23.8	5.0	47.0	100.0	21.0	24.8	3.3	50.8	100.0	657
Second	19.2	17.7	3.7	59.4	100.0	20.5	23.4	2.4	53.8	100.0	663
Middle	14.2	17.2	2.1	66.5	100.0	12.7	15.9	1.0	70.4	100.0	743
Fourth	6.9	8.0	1.7	83.5	100.0	5.4	6.9	0.6	87.0	100.0	838
Highest	7.9	10.8	0.9	80.3	100.0	7.7	5.9	0.1	86.3	100.0	920
Total 15-49	13.6	14.9	2.5	69.0	100.0	12.7	14.4	1.3	71.6	100.0	3,821
50-59	36.4	27.6	5.1	30.8	100.0	24.7	26.6	5.3	43.5	100.0	428
Total 15-59	15.9	16.2	2.8	65.1	100.0	13.9	15.6	1.7	68.8	100.0	4,249

Table 15.5.1 Ownership of title or deed for house: Women

Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	House has a title or deed and:				Total	Number who own a house ²
	Woman's name is on title or deed	Woman's name is not on title or deed	Does not have a title or deed	Don't know/missing ¹		
Age						
15-19	8.4	14.7	72.5	4.4	100.0	55
20-24	14.3	10.0	74.1	1.5	100.0	129
25-29	13.8	5.9	76.9	3.5	100.0	233
30-34	19.0	7.6	71.6	1.8	100.0	348
35-39	18.6	9.4	70.0	1.9	100.0	404
40-44	16.0	7.5	73.9	2.7	100.0	377
45-49	22.5	7.0	67.3	3.1	100.0	359
Residence						
Urban	34.0	15.9	47.1	2.9	100.0	750
Greater Monrovia	52.4	25.5	17.6	4.5	100.0	259
Other urban	24.4	10.9	62.6	2.1	100.0	491
Rural	7.1	2.9	87.8	2.2	100.0	1,155
Region						
North Western	13.3	4.6	80.0	2.1	100.0	228
South Central	34.0	14.4	47.7	3.8	100.0	577
South Eastern A	9.9	1.8	87.1	1.1	100.0	182
South Eastern B	17.8	3.5	76.2	2.5	100.0	158
North Central	8.5	6.6	82.9	2.0	100.0	760
County						
Bomi	6.3	0.2	93.5	0.0	100.0	91
Bong	11.5	8.9	79.2	0.4	100.0	229
Gbarpolu	6.3	2.3	91.4	0.0	100.0	35
Grand Bassa	11.2	4.9	81.5	2.5	100.0	162
Grand Cape Mount	22.0	9.4	64.0	4.6	100.0	102
Grand Gedeh	11.3	3.4	85.3	0.0	100.0	66
Grand Kru	1.5	1.6	93.3	3.6	100.0	54
Lofa	6.7	3.1	88.3	1.8	100.0	220
Margibi	28.2	2.8	67.3	1.7	100.0	79
Maryland	25.6	1.8	69.7	2.8	100.0	69
Montserrado	46.5	21.7	26.8	5.0	100.0	336
Nimba	7.6	7.3	81.8	3.2	100.0	312
River Cess	1.5	0.7	95.9	1.9	100.0	50
River Gee	27.5	9.8	62.7	0.0	100.0	35
Sinoe	15.0	1.2	82.3	1.6	100.0	66
Education						
No education	10.4	4.8	82.5	2.4	100.0	984
Elementary	12.3	6.4	78.3	3.0	100.0	415
Junior high	14.4	9.8	71.9	3.9	100.0	199
Senior high	34.8	25.7	37.5	2.0	100.0	211
Higher	85.8	5.5	8.6	0.0	100.0	96
Wealth quintile						
Lowest	2.6	2.6	93.1	1.8	100.0	580
Second	7.3	5.1	84.8	2.9	100.0	496
Middle	14.0	4.4	79.9	1.7	100.0	348
Fourth	41.9	20.3	35.1	2.8	100.0	193
Highest	54.7	20.2	21.1	4.0	100.0	288
Total	17.7	8.0	71.8	2.5	100.0	1,905

¹ Includes women who have a house with a title or deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title or deed for the house (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.5.2 Ownership of title or deed for house: Men

Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	House has a title or deed and:				Total	Number who own a house ²
	Man's name is on title or deed	Man's name is not on title or deed	Does not have a title or deed	Don't know/missing ¹		
Age						
15-19	14.4	8.6	76.1	0.9	100.0	70
20-24	5.3	20.0	73.8	1.0	100.0	120
25-29	15.3	8.0	76.7	0.0	100.0	148
30-34	15.0	2.9	82.0	0.1	100.0	159
35-39	16.3	6.4	76.9	0.3	100.0	248
40-44	30.7	5.7	63.6	0.0	100.0	233
45-49	24.2	5.1	70.7	0.0	100.0	209
Residence						
Urban	33.1	13.0	53.7	0.3	100.0	535
Greater Monrovia	48.0	21.1	30.9	0.0	100.0	231
Other urban	21.7	6.8	71.0	0.5	100.0	303
Rural	7.4	2.6	89.8	0.2	100.0	651
Region						
North Western	4.5	3.4	90.8	1.2	100.0	120
South Central	42.9	16.7	40.1	0.3	100.0	367
South Eastern A	13.2	3.6	83.0	0.2	100.0	109
South Eastern B	13.7	3.4	82.9	0.0	100.0	74
North Central	7.3	2.8	89.9	0.0	100.0	515
County						
Bomi	3.4	3.1	92.2	1.2	100.0	53
Bong	10.2	0.7	89.1	0.0	100.0	118
Gbarpolu	10.4	4.7	84.9	0.0	100.0	28
Grand Bassa	14.5	4.4	81.1	0.0	100.0	56
Grand Cape Mount	(1.8)	(2.9)	(93.1)	(2.2)	100.0	38
Grand Gedeh	14.3	1.6	84.2	0.0	100.0	43
Grand Kru	11.8	3.7	84.4	0.0	100.0	29
Lofa	4.2	3.4	92.4	0.0	100.0	101
Margibi	54.4	18.8	24.6	2.2	100.0	49
Maryland	14.0	5.0	81.0	0.0	100.0	29
Montserrado	46.8	18.9	34.3	0.0	100.0	262
Nimba	7.2	3.4	89.4	0.0	100.0	296
River Cess	7.6	0.5	90.7	1.2	100.0	22
River Gee	16.7	0.0	83.3	0.0	100.0	16
Sinoe	14.9	7.2	77.9	0.0	100.0	44
Education						
No education	3.8	2.1	94.0	0.0	100.0	210
Elementary	11.1	4.2	84.5	0.2	100.0	252
Junior high	11.3	4.4	83.7	0.5	100.0	232
Senior high	28.2	10.2	61.3	0.3	100.0	363
Higher	46.8	18.8	34.3	0.1	100.0	129
Wealth quintile						
Lowest	3.4	1.5	95.2	0.0	100.0	349
Second	6.0	3.0	90.7	0.4	100.0	269
Middle	16.3	9.4	73.7	0.7	100.0	249
Fourth	50.7	17.4	31.9	0.0	100.0	138
Highest	47.9	14.3	37.7	0.1	100.0	181
Total 15-49	19.0	7.3	73.5	0.2	100.0	1,186
50-59	22.5	5.8	71.4	0.3	100.0	296
Total 15-59	19.7	7.0	73.1	0.2	100.0	1,482

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes men who have a house with a title or deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title or deed for the house (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.6.1 Ownership of title or deed for land: Women

Among women age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Land has a title or deed and:				Total	Number who own land ²
	Woman's name is on title or deed	Woman's name is not on title or deed	Does not have a title or deed	Don't know/missing ¹		
Age						
15-19	(9.4)	(16.3)	(74.3)	(0.0)	100.0	28
20-24	7.0	1.1	85.8	6.1	100.0	89
25-29	16.6	3.9	77.0	2.5	100.0	136
30-34	17.2	4.2	75.0	3.7	100.0	208
35-39	20.3	4.0	72.3	3.4	100.0	231
40-44	12.0	6.7	78.1	3.2	100.0	195
45-49	15.4	7.0	74.1	3.5	100.0	217
Residence						
Urban	34.6	7.7	53.3	4.4	100.0	418
Greater Monrovia	(75.7)	(6.8)	(14.9)	(2.6)	100.0	141
Other urban	13.6	8.1	73.0	5.4	100.0	277
Rural	3.9	3.7	89.6	2.9	100.0	686
Region						
North Western	5.4	4.8	86.6	3.1	100.0	135
South Central	42.2	6.7	47.3	3.8	100.0	298
South Eastern A	7.8	1.3	90.2	0.8	100.0	104
South Eastern B	10.2	1.8	87.2	0.8	100.0	67
North Central	4.6	5.6	85.5	4.2	100.0	499
County						
Bomi	11.5	2.0	83.0	3.5	100.0	50
Bong	6.8	9.9	82.6	0.6	100.0	139
Gbarpolu	(5.3)	(2.6)	(92.1)	(0.0)	100.0	15
Grand Bassa	3.8	1.4	92.0	2.8	100.0	102
Grand Cape Mount	1.1	7.3	88.1	3.5	100.0	71
Grand Gedeh	6.7	3.0	89.0	1.3	100.0	38
Grand Kru	4.4	2.5	92.6	0.5	100.0	17
Lofa	6.8	1.9	88.4	2.9	100.0	130
Margibi	(40.9)	(6.2)	(52.9)	(0.0)	100.0	26
Maryland	9.1	0.0	90.8	0.1	100.0	31
Montserrado	65.5	9.9	19.6	5.1	100.0	170
Nimba	2.0	5.2	85.7	7.2	100.0	230
River Cess	(0.0)	(1.3)	(98.7)	(0.0)	100.0	15
River Gee	17.3	4.4	76.1	2.2	100.0	18
Sinoe	10.9	0.0	88.5	0.6	100.0	51
Education						
No education	5.4	4.7	86.1	3.9	100.0	578
Elementary	11.2	5.9	77.4	5.4	100.0	247
Junior high	9.3	8.9	81.8	0.0	100.0	113
Senior high	54.4	2.9	40.7	2.0	100.0	120
Higher	(80.0)	(4.3)	(15.7)	(0.0)	100.0	45
Wealth quintile						
Lowest	1.6	4.7	90.8	2.9	100.0	343
Second	4.4	3.3	88.6	3.7	100.0	319
Middle	8.6	6.7	80.0	4.7	100.0	233
Fourth	37.8	13.1	43.0	6.1	100.0	94
Highest	83.3	2.1	14.6	0.0	100.0	115
Total	15.5	5.2	75.9	3.5	100.0	1,104

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes women who have land with a title or deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title or deed for the land (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.6.2 Ownership of title or deed for land: Men

Among men age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Liberia DHS 2019-20

	Land has a title or deed and:					
Background characteristic	Man's name is on title or deed	Man's name is not on title or deed	Does not have a title or deed	Don't know/missing ¹	Total	Number who own land ²
Age						
15-19	7.4	1.6	86.8	4.2	100.0	76
20-24	7.5	1.7	90.7	0.1	100.0	127
25-29	21.8	6.6	71.6	0.0	100.0	181
30-34	14.1	8.3	74.0	3.6	100.0	172
35-39	17.2	7.4	73.9	1.6	100.0	205
40-44	17.3	4.3	78.5	0.0	100.0	175
45-49	17.2	5.5	77.3	0.0	100.0	147
Residence						
Urban	27.8	7.6	63.2	1.5	100.0	454
Greater Monrovia	(49.8)	(12.9)	(37.2)	(0.0)	100.0	126
Other urban	19.3	5.5	73.2	2.1	100.0	328
Rural	6.9	4.1	88.0	1.0	100.0	630
Region						
North Western	1.5	0.4	95.8	2.3	100.0	110
South Central	40.9	11.6	46.8	0.6	100.0	255
South Eastern A	13.6	2.6	83.8	0.0	100.0	85
South Eastern B	14.6	3.0	82.0	0.5	100.0	53
North Central	7.6	4.5	86.4	1.4	100.0	581
County						
Bomi	0.0	0.8	95.3	3.9	100.0	64
Bong	7.3	7.2	83.7	1.9	100.0	118
Gbarpolu	8.0	0.0	92.0	0.0	100.0	20
Grand Bassa	17.4	9.3	73.3	0.0	100.0	70
Grand Cape Mount	(0.0)	(0.0)	(100.0)	(0.0)	100.0	25
Grand Gedeh	8.3	0.0	91.7	0.0	100.0	32
Grand Kru	31.5	5.8	62.8	0.0	100.0	17
Lofa	8.7	3.3	88.0	0.0	100.0	116
Margibi	(37.8)	(16.4)	(42.8)	(2.9)	100.0	27
Maryland	(4.3)	(0.0)	(95.7)	(0.0)	100.0	16
Montserrado	51.8	11.8	35.8	0.5	100.0	158
Nimba	7.4	4.0	86.8	1.8	100.0	347
River Cess	9.1	0.0	90.9	0.0	100.0	20
River Gee	8.0	2.8	88.0	1.2	100.0	20
Sinoe	21.6	6.7	71.7	0.0	100.0	33
Education						
No education	6.0	5.6	87.7	0.7	100.0	197
Elementary	8.4	3.0	87.2	1.4	100.0	242
Junior high	8.0	4.8	85.5	1.8	100.0	237
Senior high	22.2	7.7	68.8	1.3	100.0	308
Higher	50.1	7.1	42.9	0.0	100.0	100
Wealth quintile						
Lowest	5.0	6.1	87.4	1.5	100.0	323
Second	5.3	4.0	89.2	1.4	100.0	306
Middle	14.5	2.3	81.7	1.5	100.0	220
Fourth	36.2	12.6	50.9	0.3	100.0	109
Highest	52.4	7.5	40.1	0.0	100.0	126
Total 15-49	15.7	5.6	77.6	1.2	100.0	1,084
50-59	16.0	5.1	78.9	0.0	100.0	242
Total 15-59	15.7	5.5	77.8	1.0	100.0	1,326

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes men who have land with a title or deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title or deed for the land (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.7.1 Ownership and use of bank accounts and mobile phones: Women

Percentage of women age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Have and use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age					
15-19	2.2	29.0	1,657	35.6	480
20-24	10.0	50.3	1,506	57.4	758
25-29	14.5	56.6	1,375	56.4	778
30-34	19.2	58.6	1,112	52.0	651
35-39	16.2	47.8	1,020	54.9	488
40-44	14.6	45.0	769	49.3	346
45-49	14.2	42.7	626	45.0	267
Residence					
Urban	15.6	61.3	5,023	54.9	3,081
Greater Monrovia	19.4	71.7	2,866	55.9	2,056
Other urban	10.7	47.5	2,157	53.0	1,026
Rural	6.0	22.6	3,042	36.2	688
Region					
North Western	3.2	34.2	621	41.9	212
South Central	15.5	61.4	4,105	53.1	2,519
South Eastern A	7.3	39.6	458	42.5	181
South Eastern B	6.1	41.0	441	45.1	181
North Central	10.2	27.7	2,439	53.0	676
County					
Bomi	2.9	37.9	249	48.3	95
Bong	6.4	36.7	796	58.7	292
Gbarpolu	1.9	15.8	112	31.4	18
Grand Bassa	5.1	35.8	467	44.7	167
Grand Cape Mount	3.9	38.4	260	37.7	100
Grand Gedeh	7.9	46.1	172	53.3	79
Grand Kru	1.4	33.4	136	26.7	45
Lofa	13.4	24.4	658	38.9	161
Margibi	5.5	44.7	441	34.3	197
Maryland	8.6	46.2	215	53.4	99
Montserrado	18.5	67.4	3,197	55.4	2,154
Nimba	11.2	22.7	985	55.7	223
River Cess	0.7	25.6	104	35.4	27
River Gee	7.4	40.0	91	45.4	36
Sinoe	10.5	41.4	182	33.6	75
Education					
No education	6.9	29.2	2,474	33.4	721
Elementary	5.4	28.7	1,911	36.5	548
Junior high	6.2	48.8	1,445	41.9	705
Senior high	20.6	76.8	1,761	63.3	1,352
Higher	51.3	93.3	474	78.9	442
Wealth quintile					
Lowest	4.7	13.1	1,379	32.8	181
Second	6.2	24.1	1,431	31.9	345
Middle	8.3	42.1	1,517	42.1	638
Fourth	11.6	62.1	1,829	55.4	1,136
Highest	24.9	76.9	1,910	59.5	1,469
Total	12.0	46.7	8,065	51.5	3,769

Table 15.7.2 Ownership and use of bank accounts and mobile phones: Men

Percentage of men age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among men who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Have and use a bank account	Own a mobile phone	Number of men	Use mobile phone for financial transactions	Number of men who own a mobile phone
Age					
15-19	5.0	28.9	876	30.7	253
20-24	14.0	66.8	658	50.8	440
25-29	23.4	69.1	558	56.3	386
30-34	31.8	74.4	494	57.0	367
35-39	33.1	73.1	487	55.0	356
40-44	32.2	70.8	418	48.0	296
45-49	28.7	65.8	330	46.0	217
Residence					
Urban	27.4	73.0	2,313	54.8	1,689
Greater Monrovia	31.5	80.2	1,368	54.7	1,097
Other urban	21.5	62.7	944	54.9	592
Rural	11.9	41.5	1,508	38.3	626
Region					
North Western	9.9	46.3	301	28.6	139
South Central	28.1	73.1	1,932	55.7	1,411
South Eastern A	16.0	48.8	254	51.5	124
South Eastern B	7.5	51.7	226	34.4	117
North Central	16.6	47.3	1,107	44.9	523
County					
Bomi	15.5	49.7	118	28.3	58
Bong	4.8	47.6	324	37.7	154
Gbarpolu	14.3	38.7	53	30.3	21
Grand Bassa	19.9	50.8	197	44.0	100
Grand Cape Mount	3.0	46.4	130	28.2	60
Grand Gedeh	12.3	52.5	92	61.0	48
Grand Kru	8.5	47.0	67	31.8	31
Lofa	13.1	45.6	287	54.7	131
Margibi	23.3	60.2	209	57.9	126
Maryland	5.3	56.4	110	34.1	62
Montserrado	29.8	77.7	1,525	56.5	1,185
Nimba	26.3	48.0	496	44.2	238
River Cess	4.0	38.4	52	26.5	20
River Gee	10.9	47.4	50	38.7	24
Sinoe	24.9	50.7	110	52.3	56
Education					
No education	10.4	38.9	498	26.6	193
Elementary	9.1	31.7	877	29.5	278
Junior high	12.0	53.9	738	36.3	398
Senior high	24.7	80.7	1,303	55.3	1,052
Higher	67.2	97.3	405	77.6	394
Wealth quintile					
Lowest	8.7	27.4	657	25.1	180
Second	14.4	45.9	663	40.4	304
Middle	13.0	57.0	743	48.2	423
Fourth	21.2	74.0	838	47.0	620
Highest	42.1	85.6	920	63.7	788
Total 15-49	21.3	60.6	3,821	50.3	2,315
50-59	27.1	65.7	428	42.1	281
Total 15-59	21.9	61.1	4,249	49.4	2,596

Table 15.8 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Liberia DHS 2019-20

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of women
WOMEN							
Own health care	20.0	58.1	21.7	0.3	0.0	100.0	4,216
Major household purchases	28.1	51.6	19.7	0.5	0.1	100.0	4,216
Visits to her family or relatives	21.7	58.6	19.2	0.4	0.0	100.0	4,216
MEN							
Own health care	22.2	37.3	37.2	2.8	0.4	100.0	1,906
Major household purchases	32.4	34.1	32.5	1.0	0.0	100.0	1,906

Table 15.9.1 Women's participation in decision making according to background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either alone or jointly with their husband, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	63.4	62.9	67.9	53.0	24.7	204
20-24	73.3	73.8	74.9	64.9	17.3	625
25-29	77.4	79.2	81.8	68.3	10.0	788
30-34	77.9	79.0	78.8	68.3	12.7	819
35-39	78.8	81.1	80.9	68.6	9.7	785
40-44	84.2	86.1	85.9	75.6	7.2	545
45-49	83.9	87.2	86.0	77.1	7.9	449
Employment (past 12 months)						
Not employed	67.5	66.6	71.0	56.1	20.0	1,014
Employed for cash	81.4	84.0	83.7	71.9	7.7	2,073
Employed not for cash	81.3	83.6	82.7	75.3	11.6	1,129
Number of living children						
0	70.7	70.6	66.1	57.7	20.5	249
1-2	76.1	77.6	79.0	66.6	11.8	1,503
3-4	80.0	81.5	82.3	70.9	10.4	1,369
5+	79.9	82.3	82.9	72.5	11.1	1,094
Residence						
Urban	76.7	78.9	79.1	68.2	12.8	2,268
Greater Monrovia	76.9	80.6	79.0	68.8	12.4	1,150
Other urban	76.5	77.1	79.1	67.7	13.2	1,118
Rural	79.6	80.6	81.8	69.9	10.5	1,947
Region						
North Western	77.8	76.9	73.0	59.8	10.5	400
South Central	78.6	80.8	81.4	69.8	11.0	1,801
South Eastern A	86.4	89.7	88.6	78.8	4.3	296
South Eastern B	75.9	78.6	81.5	65.8	11.0	254
North Central	76.1	77.2	79.2	69.1	14.5	1,464
County						
Bomi	84.8	88.1	77.4	70.7	5.9	148
Bong	85.4	85.2	87.2	77.2	5.8	411
Gbarpolu	77.4	73.5	74.1	59.0	10.9	80
Grand Bassa	82.6	83.9	86.2	73.9	9.1	253
Grand Cape Mount	71.8	68.9	68.7	50.7	14.4	172
Grand Gedeh	85.7	87.0	86.0	74.8	5.2	116
Grand Kru	62.2	66.7	72.6	59.1	25.3	79
Lofa	66.8	70.0	68.7	60.8	25.0	380
Margibi	79.9	84.7	85.3	74.8	8.6	239
Maryland	77.8	80.3	82.7	62.1	6.0	120
Montserrado	77.6	79.5	79.8	68.1	11.9	1,309
Nimba	75.6	76.4	80.1	68.8	13.9	673
River Cess	90.3	91.7	85.0	83.0	6.1	66
River Gee	91.4	92.1	91.7	83.1	1.2	56
Sinoe	84.7	91.1	93.2	80.3	2.3	114
Education						
No education	77.2	78.4	79.3	69.0	14.0	1,814
Elementary	74.7	76.1	79.7	66.0	13.5	935
Junior high	76.5	79.5	77.9	64.9	10.7	586
Senior high	83.2	84.2	83.2	72.0	5.7	697
Higher	88.6	93.8	91.1	85.9	5.8	184
Wealth quintile						
Lowest	77.8	79.5	82.1	69.0	11.5	930
Second	76.2	78.7	79.6	67.1	12.8	903
Middle	80.3	76.0	78.2	69.2	12.4	808
Fourth	79.3	81.6	81.8	69.6	9.5	783
Highest	76.8	82.6	79.9	70.3	12.3	792
Total	78.0	79.7	80.3	69.0	11.7	4,216

Table 15.9.2 Men's participation in decision making according to background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health	Making major household purchases			
Age					
15-19	*	*	*	*	12
20-24	65.3	68.2	53.8	20.3	141
25-29	67.8	68.5	51.7	15.4	308
30-34	76.1	66.1	58.0	15.9	367
35-39	75.1	67.9	56.1	13.0	429
40-44	77.1	70.1	61.7	14.5	357
45-49	79.6	57.9	51.2	13.7	293
Employment (past 12 months)					
Not employed	77.1	74.9	70.6	18.6	59
Employed for cash	78.8	64.7	57.5	13.9	1,467
Employed not for cash	57.3	72.5	47.6	17.8	379
Number of living children					
0	69.2	56.0	50.2	24.9	112
1-2	73.3	66.2	54.3	14.9	622
3-4	76.2	68.5	59.6	14.9	611
5+	74.9	67.2	54.8	12.8	560
Residence					
Urban	77.5	66.5	59.0	14.9	1,004
Greater Monrovia	79.9	64.0	62.7	18.7	583
Other urban	74.2	70.1	53.8	9.6	422
Rural	71.1	66.6	52.6	14.8	901
Region					
North Western	90.0	75.2	71.8	6.7	175
South Central	80.5	62.5	58.5	15.5	878
South Eastern A	77.3	67.7	55.0	9.9	148
South Eastern B	71.3	52.9	47.9	23.7	109
North Central	60.9	72.4	49.2	15.9	596
County					
Bomi	89.0	58.2	57.2	10.0	63
Bong	56.1	51.9	49.6	41.7	169
Gbarpolu	93.5	95.7	93.0	3.8	37
Grand Bassa	66.1	72.6	51.8	13.1	111
Grand Cape Mount	89.1	79.3	73.6	5.3	75
Grand Gedeh	76.9	80.6	67.1	9.6	55
Grand Kru	64.8	51.2	47.8	31.7	37
Lofa	66.9	77.2	49.4	5.3	154
Margibi	88.4	51.8	48.1	8.0	106
Maryland	82.7	53.8	47.1	10.6	47
Montserrado	81.7	62.5	61.3	17.1	662
Nimba	60.5	82.4	48.8	6.0	273
River Cess	76.7	14.3	11.9	20.9	27
River Gee	59.4	53.8	49.5	36.3	25
Sinoe	78.0	78.8	62.4	5.6	66
Education					
No education	66.8	65.1	50.6	18.7	343
Elementary	71.1	73.7	59.9	15.0	349
Junior high	73.4	65.7	53.0	14.0	298
Senior high	75.5	66.4	57.1	15.2	687
Higher	89.4	59.7	58.1	9.0	229
Wealth quintile					
Lowest	66.4	68.4	52.1	17.4	417
Second	67.1	68.0	49.1	14.0	397
Middle	77.4	67.3	57.9	13.1	335
Fourth	83.5	67.3	62.4	11.7	362
Highest	79.7	62.0	59.3	17.5	395
Total 15-49	74.5	66.6	55.9	14.9	1,906
50-59	74.6	65.9	54.9	14.5	358
Total 15-59	74.5	66.5	55.8	14.8	2,264

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.10.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	13.5	36.5	29.4	33.8	11.6	45.3	1,657
20-24	11.7	30.4	23.4	27.2	9.0	37.8	1,506
25-29	5.6	23.9	17.9	21.3	8.6	31.6	1,375
30-34	6.5	24.5	19.5	23.2	7.3	32.3	1,112
35-39	10.6	28.9	25.2	29.8	12.7	38.5	1,020
40-44	9.2	24.7	19.6	21.4	9.4	33.4	769
45-49	9.3	27.1	24.7	25.5	10.4	35.6	626
Employment (past 12 months)							
Not employed	9.2	26.4	20.4	24.1	8.1	33.3	2,881
Employed for cash	6.8	26.6	20.6	25.6	8.0	34.6	3,414
Employed not for cash	16.3	36.7	32.6	32.9	16.3	47.8	1,770
Number of living children							
0	11.4	31.0	24.0	26.9	9.0	38.4	1,916
1-2	7.7	26.0	19.7	23.6	8.4	33.0	3,023
3-4	9.8	28.9	25.2	28.8	10.2	38.8	1,832
5+	11.8	31.5	27.1	30.3	14.1	41.8	1,294
Marital status							
Never married	9.1	26.4	20.3	23.5	7.6	33.3	3,129
Married or living together	9.9	30.3	25.2	28.8	11.4	39.5	4,216
Divorced/separated/ widowed	11.2	30.2	23.8	27.5	10.5	38.5	721
Residence							
Urban	7.6	25.1	19.3	22.6	8.5	31.6	5,023
Greater Monrovia	5.0	18.0	12.9	16.4	6.3	22.0	2,866
Other urban	11.1	34.4	27.8	31.0	11.4	44.2	2,157
Rural	13.2	34.8	29.5	33.2	12.1	46.1	3,042
Region							
North Western	6.6	24.8	19.3	23.3	11.8	38.2	621
South Central	6.7	23.0	16.3	20.9	7.3	28.1	4,105
South Eastern A	10.8	33.2	26.8	32.1	7.9	42.6	458
South Eastern B	8.5	39.4	33.0	36.1	12.5	48.9	441
North Central	15.6	36.6	33.2	34.5	13.5	48.6	2,439
County							
Bomi	5.2	17.7	12.5	15.2	7.1	26.9	249
Bong	7.3	40.9	33.2	39.6	7.8	51.4	796
Gbarpolu	10.5	28.6	28.2	29.4	10.3	40.0	112
Grand Bassa	17.1	49.7	38.3	47.5	16.1	60.1	467
Grand Cape Mount	6.2	30.1	21.9	28.4	16.9	48.1	260
Grand Gedeh	16.6	36.0	34.2	34.7	10.2	46.3	172
Grand Kru	12.6	53.3	45.0	45.5	24.8	56.2	136
Lofa	19.8	29.5	34.0	31.2	16.7	45.2	658
Margibi	7.5	25.5	12.5	19.5	5.2	30.2	441
Maryland	3.9	24.3	19.1	24.3	8.6	38.8	215
Montserrat	5.1	18.8	13.6	17.2	6.3	23.1	3,197
Nimba	19.5	37.8	32.7	32.5	16.0	48.6	985
River Cess	3.5	25.6	15.2	25.0	3.4	30.9	104
River Gee	13.3	54.2	47.9	49.9	3.5	61.7	91
Sinoe	9.5	34.8	26.5	33.7	8.2	45.7	182
Education							
No education	11.0	31.4	25.7	29.2	13.7	40.6	2,474
Elementary	15.0	38.6	32.8	37.0	12.4	49.3	1,911
Junior high	10.0	31.9	25.8	29.1	8.9	40.6	1,445
Senior high	3.6	17.2	11.7	15.2	4.3	22.5	1,761
Higher	3.5	8.7	5.1	6.6	3.1	12.0	474
Wealth quintile							
Lowest	15.6	38.0	32.7	37.1	14.3	49.0	1,379
Second	13.9	36.2	31.5	33.2	12.5	47.4	1,431
Middle	11.1	30.6	26.3	28.1	11.1	40.4	1,517
Fourth	4.4	23.8	15.4	21.8	6.7	30.6	1,829
Highest	6.3	19.7	15.0	17.6	6.7	24.0	1,910
Total	9.7	28.7	23.1	26.6	9.9	37.0	8,065

Table 15.10.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	7.2	29.6	19.9	26.3	8.2	38.8	876
20-24	5.6	24.1	17.7	16.8	5.8	30.5	658
25-29	2.5	14.5	11.0	10.5	4.5	19.9	558
30-34	3.6	15.1	6.8	8.8	4.4	19.8	494
35-39	4.6	15.0	11.1	11.2	2.4	18.8	487
40-44	2.3	11.7	9.1	8.1	1.7	13.8	418
45-49	3.3	12.7	7.4	8.3	4.9	17.8	330
Employment (past 12 months)							
Not employed	4.4	18.4	10.6	16.5	3.4	24.1	597
Employed for cash	3.4	16.6	11.3	11.5	5.2	22.0	2,475
Employed not for cash	8.8	28.7	21.1	23.6	5.9	36.0	749
Number of living children							
0	6.3	25.5	17.5	20.7	7.6	33.0	1,616
1-2	2.3	13.8	10.5	9.8	3.7	18.4	937
3-4	3.2	14.3	8.3	10.3	1.4	18.6	673
5+	5.1	16.7	10.9	10.6	4.2	21.1	594
Marital status							
Never married	6.0	25.4	17.8	20.0	7.8	32.6	1,684
Married or living together	3.8	15.3	9.8	10.6	3.0	19.7	1,906
Divorced/separated/widowed	1.2	7.8	7.0	9.0	1.3	13.7	231
Residence							
Urban	4.1	19.3	13.2	14.6	5.5	24.1	2,313
Greater Monrovia	2.8	13.8	8.9	13.3	2.5	19.2	1,368
Other urban	6.0	27.3	19.3	16.6	9.7	31.3	944
Rural	5.3	19.3	13.1	14.7	4.3	26.4	1,508
Region							
North Western	2.6	5.1	4.7	5.5	2.5	9.0	301
South Central	3.4	15.9	9.4	13.4	2.6	21.6	1,932
South Eastern A	3.5	17.5	11.3	12.1	3.2	23.7	254
South Eastern B	4.2	19.3	14.4	14.6	2.9	26.9	226
North Central	7.5	29.4	22.2	19.9	10.8	35.3	1,107
County							
Bomi	1.6	4.6	5.1	4.1	4.1	7.1	118
Bong	0.5	26.7	18.5	24.0	2.7	35.0	324
Gbarpolu	8.2	7.1	5.8	7.4	3.8	11.2	53
Grand Bassa	5.9	27.0	14.6	20.7	2.8	35.6	197
Grand Cape Mount	1.1	4.8	4.0	6.0	0.5	9.9	130
Grand Gedeh	0.4	8.3	2.7	3.8	0.7	9.0	92
Grand Kru	6.1	19.3	13.6	16.9	3.9	27.6	67
Lofa	13.1	27.6	20.9	23.3	7.8	33.3	287
Margibi	5.1	20.7	7.6	11.2	2.7	26.2	209
Maryland	2.7	10.7	11.1	7.5	2.5	17.4	110
Montserrat	2.8	13.9	8.9	12.7	2.6	19.1	1,525
Nimba	8.9	32.2	25.4	15.2	17.8	36.7	496
River Cess	2.3	6.9	8.3	6.8	2.3	12.0	52
River Gee	5.1	38.3	22.9	27.4	2.3	46.9	50
Sinoe	6.6	30.2	20.0	21.6	5.7	41.6	110
Education							
No education	7.5	21.6	17.2	11.9	8.6	25.8	498
Elementary	7.5	30.0	18.8	22.7	8.8	37.7	877
Junior high	4.0	23.3	17.9	18.3	6.4	31.6	738
Senior high	3.0	13.6	8.7	12.1	1.9	18.5	1,303
Higher	0.8	4.1	1.5	1.9	0.0	5.7	405
Wealth quintile							
Lowest	6.3	22.9	19.4	16.5	8.2	30.6	657
Second	5.2	21.1	14.1	15.5	4.2	28.4	663
Middle	6.8	26.7	17.4	17.3	8.6	30.2	743
Fourth	2.5	13.7	7.6	10.7	2.0	18.7	838
Highest	3.0	14.5	9.6	14.1	3.1	20.2	920
Total 15-49	4.6	19.3	13.2	14.6	5.0	25.0	3,821
50-59	1.3	11.3	5.0	6.0	1.4	13.6	428
Total 15-59	4.3	18.5	12.3	13.8	4.6	23.9	4,249

Table 15.11 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), according to background characteristics, Liberia DHS 2019-20

Background characteristic	Women			Men		
	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	69.8	72.7	3,163	68.5	80.6	1,533
15-19	63.8	66.5	1,657	64.5	71.6	876
20-24	76.3	79.5	1,506	73.7	92.6	658
25-29	77.5	80.3	1,375	79.1	94.2	558
30-39	75.0	79.4	2,132	74.4	87.8	981
40-49	71.6	74.5	1,395	71.8	88.3	748
Marital status						
Never married	71.2	74.0	3,129	68.7	81.7	1,684
Ever had sex	77.4	80.9	2,578	76.4	93.1	1,164
Never had sex	42.1	41.8	551	51.6	56.5	520
Married or living together	73.4	76.5	4,216	74.4	88.6	1,906
Divorced/separated/widowed	75.8	82.8	721	79.2	94.3	231
Residence						
Urban	74.5	78.0	5,023	69.7	88.3	2,313
Greater Monrovia	76.2	78.8	2,866	68.2	89.8	1,368
Other urban	72.4	76.8	2,157	71.8	86.1	944
Rural	69.9	73.0	3,042	76.0	82.4	1,508
Region						
North Western	62.9	66.8	621	70.0	72.4	301
South Central	74.8	77.3	4,105	70.2	87.6	1,932
South Eastern A	73.5	81.1	458	77.9	89.0	254
South Eastern B	70.5	84.2	441	74.0	85.8	226
North Central	72.2	74.0	2,439	74.5	86.0	1,107
County						
Bomi	70.0	68.0	249	78.0	79.8	118
Bong	76.7	80.4	796	84.1	80.9	324
Gbarpolu	68.8	70.4	112	72.1	75.2	53
Grand Bassa	63.3	70.5	467	76.1	83.1	197
Grand Cape Mount	53.5	64.0	260	62.0	64.6	130
Grand Gedeh	65.9	68.5	172	78.2	85.8	92
Grand Kru	68.3	77.3	136	78.0	85.5	67
Lofa	72.8	74.1	658	74.7	88.7	287
Margibi	71.0	70.2	441	69.2	86.8	209
Maryland	67.8	86.2	215	63.4	83.4	110
Montserrado	77.0	79.3	3,197	69.6	88.3	1,525
Nimba	68.1	68.7	985	68.2	87.7	496
River Cess	84.5	84.7	104	71.7	79.1	52
River Gee	80.1	89.7	91	92.1	91.7	50
Sinoe	74.5	90.9	182	80.6	96.3	110
Education						
No education	66.4	69.4	2,474	67.9	80.6	498
Elementary	68.6	71.0	1,911	66.6	76.0	877
Junior high	73.0	76.3	1,445	73.2	86.2	738
Senior high	84.0	88.0	1,761	74.6	91.3	1,303
Higher	80.3	86.1	474	80.0	96.2	405
Wealth quintile						
Lowest	69.5	72.0	1,379	72.3	81.7	657
Second	69.7	70.9	1,431	73.7	85.3	663
Middle	69.6	74.1	1,517	74.5	84.5	743
Fourth	77.7	80.7	1,829	69.5	89.3	838
Highest	75.2	80.0	1,910	71.6	87.6	920
Total 15-49	72.8	76.1	8,065	72.2	85.9	3,821
50-59	na	na	na	75.9	86.1	428
Total 15-59	na	na	na	72.6	85.9	4,249

na = Not applicable

Table 15.12 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15-49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who can say no to their husband if they do not want to have sexual intercourse	Percentage who can ask their husband to use a condom	Number of women
Age			
15-24	82.1	62.8	830
15-19	82.8	59.5	204
20-24	81.8	63.9	625
25-29	83.4	63.2	788
30-39	82.0	60.5	1,604
40-49	81.5	49.2	995
Residence			
Urban	82.3	65.0	2,268
Greater Monrovia	81.1	70.6	1,150
Other urban	83.4	59.2	1,118
Rural	82.1	51.5	1,947
Region			
North Western	72.0	47.3	400
South Central	83.3	65.6	1,801
South Eastern A	88.4	51.9	296
South Eastern B	85.2	58.2	254
North Central	81.8	55.0	1,464
County			
Bomi	77.7	48.8	148
Bong	84.1	47.1	411
Gbarpolu	77.3	42.7	80
Grand Bassa	80.5	53.2	253
Grand Cape Mount	64.7	48.3	172
Grand Gedeh	91.4	63.5	116
Grand Kru	77.9	64.6	79
Lofa	82.1	53.5	380
Margibi	88.2	42.8	239
Maryland	88.9	58.3	120
Montserrado	83.0	72.2	1,309
Nimba	80.1	60.6	673
River Cess	83.3	41.3	66
River Gee	87.4	49.1	56
Sinoe	88.3	46.2	114
Education			
No education	76.5	44.5	1,814
Elementary	84.8	58.9	935
Junior high	82.4	67.2	586
Senior high	91.6	82.9	697
Higher	88.1	80.7	184
Wealth quintile			
Lowest	81.8	48.2	930
Second	81.4	53.7	903
Middle	82.9	53.8	808
Fourth	81.9	69.3	783
Highest	83.0	71.6	792
Total	82.2	58.8	4,216

Table 15.13 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Liberia DHS 2019-20

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all of the reasons justifying wife beating	Number of women
Number of decisions in which women participate¹			
0	na	50.3	494
1-2	na	53.4	814
3	na	64.1	2,908
Number of reasons for which wife beating is justified²			
0	73.2	na	2,548
1-2	61.9	na	752
3-4	60.5	na	738
5	73.7	na	177

na = Not applicable

¹ See Table 15.9.1 for the list of decisions.

² See Table 15.10.1 for the list of reasons.

Table 15.14 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Liberia DHS 2019-20

Empowerment indicator	Any method	Any modern method ¹	Modern methods			Any traditional method	Not currently using	Total	Number of women
			Female sterili- zation	Temporary modern female methods ²	Male condom				
Number of decisions in which women participate³									
0	15.5	15.4	0.3	14.1	1.0	0.0	84.5	100.0	494
1-2	26.7	24.0	0.1	21.5	2.4	2.7	73.3	100.0	814
3	26.1	25.2	0.2	24.7	0.4	0.8	73.9	100.0	2,908
Number of reasons for which wife beating is justified⁴									
0	25.5	24.3	0.2	23.0	1.1	1.2	74.5	100.0	2,548
1-2	27.8	26.2	0.3	25.3	0.5	1.6	72.2	100.0	752
3-4	22.0	21.6	0.3	21.0	0.4	0.4	78.0	100.0	738
5	17.4	17.1	0.1	16.9	0.0	0.3	82.6	100.0	177
Total	24.9	23.9	0.2	22.8	0.8	1.1	75.1	100.0	4,216

Note: If more than one method is used, only the most effective method is considered in this tabulation.

¹ Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods

² Pill, IUD, injectables, implants, female condom, emergency contraception, standard days method, lactational amenorrhea method, and other modern methods

³ See Table 15.9.1 for the list of decisions.

⁴ See Table 15.10.1 for the list of reasons.

Table 15.15 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Liberia DHS 2019-20

Empowerment indicator	Mean ideal number of children ¹	Number of women	Percentage of currently married women with an unmet need for family planning ²			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate³						
0	5.4	456	19.3	11.6	30.9	494
1-2	4.8	760	22.2	14.4	36.6	814
3	5.2	2,693	20.3	12.7	33.0	2,908
Number of reasons for which wife beating is justified⁴						
0	4.4	4,832	19.4	13.2	32.6	2,548
1-2	4.6	1,274	23.3	11.1	34.4	752
3-4	5.1	1,224	21.5	13.0	34.5	738
5	5.6	279	21.0	16.2	37.2	177
Total	4.6	7,608	20.5	12.9	33.4	4,216

¹ Mean excludes respondents who gave non-numeric responses.

² Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.

³ Restricted to currently married women. See Table 15.9.1 for the list of decisions.

⁴ See Table 15.10.1 for the list of reasons.

Table 15.16 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who received prenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, according to indicators of women's empowerment, Liberia DHS 2019-20

Empowerment indicator	Percentage receiving prenatal care from a skilled provider ¹	Percentage receiving delivery care from a skilled provider ¹	Percentage with a postnatal check during the first 2 days after birth ²	Number of women with a child born in the last 5 years
Number of decisions in which women participate³				
0	96.7	87.5	77.7	350
1-2	98.4	80.1	71.6	488
3	97.9	87.5	81.3	1,787
Number of reasons for which wife beating is justified⁴				
0	98.1	87.1	79.4	2,418
1-2	97.6	86.0	78.8	712
3-4	96.9	83.1	75.7	730
5	98.4	86.7	83.5	166
Total	97.8	86.2	78.8	4,026

¹ "Skilled provider" includes doctor, nurse, midwife, and physician's assistant.

² Includes women who received a postnatal checkup from a doctor, nurse, midwife, physician's assistant, or traditional midwife in the first 2 days after birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.

³ Restricted to currently married women. See Table 15.9.1 for the list of decisions.

⁴ See Table 15.10.1 for the list of reasons.

Table 15.17 Early childhood mortality rates by indicators of women's empowerment

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to indicators of women's empowerment, Liberia DHS 2019-20

Empowerment indicator	Infant mortality (_{1q0})	Child mortality (_{4q1})	Under-5 mortality (_{5q0})
Number of decisions in which women participate¹			
0	72	32	102
1-2	85	31	114
3	61	34	93
Number of reasons for which wife beating is justified²			
0	62	29	90
1-2	76	50	123
3-4	66	35	99
5	(81)	(33)	(112)

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Restricted to currently married women. See Table 15.9.1 for the list of decisions.

² See Table 15.10.1 for the list of reasons.

Table 15.18 Knowledge of and membership in Sande or bush societies

Percentage of women age 15-49 who have heard of the Sande society, and among these women, percentage who are members of the society, according to background characteristics, Liberia DHS 2019-20

Background characteristic	All women		Among women who have heard of Sande society	
	Percentage who have heard of Sande society	Number of women	Percentage who are members	Number of women
Age				
15-19	75.2	1,657	23.9	1,245
20-24	82.3	1,506	24.2	1,240
25-29	84.1	1,375	28.1	1,157
30-34	84.7	1,112	38.5	942
35-39	85.5	1,020	46.0	872
40-44	87.9	769	46.6	676
45-49	89.0	626	55.1	557
Residence				
Urban	82.1	5,023	25.0	4,125
Greater Monrovia	80.7	2,866	16.5	2,314
Other urban	84.0	2,157	35.8	1,811
Rural	84.3	3,042	49.8	2,564
Region				
North Western	87.9	621	67.3	546
South Central	82.0	4,105	23.4	3,368
South Eastern A	74.9	458	17.9	343
South Eastern B	68.1	441	2.3	301
North Central	87.4	2,439	50.9	2,131
County				
Bomi	92.9	249	66.7	231
Bong	81.6	796	51.8	650
Gbarpolu	91.9	112	81.4	103
Grand Bassa	78.0	467	34.4	364
Grand Cape Mount	81.6	260	61.0	212
Grand Gedeh	52.5	172	14.1	90
Grand Kru	73.5	136	3.8	100
Lofa	94.9	658	63.6	624
Margibi	93.8	441	35.9	414
Maryland	61.0	215	1.7	131
Montserrado	81.0	3,197	19.9	2,590
Nimba	86.9	985	41.0	856
River Cess	95.9	104	44.7	99
River Gee	76.9	91	1.3	70
Sinoe	84.3	182	2.7	154
Religion				
Christian	83.2	6,776	31.1	5,637
Muslim	81.2	1,153	54.0	936
Traditional religion	(86.4)	31	(64.6)	27
No religion	84.4	100	41.0	85
Wealth quintile				
Lowest	84.6	1,379	53.3	1,166
Second	85.0	1,431	49.4	1,217
Middle	83.6	1,517	41.8	1,268
Fourth	85.3	1,829	21.6	1,560
Highest	77.4	1,910	14.8	1,478
Total	82.9	8,065	34.5	6,689

Note: Total includes women from other religions. In the 2013 LDHS, membership in the Sande society was a proxy for female genital cutting. Figures in parentheses are based on 25-49 unweighted cases.

Table 15.19 Knowledge and prevalence of female circumcision

Percentage of women age 15-49 who have heard of female circumcision, and percentage of women circumcised, according to background characteristics, Liberia DHS 2019-20

Background characteristic	All women		Among women who have heard of female circumcision:	
	Percentage who have heard of female circumcision	Number of women	Percentage of women circumcised	Number of women
Age				
15-19	72.8	1,657	27.7	1,207
20-24	82.0	1,506	25.9	1,235
25-29	83.9	1,375	31.5	1,154
30-34	89.4	1,112	40.9	995
35-39	85.8	1,020	51.0	875
40-44	88.9	769	52.4	684
45-49	90.6	626	59.7	567
Religion				
Christian	84.3	6,776	34.7	5,711
Muslim	77.1	1,153	58.6	889
Traditional religion	(90.6)	31	64.1	28
No religion	83.0	100	53.8	83
Residence				
Urban	83.9	5,023	29.9	4,214
Greater Monrovia	85.1	2,866	23.1	2,439
Other urban	82.3	2,157	39.2	1,775
Rural	82.2	3,042	52.3	2,502
Region				
North Western	87.2	621	68.3	542
South Central	83.6	4,105	29.8	3,430
South Eastern A	85.1	458	19.6	390
South Eastern B	79.1	441	2.9	349
North Central	82.2	2,439	54.2	2,005
County				
Bomi	98.2	249	62.5	245
Bong	76.2	796	60.0	606
Gbarpolu	96.9	112	77.5	108
Grand Bassa	86.7	467	40.3	405
Grand Cape Mount	72.6	260	70.6	189
Grand Gedeh	77.9	172	12.2	134
Grand Kru	84.5	136	3.3	115
Lofa	80.4	658	68.2	529
Margibi	96.3	441	48.4	425
Maryland	72.3	215	3.1	155
Montserrado	81.3	3,197	25.2	2,601
Nimba	88.2	985	41.7	869
River Cess	99.1	104	51.6	103
River Gee	87.1	91	2.0	79
Sinoe	84.0	182	4.6	153
Education				
No education	86.1	2,474	58.9	2,131
Elementary	79.6	1,911	41.9	1,521
Junior high	80.1	1,445	29.7	1,158
Senior high	84.2	1,761	19.3	1,482
Higher	89.4	474	11.0	424
Wealth quintile				
Lowest	84.7	1,379	57.1	1,167
Second	84.5	1,431	49.4	1,209
Middle	81.7	1,517	46.3	1,239
Fourth	81.2	1,829	27.1	1,485
Highest	84.6	1,910	20.3	1,616
Total	83.3	8,065	38.2	6,716

Note: Total includes women from other religions. Figures in parentheses are based on 25-49 unweighted cases.

Table 15.20 Age at circumcision

Percent distribution of circumcised women age 15-49 by age at circumcision, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Age at circumcision					Total	Number of circumcised women
	<5	5-9	10-14	15+	Don't know/missing		
Age							
15-19	21.7	21.5	39.2	15.5	2.0	100.0	334
20-24	28.8	19.3	32.7	17.6	1.5	100.0	320
25-29	25.1	20.0	29.5	23.0	2.4	100.0	363
30-34	23.8	10.3	33.8	27.3	4.8	100.0	407
35-39	29.5	16.8	27.1	24.1	2.5	100.0	447
40-44	17.8	15.2	36.6	21.5	8.9	100.0	358
45-49	25.0	15.3	33.7	19.8	6.3	100.0	338
Religion							
Christian	24.1	16.6	33.6	21.5	4.2	100.0	1,984
Muslim	26.9	17.5	29.8	22.1	3.7	100.0	520
Traditional religion	(10.7)	(4.8)	(53.6)	(26.9)	(4.0)	100.0	18
No religion	(27.7)	(19.3)	(31.2)	(19.8)	(2.0)	100.0	45
Residence							
Urban	30.8	15.2	29.9	19.7	4.4	100.0	1,259
Greater Monrovia	45.9	12.0	21.8	14.5	5.8	100.0	563
Other urban	18.7	17.7	36.4	24.0	3.2	100.0	697
Rural	18.7	18.3	35.9	23.4	3.8	100.0	1,308
Region							
North Western	24.9	20.0	32.0	18.6	4.5	100.0	370
South Central	32.3	14.8	29.2	17.8	5.9	100.0	1,024
South Eastern A	16.1	19.0	39.9	15.8	9.2	100.0	76
South Eastern B	(35.2)	(9.9)	(34.8)	(15.1)	(5.0)	100.0	10
North Central	17.9	17.4	36.3	26.7	1.8	100.0	1,087
County							
Bomi	24.4	22.6	31.8	18.4	2.7	100.0	153
Bong	24.0	16.2	34.8	22.3	2.7	100.0	364
Gbarpolu	16.9	20.2	40.0	20.2	2.8	100.0	84
Grand Bassa	20.0	9.0	40.4	29.4	1.2	100.0	163
Grand Cape Mount	30.4	17.0	27.3	17.8	7.5	100.0	133
Grand Gedeh	(22.8)	(12.2)	(34.7)	(28.0)	(2.3)	100.0	16
Grand Kru	*	*	*	*	*	100.0	4
Lofa	12.2	20.3	36.2	28.9	2.4	100.0	361
Margibi	10.4	25.3	41.0	15.3	8.1	100.0	206
Maryland	*	*	*	*	*	100.0	5
Montserrado	42.2	12.9	22.8	15.7	6.4	100.0	655
Nimba	17.4	15.7	37.8	28.9	0.2	100.0	362
River Cess	13.0	21.2	43.6	12.6	9.6	100.0	53
River Gee	*	*	*	*	*	100.0	2
Sinoe	*	*	*	*	*	100.0	7
Total	24.6	16.7	33.0	21.6	4.1	100.0	2,568

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes women from other religions.

Table 15.21 Opinions of women about whether the practice of circumcision should continue

Percent distribution of women age 15-49 who have heard of female circumcision by their opinion on whether the practice of circumcision should be continued, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Continued	Not continued	Depends/ don't know	Total	Number of women who have heard of female circum- cision
Female circumcision status					
Circumcised	38.6	43.5	17.8	100.0	2,568
Not circumcised	8.3	76.4	15.4	100.0	4,148
Age					
15-19	19.8	64.3	15.9	100.0	1,207
20-24	20.2	63.5	16.3	100.0	1,235
25-29	16.3	68.6	15.1	100.0	1,154
30-34	16.6	68.8	14.7	100.0	995
35-39	24.4	61.2	14.4	100.0	875
40-44	20.9	59.7	19.4	100.0	684
45-49	24.4	53.6	22.1	100.0	567
Religion					
Christian	16.3	68.0	15.7	100.0	5,711
Muslim	39.1	40.5	20.5	100.0	889
Traditional religion	(67.9)	(15.7)	(16.4)	100.0	28
No religion	42.3	38.4	19.3	100.0	83
Residence					
Urban	13.5	73.4	13.1	100.0	4,214
Greater Monrovia	10.9	79.9	9.3	100.0	2,439
Other urban	17.2	64.5	18.3	100.0	1,775
Rural	30.5	47.6	21.8	100.0	2,502
Region					
North Western	43.3	34.0	22.7	100.0	542
South Central	12.6	73.8	13.6	100.0	3,430
South Eastern A	17.0	62.7	20.3	100.0	390
South Eastern B	7.7	73.5	18.8	100.0	349
North Central	28.6	53.3	18.1	100.0	2,005
County					
Bomi	36.2	43.8	20.1	100.0	245
Bong	32.1	41.8	26.1	100.0	606
Gbarpolu	41.1	27.2	31.7	100.0	108
Grand Bassa	13.8	63.2	22.9	100.0	405
Grand Cape Mount	53.8	25.2	21.0	100.0	189
Grand Gedeh	11.4	65.4	23.2	100.0	134
Grand Kru	8.9	84.2	6.9	100.0	115
Lofa	50.6	34.2	15.1	100.0	529
Margibi	18.6	69.7	11.7	100.0	425
Maryland	9.5	66.4	24.2	100.0	155
Montserrado	11.5	76.1	12.4	100.0	2,601
Nimba	12.7	72.9	14.4	100.0	869
River Cess	32.6	48.1	19.3	100.0	103
River Gee	2.6	72.0	25.4	100.0	79
Sinoe	11.5	70.0	18.5	100.0	153
Education					
No education	29.7	48.5	21.8	100.0	2,131
Elementary	22.9	57.2	19.9	100.0	1,521
Junior high	17.0	69.9	13.1	100.0	1,158
Senior high	8.8	81.0	10.2	100.0	1,482
Higher	6.0	87.4	6.6	100.0	424
Wealth quintile					
Lowest	31.8	42.8	25.4	100.0	1,167
Second	29.4	51.5	19.1	100.0	1,209
Middle	21.0	61.9	17.1	100.0	1,239
Fourth	13.2	75.2	11.5	100.0	1,485
Highest	9.4	79.1	11.5	100.0	1,616
Total	19.9	63.8	16.3	100.0	6,716

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes women from other religions.

Key Findings

- **Experience of violence:** 60% of women age 15-49 have experienced physical violence and 9% have experienced sexual violence. Among women who have ever been pregnant, 7% have experienced physical violence during pregnancy.
- **Spousal violence:** 55% of ever-married women have experienced spousal emotional, physical, or sexual violence. The prevalence of one or more of these forms of spousal violence is higher in 2019-20 than it was in 2007 (49%).
- **Injuries due to spousal violence:** 34% of ever-married women who experienced spousal physical or sexual violence reported injuries. Thirty percent reported cuts, bruises, or aches; 14% reported eye injuries, sprains, dislocations, or burns; and 8% reported deep wounds and other serious injuries.
- **Help seeking:** 42% of women who have experienced physical or sexual violence have ever sought help and 48% have never sought help. Women's own families are the most common source of help.

Gender-based violence, defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty, has been acknowledged worldwide as a violation of basic human rights. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006). This chapter focuses on domestic violence, mainly intimate partner violence, a significant component of gender-based violence.

In Liberia, violence against women and girls has long been recognized as a sociocultural problem entrenched in traditional social norms and behaviors. Liberia recently passed the 2019 Domestic Violence Bill, which seeks to abolish all forms of violence against women, children, and men and provides for assistance to and protection of victims of violence. In 2020, a roadmap to curb this social scourge was developed under the leadership of the Ministry of Gender, Children, and Social Protection.

The 2019-20 Liberia DHS included a module of questions designed to obtain information on the extent to which women in Liberia experience domestic violence. These questions asked women about their experience of both intimate partner violence and violence by perpetrators other than husbands or other intimate partners. The module on domestic violence was administered in the 50% subsample of households selected for the men's survey. In accordance with WHO guidelines on the ethical collection of information on domestic violence, only one eligible woman age 15-49 per household was randomly selected for the module, and the

module was not implemented if privacy could not be obtained (WHO 2001). In total, 3,120 women completed the module. Only 1.5% of women eligible for the domestic violence module could not be successfully interviewed with the module because privacy could not be obtained or for other reasons. Special weights were used to adjust for the selection of only one woman per household and to ensure that the domestic violence subsample was nationally representative.

This chapter presents findings for women age 15–49 on their experience of physical or sexual violence from any perpetrator and who the perpetrator was. It also provides detailed information for ever-married women on their experience of spousal physical, sexual, and emotional violence ever and in the past 12 months; the physical consequences of the violence; and when the violence first began in the relationship. Finally, it documents whether and from whom help was sought to stop the violence and whether or not the help was found useful. A similar set of questions on women’s experience of domestic violence was included in the 2007 Liberia DHS.

16.1 MEASUREMENT OF VIOLENCE

In the 2019–20 Liberia DHS, information was obtained from ever-married women on their experience of violence committed by their current and former husbands/partners and by others. More specifically, violence committed by the current husband/partner (for currently married women) and by the most recent husband/partner (for formerly married women) was measured by asking all ever-married women if their husband/partner ever did the following to them:

Physical spousal violence: push you, shake you, or throw something at you; slap you; twist your arm or pull your hair; punch you with his fist or with something that could hurt you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon

Sexual spousal violence: physically force you to have sexual intercourse with him even when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to

Emotional spousal violence: say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself

In addition, information was obtained from all women (married and unmarried) about physical violence committed by anyone (other than a current or most recent husband/partner) since they were age 15 by asking if anyone had hit, slapped, kicked, or done something else to hurt them physically. Similarly, information was gathered on experiences of sexual violence committed by anyone (other than a current or most recent husband/partner) by asking women if at any time in their life, as a child or as an adult, they were forced in any way to have sexual intercourse or to perform any other sexual acts when they did not want to.

In this chapter, married women include both women who said they were married and women who said they were living with a man as if married. Correspondingly, husbands include both husbands of married women and partners of women who are not married but are living with a man as if married.

16.2 WOMEN'S EXPERIENCE OF PHYSICAL VIOLENCE

Physical violence by anyone

Percentage of women who have experienced any physical violence (committed by a husband/partner or anyone else) since age 15 and in the 12 months before the survey.

Sample: Women age 15-49

16.2.1 Prevalence of Physical Violence

In Liberia, 60% of women age 15-49 have ever experienced physical violence, and 33% experienced physical violence in the 12 months preceding the survey (**Table 16.1**).

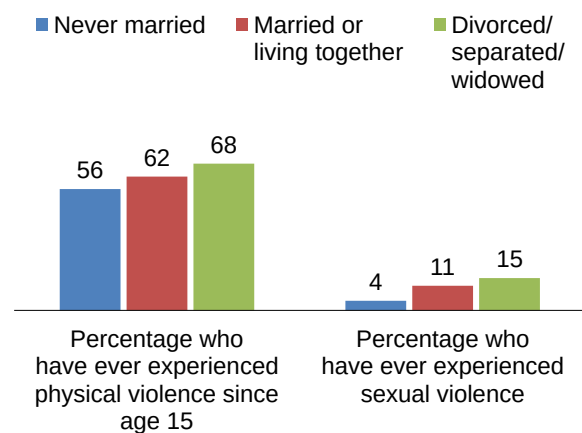
Seven percent of women who have ever been pregnant have experienced physical violence during pregnancy (**Table 16.2**).

Trends: The percentage of women who have experienced physical violence since age 15 has increased greatly over time, from 44% in 2007 to 60% in 2019-20. The percentage who have experienced physical violence in the past 12 months has also increased but by much less, from 29% to 33%.

Patterns by background characteristics

- Sixty-four percent of urban women, including 67% of women in Greater Monrovia, have experienced physical violence, compared with 54% of rural women (**Table 16.1**).
- Women who are divorced, separated, or widowed are most likely to have experienced physical violence (68%), followed by currently married women (62%). Never-married women are least likely (56%) to report experiencing physical violence since age 15 (**Figure 16.1**).
- By county, violence during pregnancy was most often reported by women in Gbarpolu (15%), Sinoe (14%), and Maryland (13%) and least often reported by women in Margibi (2%) (**Table 16.2**).
- Ten percent of women in the lowest wealth quintile report violence during pregnancy, as compared with 5%-6% of women in the other wealth quintiles.

Figure 16.1 Women's experience of violence by marital status



16.2.2 Perpetrators of Physical Violence

Fifty-eight percent of ever-married women age 15-49 who have experienced physical violence since age 15 named their current husband/partner as the perpetrator of the violence. Never-married women who have experienced physical violence most often reported the perpetrator as their mother/stepmother (47%) or father/stepfather (32%). Notably, 7% of never-married women who have experienced physical violence mentioned a teacher as the perpetrator (**Table 16.3**).

16.3 EXPERIENCE OF SEXUAL VIOLENCE

Sexual violence

Percentage of women who have experienced any sexual violence (committed by a husband/partner or anyone else) ever and in the 12 months before the survey.

Sample: Women age 15-49

16.3.1 Prevalence of Sexual Violence

Nine percent of women age 15-49 reported that they have ever experienced sexual violence, and 5% said that they had experienced sexual violence in the past 12 months¹ (Table 16.4). Five percent of women first experienced sexual violence before age 18 (Table 16.5).

Patterns by background characteristics

- Ten percent of Christian women have experienced sexual violence, as compared with 4% of Muslim women (Table 16.4).
- In contrast to women's experience of physical violence, women in Greater Monrovia are much less likely (5%) to report sexual violence than women in other urban areas (13%) or in rural areas (10%).
- As was the case for physical violence, divorced, separated, or widowed women are more likely (15%) to have experienced sexual violence than currently married women (11%) and never-married women (4%) (Figure 16.1).
- By county, the percentage of women reporting sexual violence ranges from a high of 19% in Nimba to a low of 5% each in Grand Kru and Lofa.
- Four percent of never-married women report having experienced sexual violence before age 18, compared with 6% of ever-married women (Table 16.5).

16.3.2 Perpetrators of Sexual Violence

Ever-married women who reported having experienced sexual violence most often named their current or most recent husband/partner as the perpetrator (54%). Among never-married women, the most commonly reported perpetrators were friends or acquaintances (28%) and current or former boyfriends (25%); however, these figures should be interpreted with caution because they are based on only 25-49 unweighted cases. Notably, 10% of all women who have experienced sexual violence reported a stranger as the perpetrator (Table 16.6).

16.4 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Physical violence and sexual violence may not occur in isolation; rather, women may experience a combination of different forms of violence. Sixty-one percent of women age 15-49 in Liberia have experienced physical or sexual violence. Fifty-two percent of women have experienced only physical violence, 1% have experienced only sexual violence, and 9% have experienced both physical and sexual violence (Table 16.7).

¹ The estimate of the prevalence of sexual violence in the 2007 LDHS (18%) is not comparable to the estimate from the 2019-20 LDHS because the 2007 estimate included information on forced sexual initiation. This information was not collected in 2019-20.

16.5 MARITAL CONTROL BY HUSBAND

Marital control

Percentage of women whose current husband/partner (if currently married) or most recent husband/partner (if formerly married) demonstrates at least one of the following controlling behaviors: is jealous or angry if she talks to other men, frequently accuses her of being unfaithful, does not permit her to meet her female friends, tries to limit her contact with her family, and insists on knowing where she is at all times.

Sample: Ever-married women age 15-49

Marital control in the form of a husband/partner trying to control or monitor his wife's activities can be a warning sign of the potential for violence in a relationship. In Liberia, the most common marital control behavior mentioned by ever-married women is jealousy or anger if they talk to other men, reported by 66% of women. Sixty-three percent of women report that their husband/partner insists on knowing where they are at all times, 44% report that he frequently accuses them of being unfaithful, 36% report that he does not permit them to meet their female friends, and 18% report that he tries to limit their contact with their family. Overall, 46% of women report that their husband/partner displays at least three of the specified marital control behaviors, and 19% report that their husband/partner does not display any of the specified behaviors (**Table 16.8**).

Patterns by background characteristics

- Forty-four percent of women in rural areas and 42% of women in Greater Monrovia report that their husband/partner displays three or more of the specified behaviors, as compared with 52% of women in other urban areas.
- By county, 71% of women in River Gee report that their husband/partner displays three or more of the specified behaviors, compared with 24% in River Cess and 33%-60% in other counties.
- The percentage of women whose husbands/partners display three or more specified behaviors does not vary consistently with either education or wealth.
- There is an apparent correlation between whether women are afraid of their husband/partner and whether the husband/partner displays the specified controlling behaviors. Sixty-four percent of women who say they are afraid of their husband/partner most of the time report that their husband/partner displays at least three of the specified behaviors, as compared with 46% of women who are sometimes afraid of their husband/partner and 36% of women who are never afraid of their husband/partner.

16.6 FORMS OF SPOUSAL VIOLENCE

Spousal violence

Percentage of women who have experienced any of the specified acts of emotional, physical, or sexual violence committed by their current husband/partner (if currently married) or most recent husband/partner (if formerly married), ever and in the 12 months preceding the survey.

Sample: Ever-married women age 15-49

16.6.1 Prevalence of Spousal Violence

Fifty-five percent of ever-married women have experienced emotional, sexual, or physical violence from their current or most recent husband/partner, and 46% have experienced such violence in the past 12 months (**Table 16.9**).

Overall, 45% of women reported one or more forms of spousal physical violence. Women experiencing spousal physical violence most commonly reported that their husband/partner slapped them (42%). Twenty percent of women reported that their husband/partner pushed, shook, or threw something at them; 19% reported that their husband/partner kicked, dragged, or beat them up; and 13% each reported that their husband/partner twisted their arm or pulled their hair and that he punched them with his fist or with something else that could hurt them. Five percent of women reported that their husband/partner had tried to choke or burn them on purpose, and 3% reported that he had threatened or attacked them with a knife, gun, or other weapon (**Figure 16.2**).

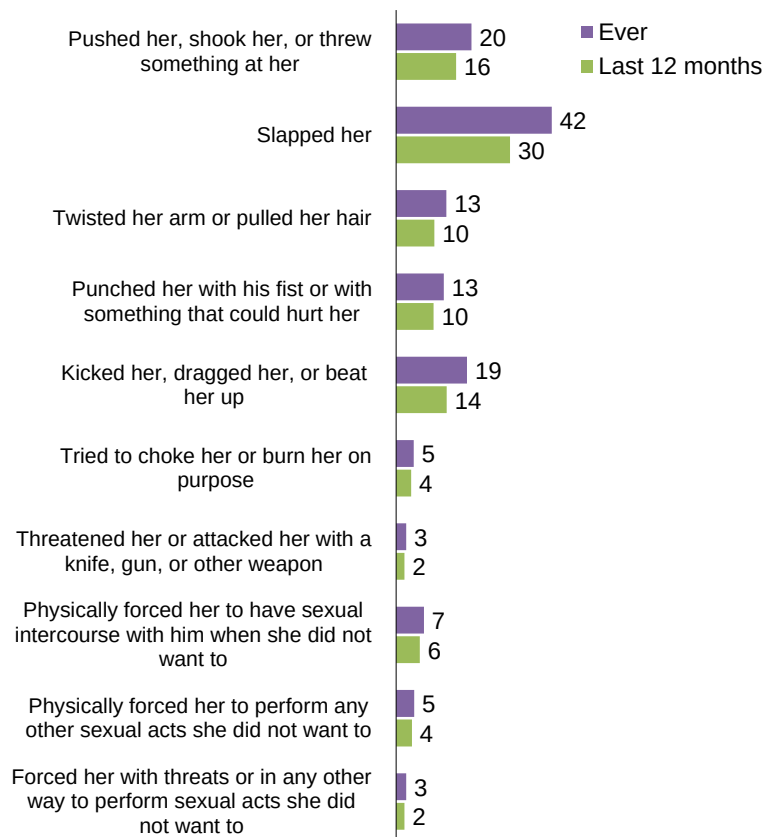
Eight percent of ever-married women reported spousal sexual violence. Women experiencing spousal sexual violence most commonly reported that their husband/partner used physical force to have sexual intercourse with them when they did not want to (7%). Five percent of women reported that their husband/partner physically forced them to perform other sexual acts they did not want to, and 3% reported that he forced them with threats or in other ways to perform sexual acts that they did not want to (**Figure 16.2**).

Experience of emotional violence is also common. Thirty-four percent of ever-married women reported that their husband/partner insulted them or made them feel bad about themselves, and 29% reported that he said or did something to humiliate them in front of others. Eleven percent of women said that their husband/partner threatened to hurt or harm them or someone close to them. In all, 42% of women reported experiencing spousal emotional violence (**Table 16.9**).

Women who have been married (or cohabited as if married with a partner) more than once were also asked about their experience of physical, sexual, or emotional violence by any previous husband/partner. When violence by previous husbands/partners is included in the estimate of prevalence of spousal violence, the percentage of women who have ever experienced spousal emotional, physical, or sexual violence by any

Figure 16.2 Forms of spousal violence

Percentage of ever-married women age 15-49 who have ever experienced specific acts of violence by their husband/partner



husband/partner increases to 58%, but the percentage experiencing such violence in the past 12 months does not change.

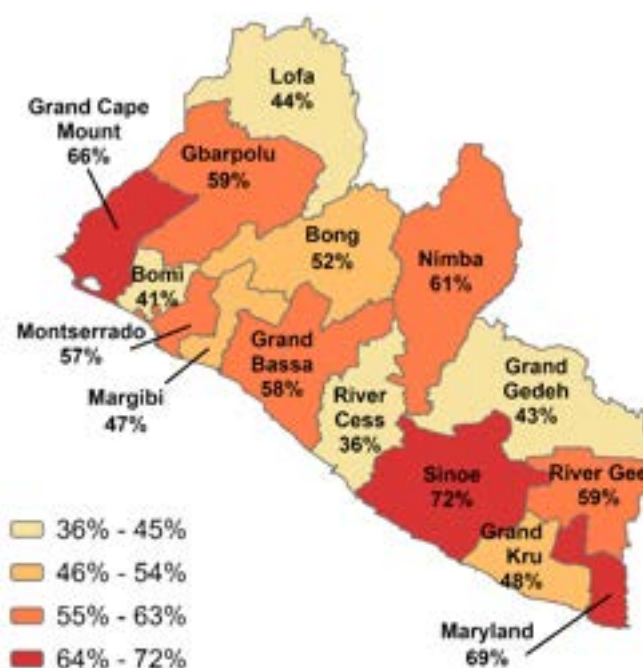
Trends: The prevalence of spousal violence is higher in 2019-20 than in 2007. Overall, the prevalence of spousal emotional, physical, or sexual violence rose from 49% in 2007 to 55% in 2019-20. In the same period, the prevalence of physical violence increased from 35% to 45%, and the prevalence of emotional violence rose from 36% to 42%. However, the prevalence of spousal sexual violence decreased from 11% in 2007 to 8% in 2019-20.

Patterns by background characteristics

- Women's experience of emotional, physical, or sexual violence declines with age, from 66% among those age 15-19 to 48% among those age 40-49 (**Table 16.10**).
- By county, the prevalence of any spousal violence is highest in Sinoe (72%) and lowest in River Cess (36%) (**Figure 16.3**).
- Women's experience of violence varies inconsistently with education. The prevalence is highest among women with a junior high or senior high education (59% each), but even 50% of women with a higher education report having experienced violence.
- Women's experience of violence also varies inconsistently with wealth. Although the prevalence of emotional, physical, or sexual violence is lowest among women in the highest wealth quintile, it is notable that, again, one out of two of even the wealthiest women have experienced some form of spousal violence.

Figure 16.3 Spousal violence by county

Percentage of ever-married women age 15-49 who have ever experienced physical, sexual, or emotional violence committed by their husband/partner

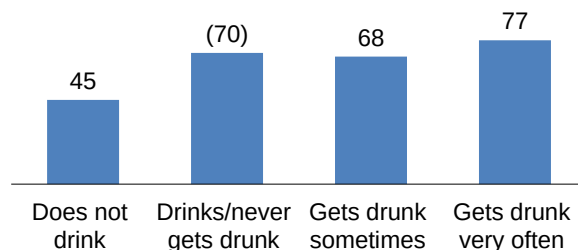


Patterns by husband's characteristics and empowerment indicators

- Husbands' alcohol consumption appears correlated with women's likelihood of experiencing any form of violence. Overall, 77% of women whose husbands are often drunk have ever experienced emotional, physical, or sexual violence, as compared with 45% of women whose husbands do not drink alcohol (**Table 16.11** and **Figure 16.4**).

Figure 16.4 Spousal violence by husband's alcohol consumption

Percentage of ever-married women who have ever experienced spousal (physical, sexual, or emotional) violence by their husband/partner



Note: Figures in parentheses are based on 25-49 unweighted cases.

- As expected, the prevalence of spousal emotional, physical, or sexual violence increases with the number of marital control behaviors displayed by husbands/partners, from 25% among women whose husband/partner does not display any of the specified behaviors to 87% among women whose husband/partner displays all five specified behaviors.
- Intergenerational effects on the experience of spousal violence are evident in Liberia. Sixty-six percent of women who report that their fathers beat their mothers have themselves experienced spousal physical, sexual, or emotional violence, compared with 51% of women who report that their fathers did not beat their mothers.
- Experiences of spousal violence vary according to women's fear of their husband/partner. Women who say that they are afraid of their husband/partner most of the time are much more likely to have ever experienced spousal emotional, physical, or sexual violence (72%) than women who are sometimes afraid of their husband/partner (60%) and women who are never afraid of their husband/partner (37%).
- The discussion thus far has focused largely on women's experience of spousal violence by their current or most recent husband/partner. For information on ever-married women's experience of violence by any husband/partner in the 12 months prior to the survey, see **Table 16.12**.

16.6.2 Onset of Spousal Violence

Table 16.13 shows when spousal violence first occurred in relation to the start of marriage among women married only once. Among currently married women age 15-49 who have been married only once, 37% first experienced spousal physical or sexual violence within the first 5 years of marriage; 24% of women first experienced such violence by 2 years of marriage, and 6% experienced violence before marriage.

16.7 INJURIES TO WOMEN DUE TO SPOUSAL VIOLENCE

Injuries due to spousal violence

Percentage of women who have the following types of injuries from spousal violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury.

Sample: Ever-married women age 15-49 who have experienced physical or sexual violence committed by their current husband/partner (if currently married) or most recent husband/partner (if formerly married)

Among ever-married women who have experienced spousal physical or sexual violence by their current or most recent husband/partner, 34% have sustained injuries (**Table 16.14**). Those who have experienced spousal sexual violence are more likely to report having sustained injuries (49%) than those who have experienced spousal physical violence (34%). Cuts, bruises, or aches are the most common type of injury (30%) among women who have ever experienced physical or sexual violence, followed by eye injuries, sprains, dislocations, or burns (14%). Eight percent of women report that they sustained deep wounds, broken bones, broken teeth, or any other serious injuries.

16.8 VIOLENCE INITIATED BY WOMEN AGAINST HUSBANDS

Initiation of physical violence by wives

Percentage of women who have ever hit, slapped, kicked, or done anything else to physically hurt their current (if currently married) or most recent (if formerly married) husband/partner at times when he was not already beating or physically hurting them.

Sample: Ever-married women age 15-49

Either spouse can play a role in instigating domestic violence. All ever-married women were asked if they had ever initiated acts of physical violence against their husband/partner. Thirteen percent of women said that they had hit, slapped, kicked, or done anything else to physically hurt their husband/partner at times when he was not already beating or physically hurting them (**Table 16.15**).

Trends: The percentage of women who have ever initiated physical violence against their husband/partner has risen slightly over time, from 10% in 2007 to 13% in 2019-20. However, among women who have not experienced spousal physical violence, the percentage who have initiated physical violence against their husband/partner has not changed (4%).

Patterns by background characteristics

- Women's initiation of violence against their husband/partner appears correlated with their own experience of spousal violence. Twenty-three percent of women who have ever experienced spousal physical violence and 27% who experienced such violence in the past 12 months have ever initiated physical violence against their husband, as compared with 4% of women who have never experienced spousal physical violence (**Table 16.15**).
- More women in urban areas (14%) than rural areas (10%) have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them.
- The percentage of women who have committed physical violence against their current or most recent husband/partner is highest in Grand Bassa (19%) and lowest in Grand Kru (2%).

16.9 HELP SEEKING AMONG WOMEN WHO HAVE EXPERIENCED VIOLENCE

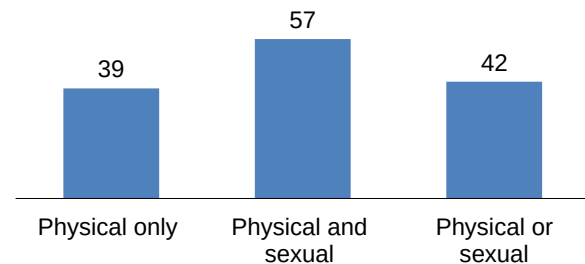
Forty-two percent of women who have ever experienced physical or sexual violence sought help to stop the violence, while 48% never sought help or told anyone about the violence (**Table 16.17**).

Patterns by background characteristics

- Women who have experienced both physical and sexual violence are more likely to have sought help (57%) than women who have experienced only physical violence (39%) (**Figure 16.5**).
- Help seeking is more common among Christian (43%) than Muslim (28%) women who have experienced violence.
- Forty-eight percent of women who are employed for cash have sought help, as compared with 35% of women who are employed but not for cash and 37% of women who are not employed.
- Help seeking varies by county, from a high of 63% among women in Gbarpolu to a low of 30% among women in Lofa.
- Help seeking does not vary consistently by education or wealth.

Figure 16.5 Help seeking by type of violence experienced

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help



16.9.1 Sources for Help

Among women who have experienced physical or sexual violence and who reported seeking help, the most common source for help is their own family (70%), followed by their husband's/partner's family (30%), a neighbor (19%), and a friend (18%) (**Table 16.18**). Six percent of women sought help from the police, 4% from a religious leader, and 1% each from doctors or medical personnel, lawyers, and social work organizations.

16.9.2 Usefulness and Impact of Help Sought

Women who had ever experienced physical or sexual violence and had sought help were asked additional questions regarding the usefulness of the help sought and whether the help had an impact on the frequency of violent assaults. Overall, 51% of these women said that the help was useful for the situation at that time, and 33% said that the help was useful in the longer term. Sixteen percent said that the help was not useful at all. Regarding the impact of the help on frequency of violence, 81% said that the help reduced the frequency and 15% said that it did not change the frequency. For 4% of women, the help sought resulted in an increase in frequency (**Table 16.19**).

Patterns by background characteristics

- Forty-nine percent of women who had experienced only physical violence said that the help sought was useful for the situation at the time, and 36% said that it was useful in the longer term. Eighty-three percent of these women said that the help reduced the frequency of the violence, while 3% said that it resulted in an increase in violence. By contrast, 61% of women who experienced both physical and sexual violence said that the help was useful for the situation at the time, 21% said that it was useful in the longer term, and 74% said that it reduced the frequency of the violence. However, 10% of women who experienced both physical and sexual violence said that the help increased the frequency of the violence.

- Women who are divorced, separated, or widowed were much more likely to say that the help they sought was not useful (35%) than married women (14%) and never-married women (13%). Also, divorced, separated, or widowed women were much less likely than married or unmarried women to say that the help reduced the frequency of assaults (61% versus 84%-85%).
- Women who are not employed appear to have gained more from the help they sought than employed women. For example, 11% of women who were not employed said that the help they sought was not useful, as compared with 24% of women who were employed but not for cash and 17% of women who were employed for cash. Similarly, 88% of women who were not employed said that the help reduced the frequency of the violence, compared with 75% of women who were employed but not for cash and 79% of women who were employed for cash.
- The usefulness and impact of help sought do not vary consistently by education or wealth.

LIST OF TABLES

For more information on domestic violence, see the following tables:

- **Table 16.1** Experience of physical violence
- **Table 16.2** Experience of violence during pregnancy
- **Table 16.3** Persons committing physical violence
- **Table 16.4** Experience of sexual violence
- **Table 16.5** Age at first experience of sexual violence
- **Table 16.6** Persons committing sexual violence
- **Table 16.7** Experience of different forms of violence
- **Table 16.8** Marital control exercised by husbands
- **Table 16.9** Forms of spousal violence
- **Table 16.10** Spousal violence by background characteristics
- **Table 16.11** Spousal violence by husband's characteristics and empowerment indicators
- **Table 16.12** Violence by any husband/partner in the last 12 months
- **Table 16.13** Experience of spousal violence by duration of marriage
- **Table 16.14** Injuries to women due to spousal violence
- **Table 16.15** Violence by women against their husbands by women's background characteristics
- **Table 16.16** Violence by women against their husband by husband's characteristics and empowerment indicators
- **Table 16.17** Help seeking to stop violence
- **Table 16.18** Sources for help to stop the violence
- **Table 16.19** Usefulness and impact of help sought

Table 16.1 Experience of physical violence

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who experienced physical violence during the 12 months preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who have experienced physical violence since age 15 ¹	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes ²	
Age					
15-19	53.7	2.7	27.4	30.1	646
20-24	66.8	7.0	33.3	40.3	593
25-29	61.3	7.0	26.4	33.3	503
30-39	63.4	6.7	26.5	33.3	823
40-49	53.8	6.8	18.9	26.0	555
Religion					
Christian	61.0	6.1	25.7	32.0	2,668
Muslim	51.0	4.8	28.6	33.5	402
Traditional religion	*	*	*	*	13
No religion	(78.5)	(9.5)	(53.7)	(63.3)	36
Residence					
Urban	63.6	5.4	27.2	32.7	1,957
Greater Monrovia	66.7	5.2	26.4	31.6	1,148
Other urban	59.1	5.8	28.3	34.2	809
Rural	54.0	6.9	25.6	32.7	1,163
Region					
North Western	65.6	6.8	32.5	39.3	243
South Central	64.3	5.5	25.3	30.9	1,620
South Eastern A	54.0	6.2	27.0	34.0	176
South Eastern B	58.8	4.6	31.4	35.9	162
North Central	52.4	6.8	26.4	33.2	920
County					
Bomi	57.8	4.7	29.8	34.5	95
Bong	51.1	2.5	25.1	27.7	305
Gbarpolu	66.3	11.1	30.7	41.7	43
Grand Bassa	63.0	3.9	24.2	28.0	181
Grand Cape Mount	72.4	6.8	35.8	42.6	104
Grand Gedeh	44.6	6.6	19.0	25.5	60
Grand Kru	49.1	2.0	26.6	28.7	47
Lofa	47.4	4.3	26.2	30.5	234
Margibi	52.3	7.3	20.5	28.3	176
Maryland	64.8	4.8	35.6	40.4	82
Montserrado	66.1	5.5	26.1	31.7	1,263
Nimba	56.5	11.7	27.6	39.3	381
River Cess	43.2	2.4	19.9	22.3	42
River Gee	58.0	7.6	27.6	35.2	33
Sinoe	68.0	8.0	37.8	47.6	74
Marital status					
Never married	55.8	1.7	20.2	21.8	1,177
Married or living together	61.5	9.2	31.8	41.1	1,608
Divorced/separated/widowed	67.5	5.8	24.5	30.5	335
Employment					
Employed for cash	64.5	5.7	27.7	33.5	1,399
Employed not for cash	50.1	7.5	23.0	30.5	603
Not employed	59.7	5.6	27.2	32.8	1,118
Number of living children					
0	58.5	3.9	30.1	34.0	785
1-2	64.3	6.0	28.9	34.9	1,111
3-4	58.9	7.8	22.4	30.4	700
5+	54.7	6.7	22.2	29.1	524
Education					
No education	56.6	7.4	26.8	34.4	957
Elementary	61.3	7.3	30.8	38.3	697
Junior high	61.7	7.0	25.0	32.0	602
Senior high	61.9	2.9	28.1	31.0	678
Higher	60.5	1.9	9.7	11.5	187
Wealth quintile					
Lowest	55.4	8.4	24.3	32.8	530
Second	53.8	7.0	29.2	36.3	546
Middle	59.8	5.8	28.0	33.9	627
Fourth	68.0	6.6	28.4	35.2	702
Highest	60.5	2.9	23.3	26.4	715
Total	60.0	6.0	26.6	32.7	3,120

Notes: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes violence in the past 12 months. For women who were married before age 15 and reported physical violence only by their husband/partner, the violence could have occurred before age 15.

² Includes women who report physical violence in the past 12 months but for whom frequency is not known

Table 16.2 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	8.2	213
20-24	9.8	475
25-29	4.9	479
30-39	6.4	814
40-49	4.8	552
Religion		
Christian	6.6	2,201
Muslim	6.3	287
Traditional religion	*	13
No religion	(0.0)	32
Residence		
Urban	6.2	1,507
Greater Monrovia	6.2	862
Other urban	6.2	644
Rural	7.1	1,026
Region		
North Western	8.2	219
South Central	6.0	1,237
South Eastern A	9.0	152
South Eastern B	9.6	133
North Central	5.9	791
County		
Bomi	5.1	84
Bong	3.7	263
Gbarpolu	15.1	40
Grand Bassa	9.5	153
Grand Cape Mount	8.0	95
Grand Gedeh	5.3	52
Grand Kru	5.5	39
Lofa	6.0	185
Margibi	1.7	131
Maryland	13.2	68
Montserrado	6.0	953
Nimba	7.6	343
River Cess	5.2	37
River Gee	6.7	27
Siinoe	14.3	62
Marital status		
Never married	7.6	633
Married or living together	5.7	1,565
Divorced/separated/ widowed	8.6	334
Number of living children		
0	7.3	197
1-2	6.5	1,111
3-4	6.4	700
5+	6.6	524
Education		
No education	6.6	911
Elementary	9.1	543
Junior high	9.5	407
Senior high	3.0	530
Higher	0.9	142
Wealth quintile		
Lowest	10.2	477
Second	5.2	486
Middle	6.0	520
Fourth	6.4	542
Highest	5.1	508
Total	6.5	2,533

Notes: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.3 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to respondent's current marital status, Liberia DHS 2019-20

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	57.9	na	37.6
Former husband/partner	25.9	na	16.8
Current boyfriend	3.3	8.1	5.0
Former boyfriend	9.4	11.4	10.1
Father/stepfather	18.2	31.5	22.8
Mother/stepmother	20.4	47.2	29.8
Sister/brother	7.4	14.8	10.0
Daughter/son	0.1	0.1	0.1
Other relative	7.0	12.7	9.0
Mother-in-law	0.1	na	0.1
Father-in-law	0.1	na	0.1
Other in-law	1.5	na	1.0
Teacher	1.2	6.8	3.2
Employer/someone at work	0.1	0.5	0.2
Other	2.8	4.5	3.4
Number of women who have experienced physical violence since age 15	1,216	657	1,872

Note: Women can report more than one person who committed the violence.
na = Not applicable

Table 16.4 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who experienced sexual violence in the 12 months preceding the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who have experienced sexual violence:		Number of women
	Ever ¹	In the past 12 months	
Age			
15-19	6.0	3.4	646
20-24	11.2	5.9	593
25-29	9.7	2.5	503
30-39	10.0	4.7	823
40-49	8.6	5.8	555
Religion			
Christian	9.8	4.8	2,668
Muslim	4.4	2.8	402
Traditional religion	*	*	13
No religion	(4.7)	(2.0)	36
Residence			
Urban	8.6	3.8	1,957
Greater Monrovia	5.4	1.4	1,148
Other urban	13.1	7.2	809
Rural	10.0	5.7	1,163
Region			
North Western	10.7	5.0	243
South Central	7.3	2.7	1,620
South Eastern A	9.3	5.2	176
South Eastern B	7.2	3.5	162
North Central	12.1	7.6	920
County			
Bomi	12.8	5.5	95
Bong	8.7	3.5	305
Gbarpolu	6.0	2.0	43
Grand Bassa	14.0	3.2	181
Grand Cape Mount	10.7	5.8	104
Grand Gedeh	8.5	2.9	60
Grand Kru	5.0	2.8	47
Lofa	5.4	3.5	234
Margibi	12.3	9.9	176
Maryland	9.1	4.7	82
Montserrado	5.7	1.7	1,263
Nimba	19.0	13.3	381
River Cess	5.8	3.1	42
River Gee	5.5	1.2	33
Sinoe	11.9	8.2	74
Marital status			
Never married	4.4	0.4	1,177
Married or living together	11.3	7.7	1,608
Divorced/separated/widowed	14.8	3.5	335
Employment			
Employed for cash	10.1	3.5	1,399
Employed not for cash	8.7	5.7	603
Not employed	8.0	5.1	1,118
Number of living children			
0	5.9	3.1	785
1-2	9.2	4.0	1,111
3-4	11.3	5.1	700
5+	10.7	7.1	524
Education			
No education	9.4	5.6	957
Elementary	12.1	6.4	697
Junior high	5.6	3.2	602
Senior high	9.2	3.1	678
Higher	7.3	1.2	187
Wealth quintile			
Lowest	9.1	5.5	530
Second	12.2	7.4	546
Middle	12.9	6.9	627
Fourth	5.9	1.9	702
Highest	6.5	2.1	715
Total	9.1	4.5	3,120

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes violence in the past 12 months

Table 16.5 Age at first experience of sexual violence

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Liberia DHS 2019-20

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
Age							
15-19	0.1	0.5	2.4	na	na	94.0	646
20-24	0.0	1.8	4.3	6.3	na	88.8	593
25-29	0.0	0.5	2.9	5.3	7.8	90.3	503
30-39	0.1	0.5	1.6	4.7	5.9	90.0	823
40-49	0.0	0.3	2.3	3.5	4.7	91.4	555
Marital status							
Never married	0.1	0.9	2.2	3.6	4.3	95.6	1,177
Ever married	0.1	0.6	2.8	5.8	7.7	88.1	1,943
Total	0.1	0.7	2.6	5.0	6.4	90.9	3,120

na = Not applicable

Table 16.6 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to respondent's current marital status, Liberia DHS 2019-20

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	53.7	na	43.8
Former husband/partner	29.0	na	23.7
Current/former boyfriend	4.0	(25.0)	7.9
Father/stepfather	0.2	(2.4)	0.6
Brother/stepbrother	0.5	(0.0)	0.4
Other relative	4.5	(4.9)	4.6
In-law	0.5	na	0.6
Own friend/acquaintance	7.0	(27.5)	10.7
Family friend	1.0	(5.7)	1.9
Teacher	1.0	(0.3)	0.9
Employer/someone at work	0.0	(0.0)	0.0
Police/soldier	3.5	(5.9)	3.9
Priest/religious leader	0.0	(5.6)	1.0
Stranger	8.1	(18.9)	10.1
Other	0.3	(2.8)	0.7
Number of women who have experienced sexual violence	232	52	284

Note: Ever-married women can report up to three perpetrators: a current husband, former husband, or one other person who is not a current or former husband. Never-married women can report only the person who was the first to commit the violence. Figures in parentheses are based on 25-49 unweighted cases.

na = Not applicable

Table 16.7 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence, by current age, Liberia DHS 2019-20

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	48.1	0.4	5.7	54.1	646
15-17	49.4	0.6	3.6	53.5	363
18-19	46.4	0.1	8.3	54.8	283
20-24	55.7	0.1	11.1	66.9	593
25-29	53.4	1.7	8.0	63.1	503
30-39	54.0	0.6	9.4	64.0	823
40-49	45.7	0.5	8.1	54.3	555
Total	51.5	0.6	8.5	60.6	3,120

Table 16.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviors, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of women whose husband/partner:							Number of ever-married women
	Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviors	Displays none of the specific behaviors	
Age								
15-19	73.0	52.9	37.5	16.4	70.2	55.9	14.3	87
20-24	72.4	62.7	45.9	24.1	71.9	60.6	12.0	295
25-29	69.5	33.0	32.4	14.0	61.6	41.0	18.6	334
30-39	67.6	43.1	34.8	18.3	64.6	45.1	18.4	718
40-49	56.5	38.0	33.8	18.2	55.5	39.5	26.4	508
Religion								
Christian	66.1	44.4	35.8	18.7	63.3	46.6	19.9	1,656
Muslim	65.1	38.0	37.4	16.5	61.6	41.4	15.6	262
Traditional religion	*	*	*	*	*	*	*	8
No religion	*	*	*	*	*	*	*	16
Residence								
Urban	65.8	43.7	37.7	19.1	65.1	47.1	18.0	1,067
Greater Monrovia	60.2	37.7	38.1	17.2	65.8	42.2	18.8	538
Other urban	71.6	49.9	37.3	21.0	64.5	52.2	17.1	528
Rural	66.1	43.1	33.8	17.4	60.5	44.1	21.0	876
Region								
North Western	61.9	38.3	30.6	13.8	56.3	40.1	24.9	196
South Central	63.0	40.4	37.0	17.0	63.2	44.1	19.5	841
South Eastern A	63.2	49.4	29.8	15.2	53.8	44.5	28.0	131
South Eastern B	72.6	43.3	30.2	12.3	62.2	44.8	16.9	106
North Central	70.4	47.6	38.3	22.9	66.9	50.0	16.3	669
County								
Bomi	54.9	45.0	25.5	15.0	38.8	35.0	32.0	75
Bong	71.2	45.0	36.1	15.9	70.6	52.1	18.1	208
Gbarpolu	60.5	34.6	26.8	13.9	54.2	33.9	31.0	36
Grand Bassa	64.4	45.4	33.2	16.5	56.3	48.0	25.5	118
Grand Cape Mount	68.7	33.9	36.7	12.6	72.7	47.2	15.8	84
Grand Gedeh	58.0	41.3	25.5	11.0	43.8	39.1	36.2	48
Grand Kru	79.9	48.7	29.1	13.9	58.6	45.2	17.0	30
Lofa	67.7	45.2	29.8	17.4	68.6	41.9	13.1	159
Margibi	70.8	43.9	31.7	19.7	58.4	48.5	20.5	113
Maryland	63.8	29.3	25.9	9.8	56.8	33.4	20.3	53
Montserrado	61.3	38.8	38.7	16.6	65.4	42.5	18.1	611
Nimba	71.2	50.7	44.3	30.7	63.3	52.8	16.6	301
River Cess	41.3	33.8	10.4	10.8	37.8	24.4	45.2	30
River Gee	83.9	69.7	41.7	16.3	79.8	71.4	8.9	22
Sinoe	79.7	65.0	44.3	21.3	71.5	60.4	11.2	54
Marital status								
Married or living together	66.2	42.9	35.9	18.8	62.8	45.2	18.6	1,608
Divorced/separated/widowed	65.1	45.9	36.3	16.2	64.3	48.5	23.0	335
Number of living children								
0	64.6	56.0	37.6	19.6	74.0	58.2	15.3	146
1-2	72.3	46.9	37.9	18.4	67.7	48.9	12.8	675
3-4	63.0	38.8	35.0	17.8	58.8	41.4	23.4	616
5+	61.5	40.9	34.1	18.5	58.9	43.3	24.4	507
Employment								
Employed for cash	66.8	42.0	33.2	14.6	63.0	43.0	18.5	992
Employed not for cash	66.7	45.3	36.6	25.1	60.1	47.7	24.1	470
Not employed	63.6	44.6	41.0	19.3	66.1	49.6	16.4	481
Education								
No education	62.2	40.2	35.9	18.7	59.3	43.0	23.2	821
Elementary	68.7	42.7	36.7	20.7	60.9	47.3	19.2	429
Junior high	72.2	51.6	42.2	15.7	67.4	53.4	11.7	257
Senior high	72.1	50.6	33.1	16.7	72.9	49.9	13.7	356
Higher	43.4	23.0	25.2	17.1	56.1	23.4	30.3	81
Wealth quintile								
Lowest	65.8	43.6	37.5	21.8	60.1	46.0	20.7	414
Second	67.2	48.0	37.5	18.8	61.4	47.3	19.7	389
Middle	69.1	48.2	36.6	20.5	66.8	49.5	16.8	415
Fourth	63.6	39.3	33.7	12.2	64.0	44.0	20.0	373
Highest	63.6	36.9	34.1	17.6	62.8	41.3	19.6	353
Woman afraid of husband/partner								
Afraid most of the time	75.3	56.7	52.7	31.8	77.8	64.3	11.0	305
Sometimes afraid	69.4	45.6	33.6	17.3	60.1	45.8	20.1	1,084
Never afraid	54.1	32.0	31.3	12.9	60.8	35.5	22.4	553
Total	66.0	43.5	36.0	18.3	63.1	45.8	19.3	1,943

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent husband/partner, and any husband/partner, Liberia DHS 2019-20

Type of violence experienced	Ever experienced	Experienced in the past 12 months	Frequency in the past 12 months	
			Often	Sometimes
SPOUSAL VIOLENCE COMMITTED BY CURRENT OR MOST RECENT HUSBAND/PARTNER ¹				
Physical violence				
Any physical violence	44.8	33.8	7.2	26.6
Pushed her, shook her, or threw something at her	20.1	16.0	3.8	12.2
Slapped her	41.5	30.4	4.9	25.5
Twisted her arm or pulled her hair	13.4	10.2	1.7	8.5
Punched her with his fist or with something that could hurt her	12.7	10.0	2.4	7.5
Kicked her, dragged her, or beat her up	18.9	13.5	2.3	11.2
Tried to choke her or burn her on purpose	4.7	4.0	0.9	3.1
Threatened her or attacked her with a knife, gun, or other weapon	2.7	2.2	0.7	1.4
Sexual violence				
Any sexual violence	8.1	6.8	1.7	5.2
Physically forced her to have sexual intercourse with him when she did not want to	7.4	6.3	1.4	4.8
Physically forced her to perform any other sexual acts she did not want to	4.8	4.2	1.0	3.2
Forced her with threats or in any other way to perform sexual acts she did not want to	2.7	2.2	0.9	1.4
Emotional violence				
Any emotional violence	41.8	35.0	9.3	25.7
Said or did something to humiliate her in front of others	29.0	23.6	5.2	18.4
Threatened to hurt or harm her or someone she cared about	11.0	9.4	2.8	6.6
Insulted her or made her feel bad about herself	34.2	28.8	7.0	21.8
Any form of physical and/or sexual violence	45.6	34.6	7.9	26.6
Any form of emotional and/or physical and/or sexual violence	55.3	45.5	12.9	32.6
SPOUSAL VIOLENCE COMMITTED BY ANY HUSBAND/PARTNER				
Physical violence	48.6	34.0	na	na
Sexual violence	8.9	6.9	na	na
Emotional violence	44.3	35.0	na	na
Any form of physical or sexual violence	49.3	34.8	na	na
Any form of emotional or physical or sexual violence	58.2	45.6	na	na
Number of ever-married women	1,943	1,943	1,943	1,943

na = Not available

¹ Includes current husband/partner for currently married women and most recent husband/partner for divorced, separated, or widowed women

Table 16.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Emotional, physical, and sexual	Physical or sexual	Emotional, physical, or sexual	Number of ever-married women
Age								
15-19	45.5	59.1	20.1	20.1	16.6	59.1	66.1	87
20-24	52.0	56.2	12.5	12.2	11.7	56.5	63.6	295
25-29	42.0	48.5	4.4	4.3	4.0	48.6	60.2	334
30-39	38.1	42.8	7.2	6.2	4.8	43.9	53.2	718
40-49	40.1	36.1	7.1	5.9	5.7	37.3	48.3	508
Religion								
Christian	42.3	45.4	8.6	7.8	6.8	46.2	56.0	1,656
Muslim	36.4	39.5	4.7	4.1	3.9	40.1	49.6	262
Traditional religion	*	*	*	*	*	*	*	8
No religion	*	*	*	*	*	*	*	16
Residence								
Urban	41.1	46.4	7.3	6.7	5.6	47.0	57.3	1,067
Greater Monrovia	37.6	46.8	2.4	2.2	2.0	47.0	58.3	538
Other urban	44.7	45.9	12.2	11.2	9.2	46.9	56.2	528
Rural	42.5	42.9	9.1	8.1	7.5	43.9	52.9	876
Region								
North Western	42.1	45.9	9.2	7.7	6.8	47.4	54.8	196
South Central	39.1	45.5	5.3	4.9	4.2	45.8	56.0	841
South Eastern A	43.2	44.3	6.3	4.9	4.1	45.7	53.7	131
South Eastern B	39.2	53.3	5.6	4.7	4.3	54.2	60.9	106
North Central	45.1	42.4	12.0	11.1	10.0	43.3	53.9	669
County								
Bomi	31.3	33.9	10.9	9.3	8.4	35.5	41.0	75
Bong	44.3	40.5	8.9	8.0	7.6	41.4	51.6	208
Gbarpolu	49.2	45.0	3.9	3.9	2.3	45.0	58.5	36
Grand Bassa	47.4	48.0	6.9	6.2	5.1	48.7	58.0	118
Grand Cape Mount	48.7	57.0	10.1	7.9	7.4	59.2	65.5	84
Grand Gedeh	33.0	34.2	3.6	3.0	3.0	34.8	43.3	48
Grand Kru	20.6	46.8	4.4	4.4	2.9	46.8	48.4	30
Lofa	35.5	36.7	4.7	4.7	4.7	36.7	43.9	159
Margibi	35.2	40.8	16.2	16.2	13.5	40.8	47.0	113
Maryland	48.7	58.9	8.5	6.9	6.9	60.4	68.9	53
Montserrado	38.2	45.8	3.0	2.6	2.3	46.2	57.3	611
Nimba	50.8	46.7	18.0	16.6	14.4	48.1	60.9	301
River Cess	27.6	30.6	5.1	4.5	3.0	31.1	36.2	30
River Gee	41.4	48.7	0.5	0.0	0.0	49.2	58.5	22
Sinoe	60.9	60.7	9.4	6.8	5.7	63.3	72.4	54
Marital status								
Married or living together	40.4	43.7	7.7	7.0	6.1	44.4	54.4	1,608
Divorced/separated/widowed	48.3	49.9	10.0	8.6	8.1	51.3	59.4	335
Number of living children								
0	51.7	56.2	13.7	13.6	12.1	56.3	70.8	146
1-2	42.1	48.8	7.1	7.0	6.4	49.0	56.1	675
3-4	41.0	43.5	7.5	6.2	5.4	44.7	55.0	616
5+	39.4	37.7	8.5	7.3	6.3	38.9	50.1	507
Employment								
Employed for cash	44.5	44.2	6.2	5.2	4.3	45.2	57.9	992
Employed not for cash	40.4	40.7	8.1	7.6	7.4	41.3	49.8	470
Not employed	37.4	50.1	11.9	11.4	10.1	50.6	55.3	481
Education								
No education	40.0	40.4	8.0	7.3	6.4	41.1	51.7	821
Elementary	44.4	49.0	11.4	10.3	9.2	50.1	57.6	429
Junior high	40.7	49.9	7.0	5.4	5.0	51.5	58.7	257
Senior high	45.1	47.8	6.3	6.2	5.2	47.8	59.3	356
Higher	33.9	38.2	2.7	2.7	2.7	38.2	50.3	81
Wealth quintile								
Lowest	45.4	44.3	9.1	8.4	7.8	45.0	55.0	414
Second	43.5	42.1	12.6	11.5	9.8	43.2	52.4	389
Middle	43.6	48.0	10.8	9.8	8.5	49.0	56.0	415
Fourth	40.8	49.5	3.0	2.4	2.3	50.2	62.0	373
Highest	34.4	39.6	4.1	3.7	3.1	39.9	50.9	353
Total	41.8	44.8	8.1	7.3	6.5	45.6	55.3	1,943

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.11 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to the husband's characteristics and women's empowerment indicators, Liberia DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Emotional and physical and sexual	Physical or sexual	Emotional or physical or sexual	Number of ever-married women
Husband's/partner's education¹								
No education	42.3	42.8	7.9	7.7	7.5	43.0	53.5	392
Elementary	48.5	47.9	9.0	8.1	7.5	48.9	57.4	202
Junior high	37.4	48.8	9.5	8.1	5.9	50.2	61.5	213
Senior high	36.9	44.1	6.7	5.8	4.4	45.1	53.7	496
Higher	42.8	37.9	5.2	5.2	5.2	37.9	51.9	211
Don't know	35.3	38.3	10.7	10.6	9.2	38.5	45.6	93
Husband's/partner's alcohol consumption								
Does not drink alcohol	33.3	35.7	4.9	4.1	3.1	36.4	45.2	1,163
Drinks alcohol but is never drunk	(50.9)	(65.3)	(7.6)	(7.6)	(7.6)	(65.3)	(70.4)	37
Is sometimes drunk	50.8	55.4	11.8	10.8	10.4	56.5	68.4	575
Is often drunk	68.0	67.4	17.7	17.6	16.2	67.5	77.2	167
Spousal education difference¹								
Husband has more education	41.0	43.9	7.5	7.0	5.7	44.4	55.9	853
Wife has more education	44.0	49.4	8.7	6.7	6.6	51.4	56.7	187
Both have equal education	32.4	44.9	7.0	6.2	5.3	45.7	51.3	168
Neither has any education	42.8	40.5	7.1	6.9	6.7	40.7	53.3	298
Don't know	34.8	39.6	9.8	9.6	8.4	39.8	46.3	102
Spousal age difference¹								
Wife older	41.5	41.8	9.2	9.1	9.1	41.9	52.6	147
Wife is same age	49.2	48.1	15.5	11.7	11.7	52.0	58.5	81
Wife 1-4 years younger	40.1	51.0	7.5	6.7	5.7	51.8	57.0	474
Wife 5-9 years younger	40.6	42.7	7.8	7.4	6.9	43.1	55.2	469
Wife 10 or more years younger	38.5	36.8	5.9	5.5	3.7	37.2	50.8	436
Number of marital control behaviors displayed by husband/partner²								
0	14.4	20.7	2.0	1.8	1.0	21.0	25.2	376
1-2	27.0	36.2	3.0	2.4	1.5	36.9	45.2	678
3-4	58.1	57.8	10.7	9.7	8.5	58.8	72.2	679
5	85.4	73.3	26.9	25.5	25.5	74.7	87.0	210
Number of decisions in which women participate³								
0	46.4	49.4	16.5	15.9	13.2	50.0	57.4	176
1-2	40.7	53.0	9.0	8.8	6.7	53.2	60.3	290
3	39.4	40.5	6.0	5.2	4.9	41.3	52.5	1,142
Number of reasons for which wife beating is justified⁴								
0	35.3	37.8	7.1	6.2	5.0	38.7	48.2	1,164
1-2	44.4	50.9	4.5	3.9	3.8	51.6	61.4	365
3-4	57.6	59.4	14.0	13.4	12.9	60.0	70.9	336
5	58.8	57.2	13.8	13.4	12.6	57.5	64.9	77
Father beat mother								
Yes	54.3	53.1	9.5	8.7	7.9	53.9	66.2	478
No	37.6	40.3	8.4	7.6	6.6	41.1	50.7	1,252
Don't know	37.8	52.4	2.9	2.4	2.4	53.0	58.0	212
Woman afraid of husband/partner								
Afraid most of the time	61.3	61.4	17.9	17.0	15.2	62.2	71.7	305
Sometimes afraid	43.6	49.0	7.7	6.7	5.9	50.0	60.2	1,084
Never afraid	27.4	27.4	3.6	3.3	2.6	27.7	36.5	553
Total	41.8	44.8	8.1	7.3	6.5	45.6	55.3	1,943

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes only currently married women

² According to the wife's report. See Table 16.8 for list of behaviors.

³ According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.

⁴ According to the wife's report. See Table 15.10.1 for list of reasons.

Table 16.12 Violence by any husband/partner in the last 12 months

Percentage of ever-married women who have experienced emotional, physical, or sexual violence by any husband/partner in the past 12 months, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Emotional and physical and sexual	Physical or sexual	Emotional or physical or sexual	Number of ever-married women
Age								
15-19	41.0	57.1	20.1	19.3	16.6	57.9	61.3	87
20-24	45.1	52.0	11.4	11.0	10.2	52.5	58.4	295
25-29	38.2	37.8	3.8	3.6	3.6	38.0	50.2	334
30-39	31.6	28.7	5.4	4.2	3.0	30.0	42.8	718
40-49	31.0	24.4	6.3	5.5	5.2	25.2	36.4	508
Residence								
Urban	35.7	35.9	6.6	5.9	4.8	36.6	48.6	1,067
Greater Monrovia	33.0	34.2	2.4	2.2	2.0	34.4	49.0	538
Other urban	38.4	37.6	10.8	9.6	7.8	38.8	48.2	528
Rural	34.3	31.6	7.4	6.4	6.0	32.6	42.0	876
Region								
North Western	34.1	34.3	6.0	5.0	4.1	35.3	43.4	196
South Central	33.4	34.0	4.8	4.3	3.7	34.4	46.5	841
South Eastern A	37.6	36.3	6.9	5.1	4.7	38.1	46.6	131
South Eastern B	33.5	40.0	4.6	3.1	2.7	41.5	50.4	106
North Central	37.1	32.4	10.3	9.4	8.4	33.3	44.2	669
County								
Bomi	24.4	24.9	6.5	5.0	4.0	26.4	31.2	75
Bong	37.0	29.6	5.0	4.2	4.2	30.5	41.6	208
Gbarpolu	43.9	35.9	2.3	2.3	2.3	35.9	49.6	36
Grand Bassa	37.3	32.3	5.0	3.7	3.0	33.6	43.7	118
Grand Cape Mount	38.6	42.1	7.2	6.3	5.0	43.0	51.8	84
Grand Gedeh	25.8	23.9	3.6	3.0	3.0	24.4	35.3	48
Grand Kru	14.1	36.3	4.4	4.4	2.9	36.3	37.3	30
Lofa	28.3	26.1	4.7	4.7	4.7	26.1	33.0	159
Margibi	32.0	35.8	15.5	15.0	12.7	36.3	43.5	113
Maryland	41.3	41.7	6.0	3.7	3.7	44.0	55.3	53
Montserrado	32.9	34.0	2.8	2.5	2.2	34.2	47.6	611
Nimba	41.8	37.7	16.9	15.4	13.2	39.1	51.9	301
River Cess	23.3	22.9	4.4	2.9	2.4	24.4	31.0	30
River Gee	40.7	40.8	1.7	0.0	0.0	42.5	55.9	22
Sinoe	55.9	54.6	11.2	8.2	7.5	57.6	65.2	54
Education								
No education	34.1	30.4	6.6	5.7	5.0	31.3	43.0	821
Elementary	37.6	39.8	10.3	9.3	8.2	40.7	48.9	429
Junior high	34.1	41.1	6.6	4.9	4.9	42.8	49.0	257
Senior high	37.2	33.4	4.9	4.9	3.8	33.4	47.3	356
Higher	25.1	19.3	2.7	2.7	2.7	19.3	36.8	81
Wealth quintile								
Lowest	36.4	33.0	7.1	6.2	5.9	33.8	44.0	414
Second	36.9	33.5	10.4	9.2	7.9	34.7	44.7	389
Middle	36.6	39.1	9.7	9.0	7.5	39.8	47.5	415
Fourth	34.8	37.1	2.8	2.1	2.0	37.8	50.9	373
Highest	29.8	26.4	4.1	3.6	3.2	26.9	40.7	353
Total	35.0	34.0	6.9	6.1	5.4	34.8	45.6	1,943

Note: Any husband/partner includes all current, most recent, and former husbands/partners.

Table 16.13 Experience of spousal violence by duration of marriage

Among currently married women age 15-49 who have been married only once, percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage, according to marital duration, Liberia DHS 2019-20

Years since marriage	Percentage who first experienced spousal physical or sexual violence by exact marital duration				Percentage who have not experienced sexual or physical violence	Number of currently married women who have been married only once
	Before marriage	2 years	5 years	10 years		
<2	2.5	na	na	na	42.9	132
2-4	4.4	29.5	na	na	54.3	220
5-9	6.0	24.7	42.7	na	50.5	250
10+	6.7	17.3	31.7	36.8	60.1	654
Total	5.7	23.7	37.4	43.0	55.4	1,256

na = Not applicable

Table 16.14 Injuries to women due to spousal violence

Among ever-married women age 15-49 who have experienced violence committed by their current or most recent husband/partner, percentage who have been injured as a result of the violence, by types of injuries, according to type of violence, Liberia DHS 2019-20

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have experienced physical or sexual violence
Physical violence¹					
Ever ²	30.1	13.9	8.6	34.2	870
Past 12 months	30.1	15.7	9.8	34.7	657
Sexual violence					
Ever ²	40.3	20.6	19.4	48.7	157
Past 12 months	41.8	22.4	20.4	51.5	133
Physical or sexual violence¹					
Ever ²	29.8	13.6	8.4	33.9	885
Past 12 months	29.9	15.4	9.6	34.5	672

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

¹ Excludes women who reported violence only in response to a direct question on violence during pregnancy

² Includes in the past 12 months

Table 16.15 Violence by women against their husband by women's background characteristics

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever ¹	Past 12 months	
Women's experience of spousal physical violence			
Ever ¹	22.8	19.6	870
In the past 12 months	26.9	24.6	657
Never	4.2	2.7	1,073
Age			
15-19	18.8	18.8	87
20-24	17.5	17.1	295
25-29	10.5	5.6	334
30-39	12.7	11.1	718
40-49	9.5	6.8	508
Religion			
Christian	13.2	10.6	1,656
Muslim	8.2	7.9	262
Traditional religion	*	*	8
No religion	*	*	16
Residence			
Urban	14.4	11.8	1,067
Greater Monrovia	13.9	11.4	538
Other urban	15.0	12.1	528
Rural	10.1	8.4	876
Region			
North Western	9.7	6.4	196
South Central	13.3	11.3	841
South Eastern A	12.3	10.5	131
South Eastern B	9.0	6.5	106
North Central	12.9	10.7	669
County			
Bomi	3.9	1.6	75
Bong	12.1	10.0	208
Gbarpolu	6.7	3.7	36
Grand Bassa	19.3	18.1	118
Grand Cape Mount	16.3	11.8	84
Grand Gedeh	8.3	7.4	48
Grand Kru	1.6	0.6	30
Lofa	6.3	6.3	159
Margibi	6.5	6.5	113
Maryland	13.6	9.8	53
Montserrado	13.4	10.8	611
Nimba	17.0	13.5	301
River Cess	7.5	3.4	30
River Gee	8.0	6.4	22
Sinoe	18.6	17.3	54
Marital status			
Married or living together	13.0	11.1	1,608
Divorced/separated/widowed	9.9	6.4	335
Employment			
Employed for cash	12.7	9.9	992
Employed not for cash	10.5	9.0	470
Not employed	14.1	12.3	481
Number of living children			
0	28.4	27.6	146
1-2	12.9	10.1	675
3-4	10.2	7.9	616
5+	10.2	8.4	507
Education			
No education	11.5	10.5	821
Elementary	14.9	10.3	429
Junior high	18.6	15.0	257
Senior high	10.3	8.5	356
Higher	1.0	1.0	81

Continued...

Table 16.15—Continued

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever ¹	Past 12 months	
Wealth quintile			
Lowest	10.4	9.1	414
Second	11.7	10.5	389
Middle	12.0	9.0	415
Fourth	16.3	12.6	373
Highest	12.4	10.4	353
Total	12.5	10.3	1,943

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes in the past 12 months

Table 16.16 Violence by women against their husband by husband's characteristics and empowerment indicators

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to their husband's characteristics and women's empowerment indicators, Liberia DHS 2019-20

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever ¹	Past 12 months	
Husband's/partner's education²			
No education	13.1	12.7	392
Elementary	14.1	11.6	202
Junior high	20.4	15.3	213
Senior high	10.7	8.4	496
Higher	9.2	8.2	211
Don't know	14.7	13.8	93
Husband's/partner's alcohol consumption			
Does not drink alcohol	9.4	7.3	1,163
Drinks alcohol but is never drunk	(31.8)	(29.6)	37
Is sometimes drunk	16.3	13.5	575
Is often drunk	16.6	15.5	167
Spousal education difference²			
Husband has more education	14.3	11.4	853
Wife has more education	13.9	12.4	187
Both have equal education	8.0	6.8	168
Neither has any education	11.5	11.3	298
Don't know	13.4	12.6	102
Spousal age difference²			
Wife older	17.6	13.7	147
Wife is same age	4.8	4.8	81
Wife 1-4 years younger	13.5	12.4	474
Wife 5-9 years younger	10.7	9.2	469
Wife 10 or more years younger	15.0	11.8	436
Number of marital control behaviors displayed by husband/partner³			
0	4.1	3.6	376
1-2	9.7	7.2	678
3-4	19.0	16.5	679
5	15.6	11.8	210
Number of decisions in which women participate⁴			
0	14.8	14.2	176
1-2	17.0	15.5	290
3	11.8	9.5	1,142
Number of reasons for which wife beating is justified⁵			
0	9.1	8.0	1,164
1-2	16.9	10.4	365
3-4	19.0	17.1	336
5	14.9	13.2	77
Father beat mother			
Yes	18.0	14.9	478
No	9.5	8.0	1,252
Don't know	17.6	13.2	212
Woman afraid of husband/partner			
Afraid most of the time	14.4	13.2	305
Sometimes afraid	14.9	11.8	1,084
Never afraid	6.7	5.6	553
Total	12.5	10.3	1,943

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes in the past 12 months

² Includes only currently married women

³ According to the wife's report. See Table 16.8 for list of behaviors.

⁴ According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.

⁵ According to the wife's report. See Table 15.10.1 for list of reasons.

Table 16.17 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior, according to type of violence and background characteristics, Liberia DHS 2019-20

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced					
Physical only	39.3	9.6	51.1	100.0	1,607
Sexual only	*	*	*	100.0	19
Both physical and sexual	56.9	13.0	30.1	100.0	265
Age					
15-19	39.0	6.8	54.2	100.0	350
20-24	38.3	10.3	51.5	100.0	396
25-29	41.5	7.6	50.8	100.0	317
30-39	49.6	9.9	40.6	100.0	526
40-49	35.9	16.0	48.0	100.0	301
Religion					
Christian	43.4	10.2	46.4	100.0	1,644
Muslim	28.3	9.7	62.0	100.0	207
Traditional religion	*	*	*	100.0	11
No religion	*	*	*	100.0	29
Residence					
Urban	39.9	10.9	49.2	100.0	1,258
Greater Monrovia	38.6	11.2	50.3	100.0	773
Other urban	41.9	10.6	47.5	100.0	485
Rural	45.5	8.1	46.4	100.0	633
Region					
North Western	52.6	14.6	32.7	100.0	160
South Central	39.9	10.8	49.4	100.0	1,050
South Eastern A	54.0	5.3	40.6	100.0	95
South Eastern B	48.3	10.8	40.8	100.0	97
North Central	38.5	7.5	54.0	100.0	489
County					
Bomi	59.8	12.6	27.7	100.0	55
Bong	43.3	12.6	44.1	100.0	157
Gbarpolu	62.9	7.3	29.8	100.0	29
Grand Bassa	57.0	14.4	28.6	100.0	115
Grand Cape Mount	43.6	18.9	37.5	100.0	76
Grand Gedeh	55.0	8.5	36.5	100.0	27
Grand Kru	45.5	12.9	41.5	100.0	23
Lofa	30.4	0.7	68.8	100.0	112
Margibi	35.2	4.7	60.1	100.0	92
Maryland	51.8	11.2	37.0	100.0	54
Montserrado	38.0	10.9	51.0	100.0	843
Nimba	39.1	7.4	53.5	100.0	221
River Cess	34.4	8.4	57.2	100.0	18
River Gee	42.1	7.3	50.6	100.0	20
Sinoe	60.8	2.5	36.7	100.0	50
Marital status					
Never married	33.8	7.1	59.1	100.0	662
Married or living together	45.5	11.5	43.0	100.0	996
Divorced/separated/widowed	48.2	11.6	40.2	100.0	234
Number of living children					
0	37.1	7.0	55.8	100.0	461
1-2	42.8	9.6	47.6	100.0	723
3-4	41.1	14.4	44.5	100.0	418
5+	47.5	9.1	43.4	100.0	289
Employment					
Employed for cash	47.5	10.2	42.3	100.0	914
Employed not for cash	35.2	6.5	58.3	100.0	308
Not employed	36.9	11.3	51.8	100.0	670
Education					
No education	41.8	9.7	48.5	100.0	546
Elementary	47.5	6.9	45.6	100.0	431
Junior high	40.4	7.5	52.0	100.0	375
Senior high	37.0	16.3	46.7	100.0	426
Higher	41.6	7.5	50.9	100.0	113
Wealth quintile					
Lowest	48.4	7.1	44.6	100.0	295
Second	41.6	6.1	52.3	100.0	300
Middle	35.1	14.3	50.6	100.0	378
Fourth	44.0	10.5	45.5	100.0	479
Highest	40.6	10.4	49.0	100.0	440
Total	41.7	10.0	48.3	100.0	1,891

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.18 Sources for help to stop the violence

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Liberia DHS 2019-20

Source	Type of violence experienced			
	Physical only	Sexual only	Both physical and sexual	Physical or sexual violence
Own family	71.0	*	66.8	70.3
Husband/partner's family	30.0	*	30.2	29.8
Husband/partner	1.5	*	0.9	1.3
Boyfriend	0.3	*	0.7	0.3
Friend	18.5	*	16.7	18.0
Neighbor	18.8	*	20.8	19.0
Religious leader	3.2	*	8.6	4.2
Doctor/medical personnel	0.8	*	3.2	1.2
Police	3.8	*	12.8	5.6
Lawyer	0.2	*	1.5	0.5
Social work organization	0.2	*	2.2	0.6
Other	3.8	*	3.4	3.7
Number of women who have sought help	632	6	151	789

Note: Women can report more than one source from which they sought help. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.19 Usefulness and impact of help sought

Among women age 15-49 who have ever experienced physical or sexual violence and sought help, percent distribution of usefulness of help sought and percent distribution of impact on frequency of violent assaults, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Usefulness of help sought:				Impact on frequency of violent assaults:				Number of women who have ever experienced any physical or sexual violence and who have sought help
	Not useful at all	Useful to situation at that time	Useful in the longer term	Total	No change in assaults	Assaults reduced	Assaults increased	Total	
Type of violence experienced									
Physical only	16.0	48.5	35.5	100.0	14.3	82.6	3.1	100.0	632
Sexual only	*	*	*	100.0	*	*	*	100.0	6
Both physical and sexual	18.4	60.5	21.1	100.0	16.6	73.8	9.6	100.0	151
Age									
15-19	9.4	58.0	32.6	100.0	12.2	87.8	0.0	100.0	136
20-24	7.8	52.0	40.1	100.0	8.6	84.5	6.9	100.0	152
25-29	16.5	57.6	25.9	100.0	15.2	84.0	0.8	100.0	132
30-34	21.3	51.3	27.5	100.0	15.6	76.1	8.3	100.0	151
35-39	19.9	37.5	42.6	100.0	14.5	81.8	3.7	100.0	110
40-44	26.2	49.3	24.5	100.0	31.9	64.8	3.3	100.0	64
45-49	27.4	40.5	32.1	100.0	14.1	76.9	9.0	100.0	45
Religion									
Christian	16.6	50.1	33.3	100.0	14.7	80.8	4.4	100.0	713
Muslim	15.9	51.8	32.3	100.0	15.1	82.1	2.8	100.0	59
Traditional religion	*	*	*	100.0	*	*	*	100.0	4
No religion	*	*	*	100.0	*	*	*	100.0	14
Residence									
Urban	16.0	49.7	34.3	100.0	14.2	80.9	4.9	100.0	501
Greater Monrovia	17.1	43.2	39.7	100.0	11.5	82.3	6.2	100.0	298
Other urban	14.5	59.1	26.4	100.0	18.2	78.9	2.9	100.0	203
Rural	17.1	53.2	29.8	100.0	15.5	81.1	3.4	100.0	288
Region									
North Western	20.5	54.6	24.9	100.0	16.8	82.2	1.1	100.0	84
South Central	16.8	44.7	38.6	100.0	13.9	79.7	6.4	100.0	419
South Eastern A	14.4	54.8	30.8	100.0	14.9	79.7	5.4	100.0	51
South Eastern B	11.1	59.7	29.2	100.0	14.3	83.0	2.8	100.0	47
North Central	15.6	60.1	24.3	100.0	15.5	83.2	1.3	100.0	188
County									
Bomi	14.3	57.3	28.4	100.0	12.5	86.7	0.8	100.0	33
Bong	17.6	64.1	18.3	100.0	22.3	75.1	2.6	100.0	68
Gbarpolu	21.7	51.3	26.9	100.0	19.9	76.6	3.5	100.0	18
Grand Bassa	11.6	42.7	45.7	100.0	13.6	78.3	8.1	100.0	66
Grand Cape Mount	26.1	53.7	20.2	100.0	19.3	80.7	0.0	100.0	33
Grand Gedeh	(21.6)	(40.0)	(38.4)	100.0	(15.9)	(70.1)	(14.0)	100.0	15
Grand Kru	(10.9)	(51.3)	(37.8)	100.0	(8.7)	(85.2)	(6.1)	100.0	10
Lofa	(8.8)	(49.2)	(42.0)	100.0	(3.9)	(96.1)	(0.0)	100.0	34
Margibi	(34.5)	(38.2)	(27.3)	100.0	(34.1)	(56.7)	(9.2)	100.0	32
Maryland	9.6	64.1	26.3	100.0	13.1	84.6	2.3	100.0	28
Montserrado	16.1	45.7	38.2	100.0	11.9	82.3	5.7	100.0	321
Nimba	16.7	61.2	22.1	100.0	14.7	84.4	0.9	100.0	86
River Cess	(20.3)	(79.7)	(0.0)	100.0	(13.5)	(82.1)	(4.3)	100.0	6
River Gee	(16.5)	(55.8)	(27.7)	100.0	(25.4)	(74.6)	(0.0)	100.0	8
Sinoe	9.7	56.7	33.6	100.0	14.7	83.9	1.4	100.0	30
Marital status									
Never married	12.7	50.0	37.2	100.0	10.7	84.8	4.4	100.0	224
Married or living together	13.5	53.1	33.4	100.0	12.6	84.1	3.3	100.0	453
Divorced/separated/ widowed	35.4	44.0	20.7	100.0	30.6	60.9	8.5	100.0	113
Number of living children									
0	6.8	48.7	44.6	100.0	9.4	89.1	1.5	100.0	171
1-2	12.4	57.6	30.1	100.0	13.1	83.5	3.4	100.0	310
3-4	29.7	44.0	26.3	100.0	20.0	71.1	8.9	100.0	172
5+	20.9	47.5	31.6	100.0	18.3	77.5	4.3	100.0	137
Employment									
Employed for cash	17.4	50.2	32.4	100.0	15.8	78.7	5.5	100.0	434
Employed not for cash	24.4	44.5	31.1	100.0	18.8	75.2	5.9	100.0	108
Not employed	11.1	55.0	33.8	100.0	10.9	87.5	1.6	100.0	247

Continued...

Table 16.19—Continued

Background characteristic	Usefulness of help sought:				Impact on frequency of violent assaults:				Number of women who have ever experienced any physical or sexual violence and who have sought help
	Not useful at all	Useful to situation at that time	Useful in the longer term	Total	No change in assaults	Assaults reduced	Assaults increased	Total	
Education									
No education	24.3	48.6	27.0	100.0	19.3	77.6	3.2	100.0	229
Elementary	16.6	51.3	32.1	100.0	13.8	78.4	7.8	100.0	205
Junior high	7.0	66.9	26.1	100.0	10.9	87.6	1.5	100.0	151
Senior high	17.4	43.2	39.4	100.0	16.0	80.9	3.0	100.0	158
Higher	*	*	*	100.0	*	*	*	100.0	47
Wealth quintile									
Lowest	19.8	54.8	25.4	100.0	19.8	74.1	6.1	100.0	143
Second	9.9	63.1	27.0	100.0	13.9	84.6	1.5	100.0	125
Middle	17.3	54.4	28.3	100.0	15.4	80.6	4.0	100.0	133
Fourth	19.8	48.4	31.9	100.0	15.3	82.5	2.3	100.0	211
Highest	13.5	39.9	46.5	100.0	9.8	82.6	7.6	100.0	179
Total	16.4	51.0	32.6	100.0	14.7	81.0	4.3	100.0	789

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Key Findings

- **Child discipline:** 85% of children age 1-14 experienced any violent discipline methods during the month before the survey.
- **Child participation in economic activities:** 11% of children age 12-14 and 2% of children age 15-17 are considered to engage in excessive work outside the home.
- **Child participation in domestic activities:** Among children age 12-14, 21% are considered to engage in excessive domestic work.
- **Exposure to hazardous work:** Overall, 30% of children work in dangerous conditions.
- **Overall child labor:** During the week before the interview, 28% of children age 5-17 were engaged in economic activities or domestic tasks at or above the threshold defined for their age group.

Information obtained in the 2019-20 LDHS allows for an assessment of several key aspects of the welfare of Liberia's children. Specifically, questions were included on child discipline and child labor. The data about child discipline will help parents and caretakers implement effective disciplinary techniques that make for happy, healthy, and well-behaved children. The data regarding child labor will help the Liberian government, civil society, communities, and other stakeholders design and implement programs and policies that will help young children grow up safely and reach their full potential.

Liberia's Children's Law, passed in 2011, prohibits inappropriate child discipline and child labor (USDOL 2020), consistent with its intent of advancing the well-being of Liberian children and children of other nationalities who may be residing or transiting in Liberia. The Child Protection Network (LCRNC 2013) and National Child Rights Observatory Group (CRC 2004) work towards the fulfillment of the Children's Law under the leadership of the Ministry of Gender, Children and Social Protection. The Decent Work Act, passed in 2015, assures the children of Liberia freedom from the worst forms of child labor. The Government of Liberia began to lead observation of the World Day Against Child Labor in 2019, the same year the country adopted the Costed National Action Plan on the Elimination of the Worst Forms of Child Labor to cover the period 2018-2030 (Yates 2020). Advocacy on these matters is led by the inter-agency National Commission on Child Labor, hosted at the Ministry of Labor (USDOL 2020).

The Liberian Children's Representative Forum, formerly the Liberian Children's Parliament, has provided a voice for children themselves to articulate issues related to their well-being since 2002 (UNCRC 2004). Other non-state actors seeking to advance children's well-being formed the National Child Rights NGOs Coalition, which was launched in 2013 (LCRNC 2013).

17.1 CHILD DISCIPLINE

Nonviolent disciplinary approaches

Include one or more of the following:

- taking away privileges, forbidding something the child liked, or not allowing the child to leave the house
- explaining that the child's behavior was wrong
- giving the child something else to do

Sample: De jure children age 1-14

Psychological aggression

Includes one or both of the following:

- shouting, yelling, or screaming at the child
- calling the child dumb, lazy, or a similar term

Sample: De jure children age 1-14

Physical punishment

Includes one or more of the following:

- shaking the child
- spanking, hitting, or slapping the child on the bottom with a bare hand
- hitting the child on the bottom or other part of the body with a belt, hairbrush, stick, or other similar hard object
- hitting or slapping the child on the face, head, or ears
- hitting the child on the hand, arm, or leg
- beating the child up, that is, hitting the child over and over as hard as one can

Sample: De jure children age 1-14

Severe physical punishment

Includes one or both of the following:

- hitting or slapping the child on the face, head, or ears
- beating the child up, that is, hitting the child over and over as hard as one can

Sample: De jure children age 1-14

The manner in which parents and caretakers discipline children can have long-term consequences for their physical and psychological development and well-being. The 2019-20 LDHS Household Questionnaire included questions from the UNICEF Multiple Indicator Cluster Survey (MICS) module on how children in the household are usually disciplined. The questions were asked about one randomly selected de jure child age 1-14 per household. The respondent to the Household Questionnaire (the household head or other household member) was asked a series of separate questions about disciplinary practices that may have been used with the child during the month before the survey.

Seven percent of children age 1-14 experienced only nonviolent discipline, 81% experienced psychological aggression, 71% experienced physical punishment, and 20% experienced severe physical punishment. Overall, 85% of children age 1-14 experienced any violent discipline method (**Table 17.1**).

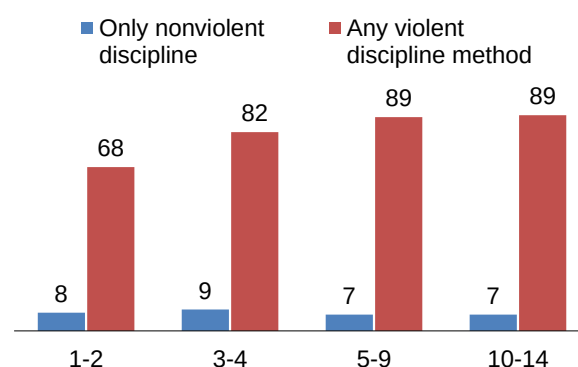
Patterns by background characteristics

- Use of violent discipline methods increases with child's age. Sixty-eight percent of children age 1-2 experienced violent discipline methods, as compared with 89% of children age 5-14 (**Figure 17.1**).
- The percentage of children experiencing any violent discipline method ranges from a low of 76% in Nimba to a high of 98% in Sinoe.
- Differences are observed by school attendance. Eighty-nine percent of children who were attending school experienced any violent discipline methods, compared with 79% of those not attending school.

Sixty-four percent of respondents believe that a child needs physical punishment to be raised or educated properly (**Table 17.2**).

Figure 17.1 Child discipline by age group

Percentage of children age 1-14 by experience of child disciplining methods



17.2 CHILD LABOR

The 2019-20 Liberia DHS included a special child labor module developed by UNICEF for the MICS program. The module obtained information on the type of work a child did, if any, and the number of hours he or she was engaged in the work during the week before the survey. Data were collected on both economic activities (paid or unpaid work for someone who is not a member of the household and/or for a family farm or business) and domestic work (household chores such as cooking, cleaning, or caring for children). The module also collected information on hazardous working conditions.

The module was administered as part of the LDHS Household Questionnaire for one child age 5-17. To the extent that the person responding to the Household Questionnaire (usually the household head) was not familiar with the selected child's involvement in economic activities or household chores, some bias may exist in the child labor data.

17.2.1 Child Labor Outside the Home

Participation in economic activities

To classify children according to their involvement in economic activities, UNICEF sets three thresholds based on the children's age and the number of hours they worked in the week before the survey:

- age 5-11: 1 hour or more
- age 12-14: 14 hours or more
- age 15-17: 43 hours or more

Children who participated in economic activities during the week preceding the interview for a number of hours equal to or greater than that defined for their age, as presented above, are considered to be "engaged in child labor."

Sample: De jure population

Table 17.3 shows that relatively large proportions of Liberian children are reported as engaging in some type of economic activity for an employer outside the home or in a family business. Specifically, 30% of children age 5-11, 49% of children age 12-14, and 60% of percent of children age 15-17 engaged in some economic activity in the week prior to the survey.

However, only 11% of children age 12-14 and 2% of children age 15-17 were working longer in their jobs than is considered appropriate for their age.

Patterns by background characteristics

- Rural children age 5-11 are more likely than their urban counterparts to be engaged in economic activity beyond what is considered appropriate for their age (38% versus 24%). The same is true among children age 12-14 (15% versus 9%). This pattern is not clearly observed among children age 15-17.
- The percentage of children age 5-11 engaged in an inappropriate amount of economic activity is highest in Gbarpolu (54%) and lowest in Montserrado (14%). Among children age 12-14, the percentage is highest in Bong (35%) and lowest in Nimba (2%).
- The percentage of children age 5-11 and 12-14 engaged in an inappropriate amount of economic activity declines as wealth increases.

17.2.2 Child Labor Inside the Home

Participation in domestic activities

To classify children according to their involvement in domestic work, UNICEF sets thresholds based on children's age and the number of hours they worked during the preceding week. For both children age 5-11 and 12-14, the threshold is 21 hours or more.

Children who participated in domestic work during the week preceding the interview for a number of hours equal to or greater than that defined for their age, as presented above, are considered to be "engaged in child labor."

Sample: De jure population

Table 17.4 presents information on the involvement of children age 5-14 in household chores during the week before the survey. Many Liberian children are responsible for performing household chores. The level of engagement varies with the child's age; however, even among children age 5-11, 79% were responsible for at least some household chores during the week before the survey. However, only 10% of children in this age range exceeded 21 hours of household work. Among children age 12-14, 96% were engaged in some household chores, while 21% exceeded the 21-hour threshold.

Patterns by background characteristics

- Rural children age 5-11 are more likely to be engaged in household chores beyond the 21-hour threshold than their urban counterparts (11% versus 9%). The same pattern is not so clearly observed among children age 12-14 (22% versus 21%).
- The percentage of children age 5-11 engaged in excessive housework is highest in Gbarpolu (27%) and lowest in Sinoe (1%). Among children age 12-14, the percentage is highest in Grand Gedeh (49%) and lowest in Sinoe (2%).

- Children age 5-11 and 12-14 who are attending school are less likely to be engaged in excessive household chores (10% and 21%, respectively) than those not attending school (12% and 23%, respectively).

17.2.3 Child Labor Hazardous Work

Exposure to hazardous work

As defined by UNICEF, children who work in hazardous conditions are those who (a) carry heavy loads; (b) work with dangerous tools or operate large machinery; (c) are exposed to dust, smoke, or gas; (d) are exposed to cold, heat, or extreme humidity; (e) are exposed to loud noises or vibrations; (f) are exposed to work at heights; (g) are exposed to chemicals (pesticides, glue) or explosives; or (h) are exposed to other things, processes, or conditions that are harmful to their health or safety.

Sample: De jure population

Table 17.5 shows the percentage of children age 5-17 working in various hazardous conditions. Overall, 30% of children work in dangerous conditions. The most frequently reported hazardous condition was carrying heavy loads (15%), followed by working with dangerous tools or operating heavy machinery (7%).

Patterns by background characteristics

- The percentage of children engaged in hazardous work grows with the age of the child, from 21% among those age 5-11 to 48% among those age 15-17.
- There is little difference by sex in the percentage of children engaged in hazardous work (31% of boys and 28% of girls).
- As wealth quintile increases, the percentage of children engaged in hazardous work declines. Specifically, 44% of children in the lowest wealth quintile are engaged in such work, as compared with 16% of children in the highest quintile.

17.2.4 Overall Child Labor

Table 17.6 combines information on children involved in economic activities or performing household chores (as detailed in the previous tables) into a total child labor indicator. One out of three (28%) children are engaged in child labor (**Figure 17.2**).

Patterns by background characteristics

- The percentage of children engaged in child labor decreases with age, declining from 36% among those age 5-11 to 26% among those age 12-14 before falling to 2% among those age 15-17.
- Girls (29%) are more likely than boys (26%) to be engaged in child labor.
- By county, Montserrado has the smallest percentage of children engaged in child labor (18%), while Gbarpolu has the largest (52%).
- As wealth quintile increases, the percentage of children engaged in child labor declines. Specifically, 39% of children in the lowest wealth quintile are engaged in such work, as compared with 19% of children in the highest quintile (**Figure 17.3**).

LIST OF TABLES

For more information on child discipline and child labor, see the following tables:

- **Table 17.1** Child discipline
- **Table 17.2** Attitudes toward physical punishment
- **Table 17.3** Children's involvement in economic activities
- **Table 17.4** Children's involvement in household chores
- **Table 17.5** Hazardous work
- **Table 17.6** Child labor

Figure 17.2 Child labor

Percentage of children aged 5-17 who were involved, during the week before the interview, in economic activities or housework at or above the number of hours fixed for their age group

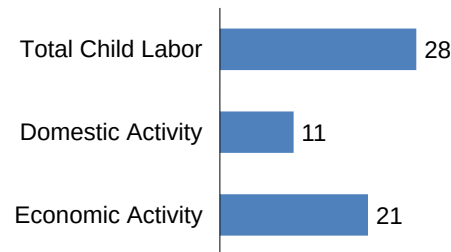


Figure 17.3 Child labor by wealth

Percentage of children age 5-17 who were involved, during the week before the interview, in economic activities or housework at or above the number of hours fixed for their age group

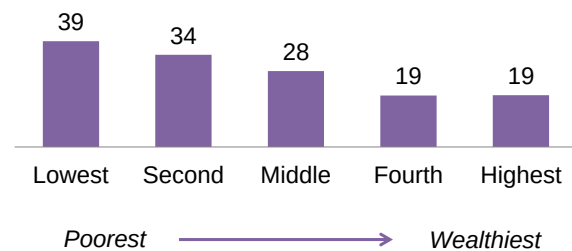


Table 17.1 Child discipline

Percentage of children age 1-14 by child disciplining methods experienced during the month before the survey, according to background characteristics, Liberia DHS 2019-20

	Percentage of children age 1-14 who experienced:					
Background characteristic	Only nonviolent discipline	Psychological aggression	Physical punishment		Any violent discipline method ²	Number of children age 1-14
			Any	Severe ¹		
Age in years						
1-2	7.6	61.3	56.5	8.0	67.9	799
3-4	8.9	78.2	71.3	19.9	82.4	948
5-9	6.8	84.8	75.4	20.5	88.6	2,195
10-14	6.8	84.3	72.7	25.0	89.4	2,135
Child's sex						
Male	7.4	80.1	71.8	20.9	85.2	3,070
Female	7.1	80.9	70.9	19.8	85.1	3,007
Residence						
Urban	7.4	80.4	71.5	21.2	84.4	3,419
Greater Monrovia	7.5	78.9	72.4	24.7	83.1	1,689
Other urban	7.4	81.8	70.6	17.8	85.6	1,730
Rural	7.0	80.7	71.1	19.2	86.2	2,658
Region						
North Western	7.5	81.5	67.6	17.4	86.6	529
South Central	6.9	80.8	73.0	23.2	85.0	2,588
South Eastern A	4.7	88.1	75.6	13.8	92.4	385
South Eastern B	3.8	91.1	79.9	23.2	94.3	371
North Central	8.6	76.8	68.0	18.4	82.3	2,204
County						
Bomi	8.8	83.1	62.6	14.5	88.1	205
Bong	5.3	87.9	78.9	20.7	91.3	572
Gbarpolu	8.7	82.3	71.7	19.3	90.5	103
Grand Bassa	5.1	86.0	81.8	21.2	91.7	342
Grand Cape Mount	5.7	79.6	70.4	19.2	83.5	221
Grand Gedeh	7.9	82.1	70.2	9.6	88.7	130
Grand Kru	6.7	90.4	68.7	17.2	91.6	120
Lofa	7.4	79.2	75.0	22.0	85.7	518
Margibi	4.4	86.9	71.2	20.1	89.6	346
Maryland	1.6	92.3	89.2	27.6	97.0	178
Montserrado	7.7	78.8	71.8	24.1	83.0	1,900
Nimba	10.8	70.0	59.2	15.6	76.0	1,114
River Cess	5.0	85.0	65.7	22.0	89.1	102
River Gee	4.5	89.2	75.6	22.5	91.9	73
Sinoe	1.8	95.3	86.9	11.9	97.7	153
School attendance						
Attending	6.6	84.8	74.3	22.2	89.4	3,520
Not attending	8.0	74.6	67.3	17.7	79.3	2,557
Head of household's education						
No education	5.2	82.4	73.3	22.8	87.5	2,010
Elementary	11.4	79.6	68.9	17.6	83.7	1,098
Junior high	5.8	78.0	70.7	19.3	82.7	821
Senior high	7.0	80.2	71.6	20.0	85.5	1,427
Higher	9.0	80.1	69.2	19.9	83.3	654
Don't know	5.3	79.2	74.4	15.2	83.8	67
Wealth quintile						
Lowest	5.4	81.2	70.6	20.1	86.7	1,259
Second	6.5	80.0	71.3	18.4	85.6	1,272
Middle	8.6	81.3	70.8	21.4	85.2	1,275
Fourth	8.0	81.6	72.7	20.5	84.5	1,178
Highest	7.8	78.2	71.3	21.5	83.7	1,092
Total	7.2	80.5	71.3	20.4	85.2	6,077

¹ Severe physical punishment includes (1) hit or slapped on the face, head, or ears or (2) beat up, that is, hit over and over as hard as one could.

² Any violent discipline method includes (1) shook; (2) shouted, yelled, or screamed at; (3) spanked, hit, or slapped on the bottom with bare hand; (4) hit on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object; (5) called dumb, lazy, or another name like that; (6) hit or slapped on the hand, arm, or leg; (7) hit or slapped on the hand, arm or leg; or (8) beat up, that is, hit over and over as hard as one could.

Table 17.2 Attitudes toward physical punishment

Percentage of mothers/caretakers of children age 1-14 who believe that physical punishment is needed to bring up, raise, or educate a child properly, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of mothers/caretakers who believe that a child needs to be physically punished	Number of mothers/caretakers responding to child discipline module
Child's age in years		
1-2	51.3	799
3-4	63.6	948
5-9	65.3	2,195
10-14	68.4	2,135
Child's sex		
Male	64.1	3,070
Female	64.4	3,007
Residence		
Urban	65.4	3,419
Greater Monrovia	67.0	1,689
Other urban	63.9	1,730
Rural	62.8	2,658
Region		
North Western	60.9	529
South Central	66.6	2,588
South Eastern A	68.3	385
South Eastern B	66.2	371
North Central	61.3	2,204
County		
Bomi	57.6	205
Bong	56.7	572
Gbarpolu	55.6	103
Grand Bassa	73.5	342
Grand Cape Mount	66.5	221
Grand Gedeh	42.7	130
Grand Kru	69.7	120
Lofa	68.1	518
Margibi	64.4	346
Maryland	70.2	178
Montserrado	65.7	1,900
Nimba	60.5	1,114
River Cess	71.1	102
River Gee	50.8	73
Sinoe	88.3	153
School attendance		
Attending	67.8	3,520
Not attending	59.4	2,557
Head of household's education		
No education	65.6	2,010
Elementary	65.0	1,098
Junior high	61.9	821
Senior high	64.9	1,427
Higher	59.6	654
Don't know	74.3	67
Wealth quintile		
Lowest	64.1	1,259
Second	63.6	1,272
Middle	64.1	1,275
Fourth	65.8	1,178
Highest	63.7	1,092
Total	64.3	6,077

Table 17.3 Children's involvement in economic activities

Percentage of children age 5-17 by involvement in economic activities during the week before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of children age 5-11 involved in economic activity for at least 1 hour	Number of children age 5-11	Percentage of children age 12-14 involved in:		Number of children age 12-14	Percentage of children age 15-17 involved in:		Number of children age 15-17
			Economic activity less than 14 hours	Economic activity for 14 hours or more		Economic activity less than 43 hours	Economic activity for 43 hours or more	
Child's sex								
Male	30.7	1,527	36.5	11.3	633	63.3	1.2	468
Female	30.2	1,504	38.8	11.0	665	49.2	2.3	357
Residence								
Urban	25.3	1,788	32.0	9.3	876	50.5	1.5	526
Greater Monrovia	30.3	229	37.4	11.7	104	45.4	1.3	92
Other urban	24.5	1,559	31.3	8.9	772	51.5	1.5	435
Rural	37.8	1,243	49.4	15.1	422	69.2	2.1	299
Region								
North Western	41.3	274	46.1	20.6	109	78.9	1.9	67
South Central	18.1	1,250	26.6	7.4	631	40.2	1.6	372
South Eastern A	33.8	203	52.9	14.4	84	66.7	2.4	55
South Eastern B	32.7	192	41.4	18.2	78	63.3	2.4	53
North Central	40.6	1,112	49.1	12.6	396	71.8	1.5	279
County								
Bomi	35.7	104	44.7	19.2	49	(78.7)	(0.2)	25
Bong	41.1	272	28.5	34.8	117	64.1	2.9	95
Gbarpolu	54.2	52	39.5	32.1	22	(65.5)	(12.4)	9
Grand Bassa	27.0	180	53.0	5.3	51	57.2	4.2	48
Grand Cape Mount	40.5	118	51.8	15.7	38	82.7	0.3	33
Grand Gedeh	22.1	65	61.4	16.0	26	(60.3)	(4.5)	23
Grand Kru	44.9	63	47.8	19.5	25	(76.9)	(0.0)	18
Lofa	42.2	299	57.8	4.6	106	78.9	1.6	89
Margibi	30.7	174	38.9	13.3	77	(66.9)	(2.1)	37
Maryland	25.2	96	42.7	10.6	36	49.4	5.5	23
Montserrado	13.8	896	22.0	6.6	503	33.8	1.1	286
Nimba	39.5	541	57.7	2.4	173	72.7	0.0	95
River Cess	36.7	61	40.6	14.9	18	(71.2)	(2.2)	12
River Gee	31.3	33	29.2	32.3	17	70.6	0.0	12
Sinoe	41.3	78	52.8	13.1	40	(71.3)	(0.0)	20
School attendance								
Attending	29.5	2,385	36.6	10.4	1,135	54.9	1.4	661
Not attending	33.7	646	45.4	16.5	163	66.5	2.6	164
Head of household's education								
No education	35.3	1,039	41.7	9.6	390	63.0	1.0	308
Elementary	35.5	509	37.4	20.4	249	71.7	4.1	123
Junior high	29.9	390	38.0	9.6	162	64.4	0.1	78
Senior high	25.8	775	40.1	9.4	285	44.4	2.3	190
Higher	15.6	290	27.3	5.0	190	39.0	1.3	113
Don't know	(45.2)	29	*	*	22	*	*	12
Wealth quintile								
Lowest	43.2	650	49.4	19.2	205	80.8	2.1	139
Second	41.8	629	55.3	14.2	217	64.5	2.1	143
Middle	30.6	671	41.2	9.0	266	65.0	1.1	178
Fourth	17.6	563	28.4	8.4	293	48.9	2.3	169
Highest	14.2	519	23.8	8.2	318	35.3	1.1	196
Total	30.4	3,031	37.7	11.2	1,298	57.2	1.7	825

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.4 Children's involvement in household chores

Percentage of children age 5-14 by involvement in household chores during the week before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of children age 5-11 involved in:		Number of children age 5-11	Percentage of children age 12-14 years involved in:		Number of children age 12-14
	Household chores less than 21 hours	Household chores for 21 hours or more		Household chores less than 21 hours	Household chores for 21 hours or more	
Child's sex						
Male	65.0	10.5	1,527	78.7	17.1	633
Female	71.8	9.7	1,504	71.3	24.9	665
Residence						
Urban	65.9	9.2	1,788	74.3	20.8	876
Greater Monrovia	66.0	10.4	229	84.6	14.6	104
Other urban	65.9	9.0	1,559	72.9	21.6	772
Rural	72.0	11.3	1,243	76.2	21.7	422
Region						
North Western	65.0	18.8	274	64.3	31.8	109
South Central	64.8	8.5	1,250	75.6	19.9	631
South Eastern A	75.7	6.4	203	80.2	17.9	84
South Eastern B	72.8	16.1	192	74.2	22.9	78
North Central	71.2	9.4	1,112	75.8	20.3	396
County						
Bomi	67.6	13.4	104	61.2	30.4	49
Bong	61.3	22.7	272	51.0	44.7	117
Gbarpolu	66.0	27.4	52	59.1	40.6	22
Grand Bassa	74.9	3.1	180	88.7	10.0	51
Grand Cape Mount	62.3	19.9	118	71.2	28.5	38
Grand Gedeh	67.2	9.8	65	46.8	49.4	26
Grand Kru	71.7	20.3	63	62.7	34.6	25
Lofa	79.4	4.7	299	93.3	6.7	106
Margibi	61.2	21.3	174	84.9	14.0	77
Maryland	72.8	14.9	96	81.0	15.9	36
Montserrado	63.4	7.1	896	72.8	21.9	503
Nimba	71.7	5.2	541	81.9	12.0	173
River Cess	72.1	9.5	61	89.8	7.0	18
River Gee	74.9	11.7	33	76.4	20.7	17
Sinoe	85.7	1.1	78	97.7	2.3	40
School attendance						
Attending	71.1	9.5	2,385	75.5	20.8	1,135
Not attending	58.4	12.2	646	71.1	23.0	163
Head of household's education						
No education	69.4	12.0	1,039	74.1	21.5	390
Elementary	71.2	13.6	509	72.7	21.6	249
Junior high	63.5	9.9	390	81.1	14.2	162
Senior high	70.6	6.6	775	84.9	12.3	285
Higher	62.7	4.2	290	61.9	37.6	190
Don't know	(48.7)	(31.8)	29	(51.8)	(30.5)	22
Wealth quintile						
Lowest	71.1	13.3	650	69.0	28.9	205
Second	73.9	9.4	629	80.2	16.7	217
Middle	66.8	13.4	671	79.2	13.1	266
Fourth	66.1	8.3	563	74.8	20.0	293
Highest	63.0	4.5	519	71.6	26.7	318
Total	68.4	10.1	3,031	74.9	21.1	1,298

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 17.5 Hazardous work

Percentage of children age 5-17 engaged in economic activities or household chores above the age-specific thresholds, percentage working under hazardous conditions by type of work, and percentage engaged in economic activities or household chores above thresholds or working under hazardous conditions during the week before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Percentage of children engaged in:			Percentage of children working under hazardous conditions								Percentage of children engaged in economic activities or household chores above thresholds or working under hazardous conditions	Number of children age 5-17
	Economic activities above age-specific threshold	Household chores above age-specific threshold	Carrying heavy loads	Working with dangerous tools or operating heavy machinery	Exposed to dust, fumes, or gas	Exposed to extreme cold, heat, or humidity	Exposed to loud noise or vibration	Working at heights	Working with chemicals or explosives	Exposed to other unsafe or unhealthy things, processes, or conditions	Total hazardous work		
Age in years													
5-11	30.4	10.1	10.4	3.8	3.5	1.9	0.9	0.4	0.1	0.2	21.2	36.9	3,031
12-14	11.2	21.1	18.0	8.8	6.0	1.4	1.8	0.4	0.4	0.0	36.8	49.1	1,298
15-17	1.7	0.0	28.9	12.4	4.1	1.8	0.7	0.0	0.2	0.0	48.2	48.4	825
Child's sex													
Male	20.8	10.2	18.0	6.9	3.7	1.5	0.8	0.4	0.0	0.1	31.3	42.2	2,628
Female	21.2	12.3	12.5	6.0	4.8	2.1	1.4	0.3	0.4	0.2	27.6	41.4	2,526
Residence													
Urban	16.9	10.9	11.6	5.4	4.2	2.0	1.4	0.2	0.3	0.2	25.4	37.5	3,191
Greater Monrovia	19.5	9.2	13.1	7.7	4.4	2.8	0.0	0.8	0.0	0.0	28.9	38.5	425
Other urban	16.6	11.1	11.4	5.1	4.2	1.9	1.6	0.1	0.3	0.2	24.8	37.4	2,766
Rural	27.5	11.8	21.2	8.1	4.2	1.3	0.6	0.6	0.0	0.1	36.2	48.8	1,963
Region													
North Western	30.4	19.2	14.3	9.7	1.1	0.8	1.6	0.4	0.0	0.3	28.2	48.5	450
South Central	12.3	10.3	6.6	3.8	5.1	2.3	1.2	0.4	0.1	0.2	19.7	31.3	2,253
South Eastern A	24.0	8.2	13.7	10.3	6.0	1.3	0.2	0.6	0.0	0.0	32.1	45.7	342
South Eastern B	24.3	15.2	21.1	7.2	3.3	1.1	0.9	1.0	0.0	0.1	34.8	48.4	323
North Central	28.3	10.3	25.6	8.1	3.7	1.5	1.1	0.1	0.4	0.0	40.6	51.5	1,787
County													
Bomi	26.2	16.1	9.2	11.0	1.7	0.3	2.2	0.0	0.0	0.0	24.5	38.6	178
Bong	32.1	23.6	27.9	7.3	5.6	2.3	1.0	0.0	0.5	0.0	44.5	58.1	484
Gbarpolu	43.8	28.0	22.0	8.0	1.7	1.8	0.4	0.0	0.0	0.4	34.4	60.5	82
Grand Bassa	19.0	3.8	14.1	5.7	5.5	3.6	2.0	3.0	0.0	0.0	33.8	39.3	279
Grand Cape Mount	28.6	18.2	15.7	9.1	0.3	0.8	1.6	0.9	0.0	0.5	28.9	52.5	189
Grand Gedeh	17.2	16.9	9.9	8.7	2.3	1.1	0.0	1.3	0.0	0.1	23.3	41.6	113
Grand Kru	31.5	20.3	22.4	11.1	3.5	2.7	0.0	0.3	0.0	0.0	40.0	58.8	106
Lofa	26.8	4.3	35.9	8.9	3.3	0.7	0.1	0.1	0.0	0.0	49.0	54.8	494
Margibi	22.3	16.6	11.2	5.1	7.0	1.5	0.5	0.0	0.1	0.0	25.3	43.2	288
Maryland	18.8	12.9	19.5	4.2	0.3	0.3	1.9	1.9	0.0	0.3	28.4	40.5	156
Montserrado	9.5	10.3	4.6	3.3	4.8	2.2	1.1	0.0	0.1	0.3	16.4	28.0	1,685
Nimba	26.9	6.1	18.0	8.3	2.8	1.5	1.8	0.2	0.6	0.0	33.2	45.4	809
River Cess	27.8	7.7	18.3	4.1	1.3	2.2	0.8	0.0	0.0	0.0	26.8	42.8	90
River Gee	25.7	11.9	23.0	8.3	10.2	0.6	0.0	0.0	0.0	0.0	42.1	50.7	62
Sinoe	27.1	1.3	13.9	15.6	12.2	0.9	0.0	0.3	0.0	0.0	43.0	50.9	138
School attendance													
Attending	21.0	11.7	14.3	7.0	4.6	1.9	1.1	0.3	0.2	0.2	29.7	42.8	3,953
Not attending	20.7	9.7	18.4	4.6	2.9	1.4	1.2	0.4	0.0	0.0	28.9	38.5	1,201
Head of household's education													
No education	23.4	12.0	21.6	6.6	3.5	1.4	0.3	0.3	0.1	0.0	33.7	46.5	1,737
Elementary	26.8	14.0	18.9	8.1	4.4	2.3	1.9	0.3	0.6	0.0	36.3	49.8	881
Junior high	21.0	9.8	14.5	4.5	4.1	3.6	1.5	0.2	0.0	0.2	28.5	39.6	630
Senior high	18.5	6.9	8.6	5.4	5.1	1.4	1.8	0.2	0.2	0.5	23.2	34.7	1,250
Higher	9.5	14.1	6.0	7.5	4.3	0.6	0.4	0.9	0.0	0.0	19.7	31.9	594
Don't know	29.0	25.3	18.1	11.0	5.3	6.4	2.9	0.0	0.0	0.0	43.8	57.2	63
Wealth quintile													
Lowest	32.5	14.7	27.0	9.1	4.0	2.1	1.3	0.3	0.0	0.0	43.7	56.9	993
Second	30.0	9.6	20.9	9.8	3.5	1.0	0.3	0.5	0.7	0.0	36.7	49.8	989
Middle	20.7	11.2	17.2	4.7	4.7	1.6	0.6	0.7	0.0	0.1	29.4	43.9	1,115
Fourth	12.4	10.3	7.5	5.2	4.6	3.2	1.8	0.2	0.2	0.0	22.7	31.7	1,025
Highest	9.9	10.5	4.4	4.0	4.4	0.9	1.4	0.0	0.0	0.6	15.7	27.5	1,032
Total	21.0	11.2	15.3	6.5	4.2	1.8	1.1	0.3	0.2	0.1	29.5	41.8	5,154

Table 17.6 Child labor

Percentage of children age 5-17 by involvement in economic activities or household chores during the week before the survey and percentage engaged in child labor during the week before the survey, according to background characteristics, Liberia DHS 2019-20

Background characteristic	Children involved in economic activities for a total number of hours during last week:		Children involved in household chores for a total number of hours during last week:		Total child labor ¹	Number of children age 5-17
	Below the age-specific threshold	At or above the age-specific threshold	Below the age-specific threshold	At or above the age-specific threshold		
Age in years						
5-11	3.2	30.4	68.4	10.1	35.5	3,031
12-14	37.7	11.2	74.9	21.1	26.0	1,298
15-17	57.2	1.7	na	na	1.7	825
Child's sex						
Male	21.8	20.8	56.7	10.2	26.3	2,628
Female	19.2	21.2	61.5	12.3	29.2	2,526
Residence						
Urban	19.0	16.9	57.3	10.9	24.5	3,191
Greater Monrovia	20.3	19.5	56.3	9.2	24.0	425
Other urban	18.8	16.6	57.5	11.1	24.6	2,766
Rural	23.0	27.5	61.9	11.8	32.9	1,963
Region						
North Western	23.5	30.4	55.2	19.2	38.0	450
South Central	16.6	12.3	57.1	10.3	20.4	2,253
South Eastern A	25.3	24.0	64.7	8.2	28.7	342
South Eastern B	20.6	24.3	61.3	15.2	32.6	323
North Central	23.8	28.3	61.1	10.3	33.3	1,787
County						
Bomi	24.0	26.2	56.3	16.1	30.7	178
Bong	22.3	32.1	46.8	23.6	42.6	484
Gbarpolu	18.5	43.8	57.1	28.0	52.2	82
Grand Bassa	25.8	19.0	64.4	3.8	22.0	279
Grand Cape Mount	25.3	28.6	53.3	18.2	38.8	189
Grand Gedeh	29.6	17.2	49.1	16.9	28.7	113
Grand Kru	24.5	31.5	57.7	20.3	42.0	106
Lofa	28.5	26.8	68.1	4.3	29.6	494
Margibi	20.7	22.3	59.7	16.6	30.6	288
Maryland	17.7	18.8	63.8	12.9	26.8	156
Montserrado	14.3	9.5	55.5	10.3	18.4	1,685
Nimba	21.9	26.9	65.5	6.1	30.0	809
River Cess	18.4	27.8	65.9	7.7	29.8	90
River Gee	21.5	25.7	61.2	11.9	31.0	62
Sinoe	26.3	27.1	76.7	1.3	27.9	138
School attendance						
Attending	21.6	21.0	64.6	11.7	28.5	3,953
Not attending	16.9	20.7	41.1	9.7	25.1	1,201
Head of household's education						
No education	22.0	23.4	58.1	12.0	30.3	1,737
Elementary	23.3	26.8	61.7	14.0	34.5	881
Junior high	18.7	21.0	60.2	9.8	26.3	630
Senior high	18.0	18.5	63.1	6.9	21.9	1,250
Higher	18.7	9.5	50.5	14.1	22.4	594
Don't know	26.2	29.0	40.5	25.3	42.4	63
Wealth quintile						
Lowest	24.8	32.5	60.7	14.7	39.2	993
Second	22.5	30.0	64.6	9.6	34.1	989
Middle	21.3	20.7	59.1	11.2	27.7	1,115
Fourth	19.1	12.4	57.7	10.3	19.1	1,025
Highest	15.1	9.9	53.7	10.5	19.1	1,032
Total	20.5	21.0	59.1	11.2	27.7	5,154

na = Not applicable

¹ According to the UNICEF definition, this category includes children who (1) participate in economic activities at or above the threshold defined for their age group or (2) participate in household chores at or above the threshold defined for their age group.

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A.1 INTRODUCTION

This appendix describes the objectives of the survey, the overall sample size, survey domains, and any subsamples used.

The 2019-20 Liberia Demographic and Health Survey (2019-20 LDHS) is a nationwide survey with a nationally representative sample of residential households. All women age 15-49 who are usual members of the selected households or who spent the night before the survey in the selected households were eligible for individual interviews. In addition, in every second household, all men age 15-59 who are usual residents of the household or who slept in the household on the night before the interview were eligible for individual interviews. Biomarker collection also occurred only in this subsample. In these households, women age 15-49 and men age 15-59, were eligible for HIV and hemoglobin testing for anemia. Children age 6-59 months were also tested for anemia in each household. In addition, height and weight measurements were collected from women age 15-49 and children age 0-59 months.

Women age 15-49 and men age 15-59, were eligible for hepatitis B and C and EVD antibody testing by a CDC follow-up survey team. The follow-up team collected venous blood samples from eligible respondents who consented to hepatitis B and C and/or EVD antibody testing.

In households selected for the Man's Questionnaire, one woman age 15-49 was selected from each household to complete the domestic violence module.

The sample for the 2019-20 LDHS was designed to produce reliable estimates for key indicators at the national, urban (Greater Monrovia and all other urban areas), and rural levels, including each of the five regions. To create the five geographical regions, the 15 counties in Liberia were grouped together as follows:

- North Western: Bomi, Grand Cape Mount, Gbarpolu
- South Central: Montserrado, Margibi, Grand Bassa
- North Central: Bong, Nimba, Lofa
- South Eastern A: River Cess, Sinoe, Grand Gedeh
- South Eastern B: River Gee, Grand Kru, Maryland

The survey will also produce separate representative results for most key indicators of the 15 counties.

A.2 SAMPLE FRAME

The 2019-20 LDHS sample was selected using a stratified, two-stage cluster design. The frame used for the first stage of selection of the 2019-20 LDHS sample was based on an updated version of the 2008 Liberia National Population and Housing Census (2008 LPHC), conducted by the Liberia Institute of Statistics and Geo-Information Services (LISGIS), in which classification of localities as urban or rural was updated through the application of standardized definitions. Administratively, Liberia is divided into 15 counties; each county is subdivided into districts and each district into clans. For the 2008 LPHC, each of the clans was subdivided into smaller enumeration areas (EAs), typically including about 100 households. The small size of the EAs and the availability of sketch maps and other materials to delimit their geographic boundaries made the census EAs ideal for use as the first-stage sampling units of the LDHS sample.

Table A.1 shows the distribution of households across counties based on the updated 2008 census frame, by type of residence (urban/rural). The table indicates that 34.7% of the households in Liberia are in Montserrado. About 56% of households are in urban areas, with the percentage of the urban household population varying from 3.5% in River Cess to 93.6% in Montserrado. **Table A.2** presents the distribution of enumeration areas and their average size in number of households in the sample frame by county and residence. There are in total 7,012 EAs; among them, 3,655 are in urban areas and 3,357 are in rural areas. The average EA size is 96 households; urban EAs are larger in size, with an average of 103 households per EA, whereas rural EAs have an average of 88 households.

Table A.1 Households

Distribution of residential households in the sampling frame, by county and by type of residence, Liberia 2019-20

Counties	Residential households			Percentage	
	Urban	Rural	Total	Counties	Urban
Bomi	3,534	16,974	20,508	3.06	17.23
Gbarpolu	2,250	12,283	14,533	2.17	15.48
Grand Cape Mount	1,533	22,532	24,065	3.59	6.37
Grand Bassa	14,810	32,630	47,440	7.07	31.22
Margibi	20,974	24,121	45,095	6.72	46.51
Montserrado	217,889	15,013	232,902	34.72	93.55
Bong	26,103	43,707	69,810	10.41	37.39
Lofa	18,033	31,609	49,642	7.40	36.33
Nimba	47,893	32,841	80,734	12.04	59.32
Grand Gedeh	8,089	10,054	18,143	2.70	44.58
River Cess	487	13,494	13,981	2.08	3.48
Sinoe	2,594	13,235	15,829	2.36	16.39
Grand Kru	507	8,462	8,969	1.34	5.65
Maryland	9,381	9,873	19,254	2.87	48.72
River Gee	2,857	6,965	9,822	1.46	29.09
Liberia	376,934	293,793	670,727	100.00	56.20

Source: The 2008 LPHC conducted by LISGIS.

Table A.2 Enumeration areas and households

Number of enumeration areas and average number of households per EA in the sampling frame, by county and type of residence, Liberia 2019-20

Counties	Number of EAs			Average EA size		
	Urban	Rural	Total	Urban	Rural	Total
Bomi	46	227	273	77	75	75
Gbarpolu	21	127	148	107	97	98
Grand Cape Mount	17	261	278	90	86	87
Grand Bassa	152	316	468	97	103	101
Margibi	168	263	431	125	92	105
Montserrado	2,101	149	2,250	104	101	104
Bong	326	601	927	80	73	75
Lofa	170	331	501	106	95	99
Nimba	434	347	781	110	95	103
Grand Gedeh	83	93	176	97	108	103
River Cess	5	147	152	97	92	92
Sinoe	23	195	218	113	68	73
Grand Kru	7	123	130	72	69	69
Maryland	73	98	171	129	101	113
River Gee	29	79	108	99	88	91
Liberia	3,655	3,357	7,012	103	88	96

Source: The 2008 LPHC conducted by LISGIS.

A.3 SAMPLE DESIGN AND IMPLEMENTATION

The sample for the 2019-20 LDHS is a stratified sample selected in two stages. In the first stage, 325 EAs were selected with a stratified probability-proportional-to-size selection from the sampling frame. EA size is the number of households residing in the EA recorded in the updated 2008 LPHC frame. Stratification is achieved by separating every county into urban and rural areas. The urban area in each county mainly consisted of the county's capital. Therefore, the 15 counties were stratified into 30 sampling strata: 15 rural strata and 15 urban strata. Samples were selected independently in each stratum, with a predetermined number of EAs to be selected. Implicit stratification was achieved at each of the lower administrative unit levels by sorting the sampling frame according to districts and clans within each sampling stratum and by using a probability-proportional-to-size selection procedure.

After the selection of EAs and before the main survey, a household listing operation was carried out in all of the selected EAs. The resulting lists of households served as the sampling frame for the selection of households in the second stage. In the second stage of selection, a fixed number of 30 households were selected in every sample cluster by an equal probability systematic sampling. The survey interviewers were asked to interview only the pre-selected households. To prevent bias, replacements and changes of the pre-selected households were not allowed.

Table A.3 shows the sample allocation of clusters and households by counties and by type of residence. The expected number of completed interviews with women and men based on the sample design is shown by county and residence in **Table A.4**. The sample allocation is a power allocation with a small adjustment that took into account county populations and their urban-rural distributions. A proportional allocation was not applied because of the great disparity among the county sizes. Among the 325 clusters selected, 120 are in urban areas and 205 are in rural areas. The total number of households planned for selection in the 2019-20 LDHS was 9,750, 3,600 in urban areas and 6,150 in rural areas. The sample was expected to result in about 9,309 completed interviews with women age 15-49 (3,749 in urban areas and 5,560 in rural areas) and about 5,329 completed interviews with men age 15-59 (2,057 in urban areas and 3,272 in rural areas).

Table A.3 Sample allocation of EAs and households

Sample allocation of EAs and households by county and region, according to residence, Liberia 2019-20

Countries/ regions	Allocation of EAs			Allocation of households		
	Urban	Rural	Total	Urban	Rural	Total
County						
Bomi	5	12	17	150	360	510
Gbarpolu	4	14	18	120	420	540
Grand Cape Mount	4	16	20	120	480	600
Grand Bassa	7	15	22	210	450	660
Margibi	9	12	21	270	360	630
Montserrado	36	8	44	1,080	240	1,320
Bong	9	16	25	270	480	750
Lofa	8	15	23	240	450	690
Nimba	8	18	26	240	540	780
Grand Gedeh	7	12	19	210	360	570
River Cess	2	15	17	60	450	510
Sinoe	5	14	19	150	420	570
Grand Kru	3	14	17	90	420	510
Maryland	8	12	20	240	360	600
River Gee	5	12	17	150	360	510
Region						
North Western	13	42	55	390	1,260	1,650
South Central	52	35	87	1,560	1,050	2,610
North Central	25	49	74	750	1,470	2,220
South Eastern A	14	41	55	420	1,230	1,650
South Eastern B	16	38	54	480	1,140	1,620
Liberia	120	205	325	3,600	6,150	9,750

Table A.4 Sample allocation of completed interviews with women and men

Sample allocation of expected number of completed interviews with women and men, by county and region, according to residence, Liberia 2019-20

Countries/ regions	Women age 15-49			Men age 15-59		
	Urban	Rural	Total	Urban	Rural	Total
County						
Bomi	156	325	481	86	192	278
Gbarpolu	125	380	505	69	223	292
Grand Cape Mount	125	434	559	69	256	325
Grand Bassa	219	407	626	120	239	359
Margibi	281	325	606	154	192	346
Montserrado	1,124	217	1,341	617	127	744
Bong	281	434	715	154	256	410
Lofa	250	407	657	137	239	376
Nimba	250	489	739	137	287	424
Grand Gedeh	219	325	544	120	192	312
River Cess	63	407	470	34	239	273
Sinoe	156	380	536	86	223	309
Grand Kru	94	380	474	51	223	274
Maryland	250	325	575	137	192	329
River Gee	156	325	481	86	192	278
Regions						
North Western	406	1139	1545	224	671	895
South Central	1624	949	2573	891	558	1,449
North Central	781	1330	2111	428	782	1,210
South Eastern A	438	1112	1550	240	654	894
South Eastern B	500	1030	1530	274	607	881
Liberia	3,749	5,560	9,309	2,057	3,272	5,329

The allocations presented in **Table A.4** are based on results obtained from the 2013 LDHS, in which the overall household completion rate was 96%. There were 1.10 women age 15-49 per household in urban areas and 0.96 in rural areas; the overall response rate for women was about 98%. There were about 1.25 men age 15-59 per household in urban areas and 1.15 in rural areas; the overall response rate for men was about 95%.

Table A.5 and **Table A.6** present response rates for women and men, respectively, by urban and rural areas and by region. The male subsample constituted one in two of the households selected for the women's sample.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women age 15-49 by results of the household and individual interviews, and household, eligible women, and overall women response rates, according to residence and region (unweighted), Liberia DHS 2019-20

Result	Residence		Region					Total
	Urban	Rural	North Western	South Central	South Eastern A	South Eastern B	North Central	
Selected households								
Completed (C)	92.1	93.6	91.9	92.4	93.4	92.5	94.7	93.1
Household present but no competent respondent at home (HP)	1.2	0.5	1.2	1.1	0.2	0.4	0.8	0.8
Postponed (P)	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.1
Refused (R)	0.6	0.3	0.1	1.2	0.1	0.0	0.3	0.4
Dwelling not found (DNF)	0.2	0.1	0.0	0.3	0.2	0.2	0.1	0.2
Household absent (HA)	2.6	2.8	4.0	2.0	2.7	3.1	2.3	2.7
Dwelling vacant/address not a dwelling (DV)	2.2	1.4	1.4	2.1	1.8	1.9	1.1	1.7
Dwelling destroyed (DD)	0.5	1.0	0.9	0.7	1.0	1.5	0.2	0.8
Other (O)	0.4	0.3	0.5	0.2	0.5	0.2	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	3,605	6,140	1,650	2,612	1,648	1,612	2,223	9,745
Household response rate (HRR) ¹	97.6	99.0	98.6	97.2	99.5	99.1	98.7	98.5
Eligible women								
Completed (EWC)	96.4	96.4	97.7	95.7	97.9	96.2	95.8	96.4
Not at home (EWNH)	2.1	1.8	1.4	2.0	0.4	3.2	2.1	1.9
Postponed (EWP)	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0
Refused (EWR)	0.8	0.7	0.4	1.2	0.7	0.1	1.0	0.8
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Incapacitated (EWI)	0.3	0.6	0.3	0.4	0.6	0.3	0.6	0.4
Other (EWO)	0.4	0.4	0.2	0.6	0.4	0.2	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,463	4,901	1,185	2,405	1,221	1,544	2,009	8,364
Eligible women response rate (EWRR) ²	96.4	96.4	97.7	95.7	97.9	96.2	95.8	96.4
Overall women response rate (OWRR) ³	94.1	95.5	96.4	93.0	97.4	95.4	94.6	95.0

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$100 * C$$

$$C + HP + P + R + DNF$$

² The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).

³ The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men age 15-59 by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to residence and region (unweighted), Liberia DHS 2019-20

Result	Residence		Region					Total
	Urban	Rural	North Western	South Central	South Eastern A	South Eastern B	North Central	
Selected households								
Completed (C)	91.5	93.4	91.8	91.8	93.1	91.5	95.0	92.7
Household present but no competent respondent at home (HP)	1.0	0.5	0.7	1.1	0.2	0.4	0.8	0.7
Postponed (P)	0.2	0.0	0.0	0.1	0.0	0.2	0.1	0.1
Refused (R)	0.8	0.4	0.1	1.7	0.0	0.0	0.5	0.6
Dwelling not found (DNF)	0.3	0.1	0.0	0.4	0.1	0.1	0.2	0.2
Household absent (HA)	2.6	2.7	4.7	1.8	2.7	3.0	1.9	2.6
Dwelling vacant/address not a dwelling (DV)	2.6	1.4	1.3	2.4	1.9	2.6	1.0	1.8
Dwelling destroyed (DD)	0.8	1.1	1.0	0.8	1.5	2.0	0.2	1.0
Other (O)	0.3	0.3	0.4	0.1	0.5	0.2	0.5	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,803	3,072	825	1,306	824	809	1,111	4,875
Household response rate (HRR) ¹	97.5	98.9	99.1	96.6	99.6	99.2	98.4	98.4
Eligible men								
Completed (EMC)	92.9	94.4	95.4	91.7	95.6	94.2	93.9	93.9
Not at home (EMNH)	5.1	3.6	3.5	5.7	2.5	4.5	3.5	4.1
Postponed (EMP)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Refused (EMR)	1.5	1.0	0.6	1.9	0.6	0.2	1.9	1.2
Incapacitated (EMI)	0.2	0.5	0.0	0.3	0.4	0.7	0.4	0.4
Other (EMO)	0.3	0.5	0.5	0.2	0.9	0.3	0.3	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,683	2,844	626	1,238	772	886	1,005	4,527
Eligible men response rate (EMRR) ²	92.9	94.4	95.4	91.7	95.6	94.2	93.9	93.9
Overall men response rate (OMRR) ³	90.6	93.4	94.5	88.6	95.2	93.5	92.4	92.3

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\text{HRR} = \frac{100 * C}{C + HP + P + R + DNF}$$

² The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC).

³ The overall men response rate (OMRR) is calculated as:

$$\text{OMRR} = \text{HRR} * \text{EMRR}/100$$

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

Due to the non-proportional allocation of the sample to different counties and their urban and rural areas and the possible differences in response rates, sampling weights will be required for any analysis using the 2019-20 LDHS data to ensure the actual representativeness of the survey results at the national level as well as the domain level. Since the 2019-20 LDHS sample is a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations were used:

P_{1hi} : first-stage sampling probability of the i^{th} cluster in stratum h

P_{2hi} : second-stage sampling probability within the i^{th} cluster (households)

P_{hi} : overall sampling probability of any households of the i^{th} cluster in stratum h

Let a_h be the number of EAs selected in stratum h , M_{hi} the number of households according to the sampling frame in the i^{th} EA, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the i^{th} EA in the 2019-20 LDHS sample is calculated as follows:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h , and let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the two-stage selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

The design weights were adjusted for household nonresponse and individual nonresponse to obtain the sampling weights for households and for women and men, respectively. Nonresponse is adjusted at the sampling stratum level. For the household sampling weight, the household design weight is multiplied by the inverse of the household response rate by stratum. For women's individual sampling weight, the household sampling weight is multiplied by the inverse of women's individual response rate by stratum. After adjusting for nonresponse, the sampling weights are normalized to obtain the final standard weights that appear in the data files. The normalization process is done to obtain a total number of unweighted cases equal to the total number of weighted cases at the national level for the total number of households, women, and men. Normalization is done by multiplying the sampling weight by the estimated sampling fraction obtained from the survey for the household weight and the individual woman's and man's weights. The normalized weights are relative weights that are valid for estimating means, proportions, ratios, and rates but are not valid for estimating population totals or for pooled data. A special weight for domestic violence was calculated that accounts for the selection of one woman per household and for module nonresponse.

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2019-20 Liberia Demographic and Health Survey (LDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2019-20 LDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2019-20 LDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programs developed by ICF. These programs use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[\frac{m_h}{m_h - 1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H ;
 m_h is the total number of clusters selected in the h^{th} stratum;
 y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum;
 x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum; and
 f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2019-20 LDHS, there were 325 non-empty clusters. Hence, 325 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 325 clusters,
 $r_{(i)}$ is the estimate computed from the reduced sample of 324 clusters (i^{th} cluster excluded), and
 k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2019-20 LDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, for each of the five geographical regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in **Table B.1**. **Tables B.2** through **B.10** present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect ($DEFT$), the relative standard error (SE/R), and the 95% confidence limits ($R \pm 2SE$) for each selected variable. The $DEFT$ is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *ideal number of children*) can be interpreted as follows: the overall average from the national sample is 4.606, and its standard error is 0.056. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, $4.606 \pm 2 \times 0.056$. There is a high probability (95%) that the true ideal number of children is between 4.495 and 4.717.

For the total sample, the value of the $DEFT$, averaged over all indicators in the appendix, is about 1.8. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.8 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Liberia DHS 2019-20

Variable	Estimate	Base population
HOUSEHOLDS AND POPULATION		
Ownership of at least one ITN	Proportion	Households
Access to an ITN	Proportion	De facto household population
Use of an ITN	Proportion	De facto household population
WOMEN		
Urban residence	Proportion	Women 15-49
Literacy	Proportion	Women 15-49
No education	Proportion	Women 15-49
Secondary education or higher	Proportion	Women 15-49
Never married/never in union	Proportion	Women 15-49
Currently married/in union	Proportion	Women 15-49
Married before age 18	Proportion	Women 20-49
Had sexual intercourse before age 18	Proportion	Women 20-49
Currently pregnant	Proportion	Women 15-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using male condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Used public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	Women 15-49
Mothers protected against tetanus for last birth	Proportion	Women with a live birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Received 3+ doses of SP/Fansidar	Proportion	Last birth of women 15-49 with live births in the last 2 years
Treated with ORS	Proportion	Children under 5 with diarrhea in past 2 weeks
Sought treatment	Proportion	Children under 5 with diarrhea in past 2 weeks
Ever had vaccination card	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT-HepB-Hib vaccination (3 doses)	Proportion	Children 12-23 months
Received birth dose polio 0 vaccination	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received pneumococcal vaccination (3 doses)	Proportion	Children 12-23 months
Received rotavirus vaccination (2 doses)	Proportion	Children 12-23 months
Received measles-containing vaccination 1	Proportion	Children 12-23 months
Received yellow fever vaccination	Proportion	Children 12-23 months
Received all basic vaccinations	Proportion	Children 12-23 months
Received all age appropriate vaccinations (12-23 months)	Proportion	Children 12-23 months
Received all age appropriate vaccinations (24-35 months)	Proportion	Children 24-35 months
Height-for-age (-2SD)	Proportion	Children under 5 who were measured
Weight-for-height (-2SD)	Proportion	Children under 5 who were measured
Weight-for-age (-2SD)	Proportion	Children under 5 who were measured
Body mass index (BMI) <18.5	Proportion	Women 15-49 who were measured
Body mass index (BMI) ≥25	Proportion	Women 15-49 who were measured
Prevalence of anemia (children 6-59 months)	Proportion	Children 6-59 months who were tested
Prevalence of anemia (women 15-49)	Proportion	Women 15-49 who were tested
Ever experienced any physical violence since age 15	Proportion	Women 15-49
Ever experienced any sexual violence	Proportion	Women 15-49
Ever experienced any physical/sexual violence by husband/partner	Proportion	Women 15-49
Ever experienced any emotional/physical/sexual violence by any husband/partner	Proportion	Women 15-49
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	Proportion	Women 15-49
Had 2+ sexual partners in past 12 months	Proportion	Women 15-49
Condom use at last sex	Proportion	Women 15-49 with nonmarital, noncohabiting-partner-in past 12 months
Abstinence among young people (never had sex)	Proportion	Never-married women 15-24

Continued...

Table B.1—Continued

Variable	Estimate	Base population
Had an HIV test and received results in past 12 months	Proportion	Women 15-49
Discriminatory attitudes towards people with HIV	Proportion	Women who have heard of HIV/AIDS
Prevalence of female circumcision	Proportion	Women 15-49
Total fertility rate (3 years)	Rate	Woman-years of exposure to childbearing
Neonatal mortality rate ¹	Rate	Children exposed to the risk of mortality
Postneonatal mortality rate ¹	Rate	Children exposed to the risk of mortality
Infant mortality rate ¹	Rate	Children exposed to the risk of mortality
Child mortality rate ¹	Rate	Children exposed to the risk of mortality
Under-5 mortality rate ¹	Rate	Children exposed to the risk of mortality
MEN		
Urban residence	Proportion	Men 15-49
Literacy	Proportion	Men 15-49
No education	Proportion	Men 15-49
Secondary education or higher	Proportion	Men 15-49
Never married/never in union	Proportion	Men 15-49
Currently married/in union	Proportion	Men 15-49
Had sexual intercourse before age 18	Proportion	Men 20-49
Know any contraceptive method	Proportion	Currently married men 15-49
Know a modern method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	Men 15-49
Had 2+ sexual partners in past 12 months	Proportion	Men 15-49
Condom use at last sex	Proportion	Men 15-49 with nonmarital, noncohabiting partners in past 12 months
Abstinence among young people (never had sex)	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	Men 15-49
Had an HIV test and received results in past 12 months	Proportion	Men 15-49
Discriminatory attitudes towards people with HIV	Proportion	Men who have heard of HIV/AIDS

¹ Mortality rates are calculated for the 5 years before the survey for the national sample, urban, and rural samples and for the 10 years before the survey for regional samples.

Table B.2 Sampling errors: Total sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.547	0.012	9,068	9,068	2.336	0.022	0.523	0.572
Access to an ITN	0.397	0.011	40,098	40,202	2.364	0.027	0.375	0.419
Use of an ITN	0.390	0.011	40,098	40,202	2.253	0.029	0.368	0.412
WOMEN								
Urban residence	0.623	0.018	8,065	8,065	3.257	0.028	0.588	0.658
Literacy	0.520	0.015	8,065	8,065	2.609	0.028	0.491	0.549
No education	0.307	0.012	8,065	8,065	2.403	0.040	0.282	0.331
Secondary education or higher	0.456	0.016	8,065	8,065	2.922	0.036	0.424	0.489
Never married (never in union)	0.388	0.013	8,065	8,065	2.423	0.034	0.362	0.414
Currently married (in union)	0.523	0.013	8,065	8,065	2.389	0.025	0.496	0.549
Married before age 18	0.295	0.011	6,349	6,408	1.923	0.037	0.273	0.317
Had sexual intercourse before age 18	0.799	0.009	6,349	6,408	1.809	0.011	0.781	0.817
Currently pregnant	0.070	0.005	8,065	8,065	1.663	0.068	0.060	0.079
Know any contraceptive method	0.987	0.003	4,654	4,216	1.848	0.003	0.981	0.993
Know a modern method	0.987	0.003	4,654	4,216	1.848	0.003	0.981	0.993
Currently using any method	0.249	0.011	4,654	4,216	1.745	0.044	0.227	0.272
Currently using a modern method	0.239	0.011	4,654	4,216	1.731	0.045	0.217	0.260
Currently using pill	0.041	0.004	4,654	4,216	1.497	0.107	0.032	0.049
Currently using male condoms	0.008	0.002	4,654	4,216	1.590	0.255	0.004	0.013
Currently using injectables	0.137	0.008	4,654	4,216	1.530	0.056	0.122	0.153
Currently using implants	0.046	0.005	4,654	4,216	1.548	0.103	0.037	0.056
Currently using female sterilization	0.002	0.001	4,654	4,216	1.091	0.347	0.001	0.004
Currently using withdrawal	0.006	0.002	4,654	4,216	1.902	0.351	0.002	0.011
Currently using rhythm	0.005	0.001	4,654	4,216	1.485	0.322	0.002	0.007
Using public sector source	0.566	0.021	2,387	2,034	2.045	0.037	0.524	0.607
Want no more children	0.342	0.012	4,654	4,216	1.730	0.035	0.317	0.366
Want to delay next birth at least 2 years	0.223	0.010	4,654	4,216	1.675	0.046	0.203	0.244
Ideal number of children	4.606	0.056	7,451	7,608	2.240	0.012	4.495	4.717
Mothers protected against tetanus for last birth	0.828	0.011	4,267	4,026	1.803	0.013	0.807	0.849
Births with skilled attendant at delivery	0.844	0.011	5,704	5,263	1.981	0.013	0.821	0.866
Received 3+ doses of SP/Fansidar	0.403	0.017	2,284	2,096	1.593	0.042	0.370	0.437
Treated with ORS	0.541	0.024	942	763	1.313	0.044	0.494	0.589
Sought medical treatment for diarrhea	0.663	0.024	942	763	1.378	0.036	0.616	0.710
Ever had vaccination card	0.922	0.014	1,063	937	1.588	0.015	0.895	0.950
Received BCG vaccination	0.906	0.014	1,063	937	1.525	0.016	0.877	0.935
Received DPT-HepB-Hib vaccination (3 doses)	0.692	0.024	1,063	937	1.575	0.034	0.645	0.740
Received birth dose polio 0 vaccination	0.861	0.017	1,063	937	1.476	0.019	0.828	0.894
Received polio vaccination (3 doses)	0.632	0.023	1,063	937	1.436	0.036	0.587	0.677
Received pneumococcal vaccination (3 doses)	0.685	0.023	1,063	937	1.534	0.034	0.639	0.732
Received rotavirus vaccination (2 doses)	0.769	0.022	1,063	937	1.603	0.028	0.726	0.813
Received measles-containing vaccination 1	0.738	0.020	1,063	937	1.420	0.027	0.697	0.778
Received yellow fever vaccination	0.703	0.022	1,063	937	1.469	0.031	0.659	0.746
Received all basic vaccinations (12-23 months)	0.508	0.025	1,063	937	1.516	0.049	0.459	0.558
Received all age-appropriate vaccinations (12-23 months)	0.394	0.023	1,063	937	1.427	0.058	0.349	0.439
Received all age-appropriate vaccinations (24-35 months)	0.314	0.023	973	873	1.441	0.073	0.269	0.360
Height-for-age (-2SD)	0.298	0.013	2,951	2,814	1.498	0.045	0.272	0.325
Weight-for-height (-2SD)	0.034	0.004	2,963	2,825	1.195	0.124	0.026	0.042
Weight-for-age (-2SD)	0.109	0.008	2,971	2,831	1.260	0.070	0.094	0.124
Body mass index (BMI) <18.5	0.052	0.005	3,703	3,722	1.321	0.092	0.043	0.062
Body mass index (BMI) ≥25	0.366	0.012	3,703	3,722	1.549	0.033	0.342	0.391
Prevalence of anemia (children 6-59 months)	0.708	0.014	2,656	2,524	1.487	0.020	0.679	0.736
Prevalence of anemia (women 15-49)	0.445	0.012	4,065	4,027	1.509	0.027	0.421	0.469
Ever experienced any physical violence since age 15	0.600	0.017	3,120	3,120	1.930	0.028	0.566	0.634
Ever experienced any sexual violence	0.091	0.009	3,120	3,120	1.783	0.101	0.073	0.109
Ever experienced any physical/sexual violence by husband/partner	0.456	0.018	2,331	1,943	1.733	0.039	0.420	0.491
Ever experienced any emotional/physical/sexual violence by husband/partner	0.582	0.017	2,331	1,943	1.664	0.029	0.548	0.616
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.456	0.017	2,331	1,943	1.621	0.037	0.423	0.490
Had 2+ sexual partners in past 12 months	0.068	0.006	8,065	8,065	2.047	0.084	0.057	0.080
Condom use at last sex	0.168	0.024	492	550	1.425	0.143	0.120	0.216
Abstinence among never-married youth (never had sex)	0.247	0.018	2,073	2,211	1.847	0.071	0.212	0.282

Continued...

Table B.2—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.220	0.008	8,065	8,065	1.808	0.038	0.204	0.237
Discriminatory attitudes towards people living with HIV	0.691	0.011	7,678	7,622	2.120	0.016	0.669	0.714
Prevalence of female circumcision	0.382	0.015	6,716	6,716	2.576	0.040	0.352	0.413
Total fertility rate (last 3 years)	4.179	0.148	22,584	22,699	1.712	0.035	3.884	4.475
Neonatal mortality (last 0-4 years)	37.464	4.635	5,707	5,259	1.532	0.124	28.195	46.733
Postneonatal mortality (last 0-4 years)	25.053	2.716	5,710	5,266	1.173	0.108	19.622	30.485
Infant mortality (last 0-4 years)	62.518	5.084	5,721	5,272	1.357	0.081	52.350	72.685
Child mortality (last 0-4 years)	32.950	4.017	5,634	5,162	1.569	0.122	24.915	40.985
Under-5 mortality (last 0-4 years)	93.407	7.330	5,795	5,339	1.652	0.078	78.747	108.067
MEN								
Urban residence	0.605	0.021	3,760	3,821	2.591	0.034	0.564	0.647
Literacy	0.750	0.015	3,760	3,821	2.162	0.020	0.720	0.781
No education	0.130	0.010	3,760	3,821	1.735	0.073	0.111	0.149
Secondary education or higher	0.640	0.018	3,760	3,821	2.274	0.028	0.605	0.676
Never married (in union)	0.441	0.019	3,760	3,821	2.311	0.042	0.403	0.478
Currently married (in union)	0.499	0.019	3,760	3,821	2.337	0.038	0.461	0.537
Had first sexual intercourse before age 18	0.448	0.015	2,875	2,945	1.626	0.034	0.418	0.478
Knows any contraceptive method	0.999	0.001	2,024	1,906	0.839	0.001	0.998	1.000
Knows any modern contraceptive method	0.999	0.001	2,024	1,906	0.839	0.001	0.998	1.000
Want no more children	0.240	0.016	2,024	1,906	1.737	0.069	0.207	0.273
Want to delay birth at least 2 years	0.329	0.020	2,024	1,906	1.896	0.060	0.290	0.369
Ideal number of children	4.946	0.119	3,505	3,574	1.936	0.024	4.707	5.184
Had 2+ sexual partners in past 12 months	0.239	0.014	3,760	3,821	2.003	0.058	0.211	0.267
Condom use at last sex	0.207	0.026	950	912	1.979	0.126	0.155	0.259
Abstinence among never-married youth (never had sex)	0.381	0.025	1,278	1,347	1.827	0.065	0.331	0.431
Paid for sexual intercourse in past 12 months	0.046	0.006	3,760	3,821	1.732	0.128	0.034	0.058
Had HIV test and received results in past 12 months	0.212	0.014	3,760	3,821	2.134	0.067	0.183	0.240
Discriminatory attitudes towards people living with HIV	0.642	0.020	3,573	3,672	2.501	0.031	0.601	0.682

Table B.3 Sampling errors: Urban sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.489	0.019	3,321	5,195	2.145	0.038	0.452	0.527
Access to an ITN	0.358	0.017	14,833	23,089	2.203	0.046	0.325	0.392
Use of an ITN	0.351	0.017	14,833	23,089	2.065	0.048	0.318	0.385
WOMEN								
Urban residence	1.000	0.000	3,338	5,023	na	0.000	1.000	1.000
Literacy	0.632	0.019	3,338	5,023	2.269	0.030	0.594	0.670
No education	0.210	0.015	3,338	5,023	2.195	0.074	0.179	0.241
Secondary education or higher	0.606	0.020	3,338	5,023	2.378	0.033	0.565	0.646
Never married (never in union)	0.464	0.018	3,338	5,023	2.033	0.038	0.429	0.499
Currently married (in union)	0.452	0.018	3,338	5,023	2.073	0.040	0.416	0.487
Married before age 18	0.223	0.015	2,555	3,956	1.807	0.067	0.193	0.253
Had sexual intercourse before age 18	0.769	0.013	2,555	3,956	1.570	0.017	0.743	0.795
Currently pregnant	0.062	0.007	3,338	5,023	1.691	0.114	0.048	0.076
Know any contraceptive method	0.987	0.005	1,606	2,268	1.776	0.005	0.978	0.997
Know a modern method	0.987	0.005	1,606	2,268	1.776	0.005	0.978	0.997
Currently using any method	0.239	0.018	1,606	2,268	1.716	0.076	0.203	0.276
Currently using a modern method	0.224	0.018	1,606	2,268	1.689	0.079	0.189	0.259
Currently using pill	0.033	0.006	1,606	2,268	1.382	0.187	0.021	0.045
Currently using male condoms	0.013	0.004	1,606	2,268	1.381	0.301	0.005	0.021
Currently using injectables	0.128	0.012	1,606	2,268	1.423	0.093	0.104	0.151
Currently using implants	0.044	0.008	1,606	2,268	1.517	0.177	0.028	0.059
Currently using female sterilization	0.001	0.001	1,606	2,268	0.954	1.003	0.000	0.002
Currently using withdrawal	0.009	0.004	1,606	2,268	1.649	0.429	0.001	0.017
Currently using rhythm	0.006	0.003	1,606	2,268	1.282	0.407	0.001	0.011
Using public sector source	0.464	0.026	1,011	1,264	1.686	0.057	0.411	0.517
Want no more children	0.312	0.019	1,606	2,268	1.680	0.062	0.273	0.351
Want to delay next birth at least 2 years	0.233	0.016	1,606	2,268	1.555	0.071	0.200	0.265
Ideal number of children	4.234	0.069	3,172	4,829	2.085	0.016	4.096	4.371
Mothers protected against tetanus for last birth	0.833	0.017	1,526	2,269	1.748	0.020	0.799	0.866
Births with skilled attendant at delivery	0.892	0.016	1,894	2,805	1.977	0.018	0.860	0.924
Received 3+ doses of SP/Fansidar	0.377	0.028	770	1,129	1.553	0.073	0.322	0.433
Treated with ORS	0.533	0.041	282	373	1.275	0.076	0.452	0.615
Sought medical treatment for diarrhea	0.711	0.041	282	373	1.415	0.058	0.630	0.793
Ever had vaccination card	0.931	0.023	345	484	1.641	0.025	0.885	0.978
Received BCG vaccination	0.922	0.024	345	484	1.570	0.026	0.875	0.969
Received DPT-HepB-Hib vaccination (3 doses)	0.700	0.040	345	484	1.553	0.057	0.619	0.780
Received birth dose polio 0 vaccination	0.912	0.027	345	484	1.677	0.029	0.858	0.965
Received polio vaccination (3 doses)	0.636	0.037	345	484	1.366	0.058	0.562	0.710
Received pneumococcal vaccination (3 doses)	0.704	0.040	345	484	1.548	0.056	0.625	0.784
Received rotavirus vaccination (2 doses)	0.779	0.037	345	484	1.604	0.048	0.704	0.853
Received measles-containing vaccination 1	0.770	0.033	345	484	1.411	0.043	0.704	0.837
Received yellow fever vaccination	0.746	0.036	345	484	1.463	0.048	0.674	0.817
Received all basic vaccinations (12-23 months)	0.525	0.041	345	484	1.447	0.078	0.443	0.607
Received all age-appropriate vaccinations (12-23 months)	0.430	0.038	345	484	1.358	0.088	0.354	0.506
Received all age-appropriate vaccinations (24-35 months)	0.358	0.040	327	450	1.406	0.111	0.279	0.437
Height-for-age (-2SD)	0.250	0.021	958	1,465	1.466	0.085	0.207	0.292
Weight-for-height (-2SD)	0.034	0.007	961	1,470	1.156	0.217	0.019	0.048
Weight-for-age (-2SD)	0.092	0.012	963	1,471	1.264	0.130	0.068	0.116
Body mass index (BMI) <18.5	0.044	0.007	1,551	2,354	1.298	0.152	0.031	0.058
Body mass index (BMI) ≥25	0.429	0.017	1,551	2,354	1.368	0.040	0.395	0.463
Prevalence of anemia (children 6-59 months)	0.701	0.024	843	1,311	1.392	0.034	0.654	0.748
Prevalence of anemia (women 15-49)	0.432	0.017	1,658	2,515	1.415	0.040	0.398	0.466
Ever experienced any physical violence since age 15	0.636	0.025	1,194	1,957	1.757	0.039	0.587	0.685
Ever experienced any sexual violence	0.086	0.013	1,194	1,957	1.635	0.155	0.059	0.112
Ever experienced any physical/sexual violence by husband/partner	0.470	0.028	795	1,067	1.551	0.059	0.415	0.525
Ever experienced any emotional/physical/sexual violence by husband/partner	0.601	0.026	795	1,067	1.494	0.043	0.549	0.653
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.486	0.026	795	1,067	1.460	0.053	0.434	0.538
Had 2+ sexual partners in past 12 months	0.081	0.009	3,338	5,023	1.862	0.109	0.063	0.098
Condom use at last sex	0.201	0.031	239	405	1.180	0.152	0.140	0.263
Abstinence among never-married youth (never had sex)	0.248	0.024	1,045	1,556	1.772	0.096	0.200	0.295

Continued...

Table B.3—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.232	0.012	3,338	5,023	1.685	0.053	0.207	0.256
Discriminatory attitudes towards people living with HIV	0.666	0.016	3,218	4,776	1.936	0.024	0.634	0.699
Prevalence of female circumcision	0.299	0.021	2,756	4,214	2.401	0.070	0.257	0.341
Total fertility rate (last 3 years)	3.358	0.155	9,333	14,176	1.533	0.046	3.048	3.669
Neonatal mortality (last 0-4 years)	36.520	7.647	1,896	2,806	1.455	0.209	21.226	51.814
Postneonatal mortality (last 0-4 years)	20.378	4.392	1,882	2,803	1.225	0.216	11.594	29.163
Infant mortality (last 0-4 years)	56.898	8.327	1,903	2,814	1.355	0.146	40.244	73.552
Child mortality (last 0-4 years)	29.930	7.107	1,811	2,682	1.666	0.237	15.716	44.143
Under-5 mortality (last 0-4 years)	85.125	12.715	1,921	2,847	1.727	0.149	59.696	110.554
MEN								
Urban residence	1.000	0.000	1,434	2,313	na	0.000	1.000	1.000
Literacy	0.840	0.020	1,434	2,313	2.063	0.024	0.800	0.880
No education	0.074	0.011	1,434	2,313	1.580	0.148	0.052	0.095
Secondary education or higher	0.763	0.023	1,434	2,313	2.065	0.030	0.716	0.809
Never married (in union)	0.502	0.027	1,434	2,313	2.040	0.054	0.448	0.556
Currently married (in union)	0.434	0.028	1,434	2,313	2.106	0.064	0.379	0.490
Had first sexual intercourse before age 18	0.453	0.023	1,050	1,758	1.475	0.050	0.407	0.498
Knows any contraceptive method	1.000	0.000	647	1,004	0.312	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	647	1,004	0.312	0.000	1.000	1.000
Want no more children	0.205	0.028	647	1,004	1.742	0.135	0.149	0.260
Want to delay birth at least 2 years	0.345	0.034	647	1,004	1.809	0.098	0.277	0.413
Ideal number of children	4.445	0.158	1,361	2,194	1.872	0.036	4.129	4.761
Had 2+ sexual partners in past 12 months	0.236	0.021	1,434	2,313	1.898	0.090	0.193	0.278
Condom use at last sex	0.273	0.041	334	545	1.668	0.150	0.191	0.354
Abstinence among never-married youth (never had sex)	0.343	0.033	593	912	1.687	0.096	0.277	0.409
Paid for sexual intercourse in past 12 months	0.050	0.009	1,434	2,313	1.553	0.179	0.032	0.068
Had HIV test and received results in past 12 months	0.226	0.021	1,434	2,313	1.932	0.094	0.184	0.269
Discriminatory attitudes towards people living with HIV	0.584	0.032	1,397	2,264	2.397	0.054	0.521	0.648

na = Not applicable

Table B.4 Sampling errors: Rural sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.625	0.013	5,747	3,873	1.985	0.020	0.600	0.651
Access to an ITN	0.449	0.013	25,265	17,113	2.272	0.029	0.422	0.475
Use of an ITN	0.442	0.014	25,265	17,113	2.225	0.032	0.414	0.470
WOMEN								
Urban residence	0.000	0.000	4,727	3,042	na	na	0.000	0.000
Literacy	0.335	0.018	4,727	3,042	2.640	0.054	0.299	0.372
No education	0.466	0.016	4,727	3,042	2.186	0.034	0.434	0.498
Secondary education or higher	0.210	0.017	4,727	3,042	2.825	0.080	0.176	0.243
Never married (never in union)	0.262	0.013	4,727	3,042	1.970	0.048	0.237	0.288
Currently married (in union)	0.640	0.014	4,727	3,042	1.996	0.022	0.612	0.668
Married before age 18	0.411	0.011	3,794	2,452	1.393	0.027	0.388	0.433
Had sexual intercourse before age 18	0.847	0.010	3,794	2,452	1.724	0.012	0.827	0.867
Currently pregnant	0.082	0.005	4,727	3,042	1.235	0.060	0.072	0.092
Know any contraceptive method	0.987	0.003	3,048	1,947	1.575	0.003	0.980	0.993
Know a modern method	0.987	0.003	3,048	1,947	1.575	0.003	0.980	0.993
Currently using any method	0.262	0.011	3,048	1,947	1.362	0.041	0.240	0.283
Currently using a modern method	0.256	0.011	3,048	1,947	1.394	0.043	0.234	0.278
Currently using pill	0.049	0.006	3,048	1,947	1.529	0.122	0.037	0.061
Currently using male condoms	0.003	0.001	3,048	1,947	0.983	0.329	0.001	0.005
Currently using injectables	0.149	0.009	3,048	1,947	1.431	0.062	0.130	0.167
Currently using implants	0.049	0.005	3,048	1,947	1.290	0.103	0.039	0.060
Currently using female sterilization	0.004	0.001	3,048	1,947	1.257	0.362	0.001	0.007
Currently using withdrawal	0.003	0.001	3,048	1,947	1.204	0.400	0.001	0.005
Currently using rhythm	0.003	0.001	3,048	1,947	1.360	0.475	0.000	0.005
Using public sector source	0.733	0.024	1,376	770	2.019	0.033	0.685	0.781
Want no more children	0.376	0.012	3,048	1,947	1.395	0.033	0.352	0.401
Want to delay next birth at least 2 years	0.213	0.011	3,048	1,947	1.505	0.052	0.190	0.235
Ideal number of children	5.254	0.083	4,279	2,779	2.216	0.016	5.089	5.419
Mothers protected against tetanus for last birth	0.822	0.011	2,741	1,757	1.467	0.013	0.800	0.843
Births with skilled attendant at delivery	0.789	0.015	3,810	2,458	1.982	0.019	0.758	0.819
Received 3+ doses of SP/Fansidar	0.434	0.018	1,514	967	1.381	0.041	0.398	0.469
Treated with ORS	0.549	0.026	660	391	1.240	0.047	0.497	0.601
Sought medical treatment for diarrhea	0.616	0.023	660	391	1.138	0.037	0.571	0.662
Ever had vaccination card	0.913	0.014	718	453	1.298	0.015	0.885	0.940
Received BCG vaccination	0.889	0.016	718	453	1.337	0.018	0.857	0.921
Received DPT-HepB-Hib vaccination (3 doses)	0.685	0.023	718	453	1.332	0.034	0.638	0.731
Received birth dose polio 0 vaccination	0.807	0.019	718	453	1.283	0.024	0.769	0.846
Received polio vaccination (3 doses)	0.627	0.025	718	453	1.340	0.039	0.578	0.677
Received pneumococcal vaccination (3 doses)	0.665	0.022	718	453	1.246	0.034	0.620	0.710
Received rotavirus vaccination (2 doses)	0.760	0.021	718	453	1.323	0.028	0.717	0.803
Received measles-containing vaccination 1	0.703	0.022	718	453	1.248	0.031	0.660	0.747
Received yellow fever vaccination	0.657	0.023	718	453	1.263	0.035	0.611	0.702
Received all basic vaccinations (12-23 months)	0.490	0.027	718	453	1.403	0.054	0.437	0.544
Received all age-appropriate vaccinations (12-23 months)	0.355	0.024	718	453	1.298	0.066	0.308	0.403
Received all age-appropriate vaccinations (24-35 months)	0.268	0.022	646	423	1.244	0.083	0.224	0.313
Height-for-age (-2SD)	0.351	0.015	1,993	1,349	1.367	0.043	0.321	0.381
Weight-for-height (-2SD)	0.034	0.004	2,002	1,355	0.958	0.113	0.027	0.042
Weight-for-age (-2SD)	0.127	0.009	2,008	1,360	1.137	0.069	0.109	0.145
Body mass index (BMI) <18.5	0.066	0.006	2,152	1,369	1.120	0.091	0.054	0.078
Body mass index (BMI) ≥25	0.259	0.012	2,152	1,369	1.280	0.047	0.235	0.283
Prevalence of anemia (children 6-59 months)	0.715	0.015	1,813	1,213	1.372	0.021	0.685	0.746
Prevalence of anemia (women 15-49)	0.467	0.013	2,407	1,512	1.290	0.028	0.440	0.493
Ever experienced any physical violence since age 15	0.540	0.018	1,926	1,163	1.586	0.033	0.504	0.576
Ever experienced any sexual violence	0.100	0.010	1,926	1,163	1.518	0.104	0.079	0.121
Ever experienced any physical/sexual violence by husband/partner	0.439	0.021	1,536	876	1.655	0.048	0.397	0.481
Ever experienced any emotional/physical/sexual violence by husband/partner	0.560	0.020	1,536	876	1.567	0.035	0.520	0.600
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.420	0.018	1,536	876	1.462	0.044	0.383	0.457
Had 2+ sexual partners in past 12 months	0.048	0.004	4,727	3,042	1.265	0.082	0.040	0.055
Condom use at last sex	0.075	0.020	253	145	1.227	0.272	0.034	0.116
Abstinence among never-married youth (never had sex)	0.247	0.018	1,028	655	1.344	0.073	0.210	0.283

Continued...

Table B.4—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.202	0.009	4,727	3,042	1.456	0.042	0.185	0.219
Discriminatory attitudes towards people living with HIV	0.734	0.013	4,460	2,846	1.928	0.017	0.708	0.759
Prevalence of female circumcision	0.523	0.015	3,960	2,502	1.924	0.029	0.492	0.554
Total fertility rate (last 3 years)	5.545	0.180	13,251	8,523	1.673	0.032	5.185	5.905
Neonatal mortality (last 0-4 years)	38.540	4.833	3,811	2,453	1.397	0.125	28.875	48.206
Postneonatal mortality (last 0-4 years)	30.216	3.227	3,828	2,464	1.111	0.107	23.762	36.669
Infant mortality (last 0-4 years)	68.756	5.446	3,818	2,457	1.178	0.079	57.864	79.649
Child mortality (last 0-4 years)	36.196	3.666	3,823	2,480	1.127	0.101	28.864	43.527
Under-5 mortality (last 0-4 years)	102.463	6.893	3,874	2,492	1.220	0.067	88.678	116.249
MEN								
Urban residence	0.000	0.000	2,326	1,508	na	na	0.000	0.000
Literacy	0.613	0.020	2,326	1,508	1.946	0.032	0.574	0.652
No education	0.217	0.015	2,326	1,508	1.768	0.070	0.187	0.247
Secondary education or higher	0.452	0.020	2,326	1,508	1.888	0.043	0.413	0.491
Never married (in union)	0.347	0.015	2,326	1,508	1.555	0.044	0.316	0.378
Currently married (in union)	0.598	0.015	2,326	1,508	1.498	0.025	0.567	0.628
Had first sexual intercourse before age 18	0.441	0.016	1,825	1,187	1.406	0.037	0.409	0.474
Knows any contraceptive method	0.998	0.001	1,377	901	1.033	0.001	0.995	1.000
Knows any modern contraceptive method	0.998	0.001	1,377	901	1.033	0.001	0.995	1.000
Want no more children	0.279	0.016	1,377	901	1.295	0.056	0.248	0.311
Want to delay birth at least 2 years	0.312	0.018	1,377	901	1.446	0.058	0.276	0.348
Ideal number of children	5.743	0.136	2,144	1,380	1.485	0.024	5.471	6.015
Had 2+ sexual partners in past 12 months	0.243	0.013	2,326	1,508	1.499	0.055	0.217	0.270
Condom use at last sex	0.109	0.015	616	367	1.199	0.138	0.079	0.139
Abstinence among never-married youth (never had sex)	0.460	0.025	685	435	1.329	0.055	0.410	0.511
Paid for sexual intercourse in past 12 months	0.040	0.006	2,326	1,508	1.453	0.148	0.028	0.052
Had HIV test and received results in past 12 months	0.189	0.016	2,326	1,508	1.948	0.084	0.157	0.221
Discriminatory attitudes towards people living with HIV	0.734	0.015	2,176	1,408	1.574	0.020	0.704	0.763

na = Not applicable

Table B.5 Sampling errors: North Western sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.655	0.027	1,517	850	2.189	0.041	0.602	0.709
Access to an ITN	0.477	0.029	5,906	3,386	2.559	0.060	0.419	0.534
Use of an ITN	0.476	0.026	5,906	3,386	2.055	0.054	0.425	0.527
WOMEN								
Urban residence	0.109	0.017	1,158	621	1.863	0.157	0.075	0.143
Literacy	0.427	0.028	1,158	621	1.949	0.066	0.370	0.484
No education	0.489	0.025	1,158	621	1.676	0.050	0.440	0.538
Secondary education or higher	0.253	0.024	1,158	621	1.876	0.095	0.205	0.301
Never married (never in union)	0.258	0.025	1,158	621	1.935	0.097	0.208	0.308
Currently married (in union)	0.644	0.029	1,158	621	2.092	0.046	0.585	0.703
Married before age 18	0.367	0.021	907	487	1.307	0.057	0.325	0.409
Had sexual intercourse before age 18	0.819	0.026	907	487	2.056	0.032	0.766	0.871
Currently pregnant	0.080	0.009	1,158	621	1.073	0.107	0.063	0.097
Know any contraceptive method	0.978	0.010	723	400	1.842	0.010	0.958	0.998
Know a modern method	0.978	0.010	723	400	1.842	0.010	0.958	0.998
Currently using any method	0.269	0.026	723	400	1.551	0.095	0.218	0.320
Currently using a modern method	0.263	0.026	723	400	1.597	0.100	0.210	0.315
Currently using pill	0.053	0.010	723	400	1.162	0.182	0.034	0.073
Currently using male condoms	0.005	0.003	723	400	0.976	0.508	0.000	0.010
Currently using injectables	0.165	0.024	723	400	1.708	0.143	0.117	0.212
Currently using implants	0.038	0.010	723	400	1.352	0.253	0.019	0.057
Currently using female sterilization	0.000	0.000	723	400	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	723	400	na	na	0.000	0.000
Currently using rhythm	0.006	0.004	723	400	1.331	0.620	0.000	0.014
Using public sector source	0.726	0.059	337	172	2.409	0.081	0.608	0.844
Want no more children	0.440	0.020	723	400	1.091	0.046	0.400	0.481
Want to delay next birth at least 2 years	0.171	0.020	723	400	1.433	0.118	0.131	0.211
Ideal number of children	4.830	0.109	1,095	591	1.543	0.023	4.612	5.048
Mothers protected against tetanus for last birth	0.842	0.028	635	331	1.878	0.033	0.787	0.897
Births with skilled attendant at delivery	0.781	0.036	880	464	2.195	0.046	0.710	0.853
Received 3+ doses of SP/Fansidar	0.458	0.040	346	184	1.495	0.088	0.378	0.538
Treated with ORS	0.715	0.053	131	72	1.361	0.075	0.608	0.822
Sought medical treatment for diarrhea	0.728	0.053	131	72	1.396	0.073	0.621	0.835
Ever had vaccination card	0.971	0.014	171	89	1.040	0.014	0.943	0.998
Received BCG vaccination	0.955	0.017	171	89	1.039	0.018	0.921	0.988
Received DPT-HepB-Hib vaccination (3 doses)	0.736	0.044	171	89	1.277	0.060	0.648	0.824
Received birth dose polio 0 vaccination	0.809	0.028	171	89	0.925	0.035	0.752	0.865
Received polio vaccination (3 doses)	0.714	0.043	171	89	1.202	0.060	0.628	0.800
Received pneumococcal vaccination (3 doses)	0.740	0.040	171	89	1.162	0.054	0.659	0.820
Received rotavirus vaccination (2 doses)	0.791	0.033	171	89	1.021	0.042	0.725	0.857
Received measles-containing vaccination 1	0.762	0.039	171	89	1.177	0.051	0.684	0.840
Received yellow fever vaccination	0.720	0.042	171	89	1.197	0.058	0.636	0.804
Received all basic vaccinations (12-23 months)	0.577	0.048	171	89	1.219	0.082	0.482	0.672
Received all age-appropriate vaccinations (12-23 months)	0.457	0.041	171	89	1.042	0.090	0.374	0.539
Received all age-appropriate vaccinations (24-35 months)	0.335	0.048	148	75	1.198	0.144	0.238	0.432
Height-for-age (-2SD)	0.328	0.026	445	254	1.152	0.079	0.277	0.380
Weight-for-height (-2SD)	0.050	0.011	446	254	1.015	0.213	0.029	0.072
Weight-for-age (-2SD)	0.159	0.025	450	257	1.417	0.156	0.110	0.209
Body mass index (BMI) <18.5	0.058	0.013	502	268	1.244	0.224	0.032	0.084
Body mass index (BMI) ≥25	0.369	0.030	502	268	1.378	0.081	0.310	0.429
Prevalence of anemia (children 6-59 months)	0.722	0.029	401	226	1.247	0.041	0.664	0.781
Prevalence of anemia (women 15-49)	0.524	0.027	564	297	1.261	0.051	0.470	0.577
Ever experienced any physical violence since age 15	0.656	0.048	487	243	2.196	0.072	0.561	0.751
Ever experienced any sexual violence	0.107	0.022	487	243	1.556	0.204	0.063	0.151
Ever experienced any physical/sexual violence by husband/partner	0.474	0.044	394	196	1.738	0.093	0.387	0.562
Ever experienced any emotional/physical/sexual violence by husband/partner	0.565	0.044	394	196	1.752	0.078	0.477	0.653
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.434	0.037	394	196	1.473	0.085	0.361	0.508
Had 2+ sexual partners in past 12 months	0.066	0.009	1,158	621	1.170	0.129	0.049	0.083
Condom use at last sex	0.082	0.034	79	41	1.091	0.415	0.014	0.149
Abstinence among never-married youth (never had sex)	0.297	0.038	258	142	1.344	0.129	0.220	0.373

Continued...

Table B.5—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.243	0.021	1,158	621	1.674	0.087	0.201	0.286
Discriminatory attitudes towards people living with HIV	0.649	0.035	1,083	573	2.416	0.054	0.578	0.719
Prevalence of female circumcision	0.683	0.032	1,023	542	2.165	0.046	0.620	0.746
Total fertility rate (last 3 years)	5.232	0.330	3,255	1,740	1.607	0.063	4.572	5.891
Neonatal mortality (last 0-9 years)	35.737	6.468	1,781	959	1.202	0.181	22.801	48.672
Postneonatal mortality (last 0-9 years)	50.319	7.751	1,783	959	1.307	0.154	34.817	65.821
Infant mortality (last 0-9 years)	86.056	12.238	1,784	962	1.514	0.142	61.580	110.532
Child mortality (last 0-9 years)	39.924	7.350	1,820	988	1.440	0.184	25.223	54.624
Under-5 mortality (last 0-9 years)	122.544	14.784	1,799	971	1.529	0.121	92.975	152.113
MEN								
Urban residence	0.080	0.013	508	301	1.071	0.161	0.054	0.106
Literacy	0.607	0.045	508	301	2.087	0.075	0.516	0.698
No education	0.263	0.029	508	301	1.499	0.112	0.204	0.322
Secondary education or higher	0.465	0.049	508	301	2.184	0.104	0.368	0.562
Never married (in union)	0.361	0.035	508	301	1.651	0.098	0.290	0.431
Currently married (in union)	0.581	0.036	508	301	1.640	0.062	0.509	0.653
Had first sexual intercourse before age 18	0.334	0.035	380	226	1.431	0.104	0.264	0.403
Knows any contraceptive method	0.995	0.005	297	175	1.249	0.005	0.984	1.005
Knows any modern contraceptive method	0.995	0.005	297	175	1.249	0.005	0.984	1.005
Want no more children	0.287	0.040	297	175	1.534	0.141	0.206	0.368
Want to delay birth at least 2 years	0.206	0.043	297	175	1.827	0.210	0.119	0.292
Ideal number of children	5.128	0.304	500	298	1.784	0.059	4.521	5.736
Had 2+ sexual partners in past 12 months	0.155	0.019	508	301	1.167	0.121	0.118	0.193
Condom use at last sex	0.133	0.038	73	47	0.959	0.288	0.056	0.210
Abstinence among never-married youth (never had sex)	0.586	0.059	159	91	1.490	0.100	0.469	0.703
Paid for sexual intercourse in past 12 months	0.007	0.004	508	301	1.142	0.616	0.000	0.015
Had HIV test and received results in past 12 months	0.173	0.026	508	301	1.534	0.149	0.121	0.224
Discriminatory attitudes towards people living with HIV	0.652	0.032	452	265	1.440	0.050	0.587	0.716

na = Not applicable

Table B.6 Sampling errors: South Central sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.429	0.019	2,414	4,334	1.929	0.045	0.390	0.468
Access to an ITN	0.297	0.016	10,347	18,318	1.877	0.052	0.266	0.328
Use of an ITN	0.285	0.018	10,347	18,318	2.014	0.064	0.249	0.321
WOMEN								
Urban residence	0.838	0.021	2,301	4,105	2.673	0.025	0.797	0.879
Literacy	0.623	0.018	2,301	4,105	1.783	0.029	0.587	0.659
No education	0.222	0.013	2,301	4,105	1.542	0.060	0.195	0.249
Secondary education or higher	0.606	0.020	2,301	4,105	1.921	0.032	0.567	0.645
Never married (never in union)	0.474	0.019	2,301	4,105	1.799	0.040	0.436	0.511
Currently married (in union)	0.439	0.018	2,301	4,105	1.711	0.040	0.403	0.474
Married before age 18	0.231	0.016	1,810	3,246	1.618	0.069	0.199	0.264
Had sexual intercourse before age 18	0.767	0.014	1,810	3,246	1.420	0.018	0.738	0.795
Currently pregnant	0.059	0.005	2,301	4,105	1.102	0.092	0.048	0.070
Know any contraceptive method	0.988	0.006	1,150	1,801	1.736	0.006	0.976	0.999
Know a modern method	0.988	0.006	1,150	1,801	1.736	0.006	0.976	0.999
Currently using any method	0.222	0.020	1,150	1,801	1.597	0.088	0.183	0.261
Currently using a modern method	0.207	0.018	1,150	1,801	1.540	0.089	0.170	0.243
Currently using pill	0.033	0.007	1,150	1,801	1.413	0.225	0.018	0.048
Currently using male condoms	0.012	0.004	1,150	1,801	1.302	0.351	0.004	0.020
Currently using injectables	0.113	0.014	1,150	1,801	1.452	0.120	0.086	0.141
Currently using implants	0.042	0.009	1,150	1,801	1.546	0.218	0.024	0.060
Currently using female sterilization	0.000	0.000	1,150	1,801	na	na	0.000	0.000
Currently using withdrawal	0.009	0.004	1,150	1,801	1.454	0.449	0.001	0.017
Currently using rhythm	0.006	0.003	1,150	1,801	1.263	0.468	0.000	0.012
Using public sector source	0.405	0.028	529	976	1.291	0.068	0.350	0.461
Want no more children	0.336	0.023	1,150	1,801	1.681	0.070	0.289	0.383
Want to delay next birth at least 2 years	0.211	0.017	1,150	1,801	1.431	0.082	0.177	0.246
Ideal number of children	4.174	0.067	2,153	3,920	1.594	0.016	4.040	4.309
Mothers protected against tetanus for last birth	0.821	0.020	1,121	1,825	1.701	0.025	0.780	0.861
Births with skilled attendant at delivery	0.802	0.020	1,484	2,296	1.625	0.025	0.761	0.843
Received 3+ doses of SP/Fansidar	0.343	0.031	581	926	1.492	0.090	0.281	0.404
Treated with ORS	0.548	0.039	274	357	1.099	0.071	0.470	0.626
Sought medical treatment for diarrhea	0.654	0.038	274	357	1.105	0.058	0.579	0.730
Ever had vaccination card	0.898	0.029	242	383	1.439	0.033	0.840	0.957
Received BCG vaccination	0.881	0.030	242	383	1.390	0.035	0.820	0.942
Received DPT-HepB-Hib vaccination (3 doses)	0.673	0.046	242	383	1.435	0.068	0.581	0.764
Received birth dose polio 0 vaccination	0.872	0.034	242	383	1.505	0.039	0.804	0.940
Received polio vaccination (3 doses)	0.609	0.043	242	383	1.302	0.071	0.523	0.695
Received pneumococcal vaccination (3 doses)	0.675	0.044	242	383	1.372	0.065	0.588	0.762
Received rotavirus vaccination (2 doses)	0.741	0.046	242	383	1.575	0.063	0.648	0.834
Received measles-containing vaccination 1	0.770	0.036	242	383	1.250	0.046	0.699	0.841
Received yellow fever vaccination	0.732	0.039	242	383	1.300	0.053	0.654	0.810
Received all basic vaccinations (12-23 months)	0.489	0.047	242	383	1.370	0.095	0.396	0.583
Received all age-appropriate vaccinations (12-23 months)	0.393	0.041	242	383	1.246	0.105	0.311	0.475
Received all age-appropriate vaccinations (24-35 months)	0.277	0.046	252	367	1.449	0.165	0.186	0.369
Height-for-age (-2SD)	0.246	0.025	719	1,173	1.406	0.100	0.197	0.296
Weight-for-height (-2SD)	0.038	0.008	722	1,178	1.041	0.218	0.022	0.055
Weight-for-age (-2SD)	0.107	0.013	720	1,177	1.073	0.121	0.081	0.132
Body mass index (BMI) <18.5	0.058	0.008	1,056	1,907	1.094	0.135	0.043	0.074
Body mass index (BMI) ≥25	0.441	0.018	1,056	1,907	1.203	0.041	0.405	0.478
Prevalence of anemia (children 6-59 months)	0.712	0.025	639	1,055	1.250	0.036	0.662	0.763
Prevalence of anemia (women 15-49)	0.469	0.019	1,138	2,042	1.264	0.040	0.432	0.506
Ever experienced any physical violence since age 15	0.643	0.029	846	1,620	1.738	0.045	0.585	0.700
Ever experienced any sexual violence	0.073	0.012	846	1,620	1.392	0.170	0.048	0.098
Ever experienced any physical/sexual violence by husband/partner	0.458	0.034	581	841	1.649	0.075	0.390	0.527
Ever experienced any emotional/physical/sexual violence by husband/partner	0.592	0.032	581	841	1.562	0.054	0.528	0.656
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.465	0.032	581	841	1.555	0.069	0.400	0.529
Had 2+ sexual partners in past 12 months	0.085	0.010	2,301	4,105	1.694	0.116	0.066	0.105
Condom use at last sex	0.190	0.035	164	351	1.132	0.183	0.120	0.260
Abstinence among never-married youth (never had sex)	0.256	0.026	670	1,265	1.549	0.102	0.204	0.308

Continued...

Table B.6—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.212	0.013	2,301	4,105	1.501	0.060	0.187	0.238
Discriminatory attitudes towards people living with HIV	0.673	0.019	2,169	3,898	1.881	0.028	0.635	0.711
Prevalence of female circumcision	0.298	0.022	1,885	3,430	2.095	0.074	0.254	0.343
Total fertility rate (last 3 years)	3.405	0.179	6,501	11,628	1.317	0.053	3.046	3.763
Neonatal mortality (last 0-9 years)	40.916	8.885	2,868	4,374	1.690	0.217	23.145	58.687
Postneonatal mortality (last 0-9 years)	26.266	4.160	2,860	4,363	1.170	0.158	17.946	34.585
Infant mortality (last 0-9 years)	67.182	10.224	2,869	4,374	1.658	0.152	46.734	87.629
Child mortality (last 0-9 years)	37.373	5.741	2,796	4,222	1.265	0.154	25.892	48.854
Under-5 mortality (last 0-9 years)	102.044	12.166	2,886	4,396	1.682	0.119	77.711	126.377
MEN								
Urban residence	0.846	0.018	1,016	1,932	1.599	0.021	0.809	0.882
Literacy	0.839	0.018	1,016	1,932	1.534	0.021	0.804	0.875
No education	0.080	0.012	1,016	1,932	1.389	0.148	0.056	0.103
Secondary education or higher	0.763	0.023	1,016	1,932	1.713	0.030	0.717	0.809
Never married (in union)	0.464	0.024	1,016	1,932	1.509	0.051	0.417	0.512
Currently married (in union)	0.455	0.026	1,016	1,932	1.675	0.058	0.402	0.507
Had first sexual intercourse before age 18	0.429	0.022	772	1,482	1.258	0.052	0.384	0.473
Knows any contraceptive method	1.000	0.000	506	878	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	506	878	na	0.000	1.000	1.000
Want no more children	0.213	0.029	506	878	1.607	0.138	0.154	0.271
Want to delay birth at least 2 years	0.343	0.034	506	878	1.618	0.100	0.275	0.412
Ideal number of children	4.299	0.161	948	1,833	1.504	0.037	3.977	4.621
Had 2+ sexual partners in past 12 months	0.225	0.023	1,016	1,932	1.723	0.101	0.179	0.270
Condom use at last sex	0.231	0.044	248	434	1.653	0.192	0.142	0.320
Abstinence among never-married youth (never had sex)	0.372	0.031	362	710	1.221	0.083	0.310	0.435
Paid for sexual intercourse in past 12 months	0.060	0.011	1,016	1,932	1.435	0.178	0.039	0.082
Had HIV test and received results in past 12 months	0.229	0.021	1,016	1,932	1.613	0.093	0.187	0.272
Discriminatory attitudes towards people living with HIV	0.563	0.036	993	1,897	2.280	0.064	0.491	0.635

na = Not applicable

Table B.7 Sampling errors: South Eastern A sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.590	0.020	1,540	628	1.617	0.034	0.549	0.631
Access to an ITN	0.462	0.020	6,311	2,544	1.704	0.044	0.422	0.503
Use of an ITN	0.446	0.021	6,311	2,544	1.681	0.048	0.403	0.489
WOMEN								
Urban residence	0.251	0.037	1,195	458	2.933	0.147	0.177	0.325
Literacy	0.401	0.025	1,195	458	1.784	0.063	0.350	0.451
No education	0.371	0.024	1,195	458	1.712	0.065	0.323	0.419
Secondary education or higher	0.256	0.022	1,195	458	1.768	0.087	0.212	0.301
Never married (never in union)	0.246	0.016	1,195	458	1.308	0.066	0.214	0.279
Currently married (in union)	0.646	0.016	1,195	458	1.190	0.025	0.613	0.679
Married before age 18	0.406	0.020	950	370	1.271	0.050	0.366	0.447
Had sexual intercourse before age 18	0.859	0.014	950	370	1.238	0.016	0.831	0.887
Currently pregnant	0.077	0.008	1,195	458	0.971	0.097	0.062	0.092
Know any contraceptive method	0.995	0.003	761	296	1.017	0.003	0.990	1.000
Know a modern method	0.995	0.003	761	296	1.017	0.003	0.990	1.000
Currently using any method	0.376	0.017	761	296	0.971	0.045	0.342	0.410
Currently using a modern method	0.369	0.017	761	296	0.973	0.046	0.335	0.403
Currently using pill	0.036	0.009	761	296	1.307	0.246	0.018	0.054
Currently using male condoms	0.005	0.004	761	296	1.436	0.705	0.000	0.013
Currently using injectables	0.246	0.018	761	296	1.171	0.074	0.210	0.283
Currently using implants	0.079	0.014	761	296	1.387	0.172	0.052	0.106
Currently using female sterilization	0.002	0.002	761	296	0.961	0.792	0.000	0.005
Currently using withdrawal	0.002	0.001	761	296	0.837	0.713	0.000	0.004
Currently using rhythm	0.005	0.002	761	296	0.881	0.435	0.001	0.010
Using public sector source	0.776	0.042	420	167	2.076	0.055	0.691	0.861
Want no more children	0.267	0.020	761	296	1.257	0.076	0.226	0.307
Want to delay next birth at least 2 years	0.295	0.021	761	296	1.245	0.070	0.254	0.337
Ideal number of children	5.548	0.123	1,058	398	1.489	0.022	5.303	5.794
Mothers protected against tetanus for last birth	0.774	0.025	654	248	1.530	0.033	0.723	0.824
Births with skilled attendant at delivery	0.836	0.031	857	333	2.157	0.037	0.775	0.898
Received 3+ doses of SP/Fansidar	0.409	0.032	364	140	1.263	0.080	0.344	0.474
Treated with ORS	0.576	0.039	170	64	1.022	0.068	0.497	0.655
Sought medical treatment for diarrhea	0.713	0.044	170	64	1.238	0.062	0.625	0.801
Ever had vaccination card	0.923	0.031	184	71	1.577	0.033	0.861	0.985
Received BCG vaccination	0.899	0.034	184	71	1.524	0.037	0.832	0.966
Received DPT-HepB-Hib vaccination (3 doses)	0.567	0.059	184	71	1.605	0.103	0.450	0.684
Received birth dose polio 0 vaccination	0.797	0.038	184	71	1.296	0.048	0.721	0.874
Received polio vaccination (3 doses)	0.535	0.053	184	71	1.436	0.099	0.429	0.640
Received pneumococcal vaccination (3 doses)	0.586	0.050	184	71	1.386	0.086	0.485	0.686
Received rotavirus vaccination (2 doses)	0.765	0.039	184	71	1.247	0.051	0.686	0.843
Received measles-containing vaccination 1	0.555	0.044	184	71	1.215	0.080	0.466	0.644
Received yellow fever vaccination	0.522	0.042	184	71	1.138	0.080	0.439	0.606
Received all basic vaccinations (12-23 months)	0.372	0.052	184	71	1.451	0.139	0.268	0.475
Received all age-appropriate vaccinations (12-23 months)	0.281	0.042	184	71	1.277	0.150	0.197	0.365
Received all age-appropriate vaccinations (24-35 months)	0.251	0.047	135	53	1.287	0.189	0.156	0.345
Height-for-age (-2SD)	0.335	0.025	478	194	1.156	0.074	0.285	0.384
Weight-for-height (-2SD)	0.038	0.010	479	194	1.164	0.266	0.018	0.058
Weight-for-age (-2SD)	0.126	0.015	480	195	0.942	0.123	0.095	0.157
Body mass index (BMI) <18.5	0.053	0.010	566	215	1.026	0.183	0.034	0.073
Body mass index (BMI) ≥25	0.329	0.024	566	215	1.209	0.073	0.281	0.377
Prevalence of anemia (children 6-59 months)	0.717	0.024	429	172	1.077	0.034	0.668	0.766
Prevalence of anemia (women 15-49)	0.477	0.030	620	236	1.489	0.063	0.416	0.537
Ever experienced any physical violence since age 15	0.540	0.029	495	176	1.287	0.053	0.483	0.598
Ever experienced any sexual violence	0.093	0.014	495	176	1.081	0.152	0.065	0.121
Ever experienced any physical/sexual violence by husband/partner	0.457	0.033	392	131	1.309	0.072	0.391	0.523
Ever experienced any emotional/physical/sexual violence by husband/partner	0.584	0.030	392	131	1.216	0.052	0.523	0.644
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.466	0.038	392	131	1.506	0.082	0.390	0.542
Had 2+ sexual partners in past 12 months	0.073	0.012	1,195	458	1.619	0.168	0.048	0.097
Condom use at last sex	0.079	0.038	91	33	1.332	0.483	0.003	0.154
Abstinence among never-married youth (never had sex)	0.211	0.033	264	96	1.305	0.156	0.145	0.277

Continued...

Table B.7—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.204	0.018	1,195	458	1.556	0.089	0.168	0.240
Discriminatory attitudes towards people living with HIV	0.640	0.021	1,188	456	1.471	0.032	0.599	0.681
Prevalence of female circumcision	0.196	0.024	1,037	390	1.928	0.122	0.148	0.243
Total fertility rate (last 3 years)	5.149	0.267	3,342	1,280	1.301	0.052	4.615	5.684
Neonatal mortality (last 0-9 years)	45.044	6.221	1,784	695	1.029	0.138	32.601	57.487
Postneonatal mortality (last 0-9 years)	37.488	6.093	1,791	697	1.338	0.163	25.302	49.674
Infant mortality (last 0-9 years)	82.532	8.892	1,787	697	1.091	0.108	64.748	100.317
Child mortality (last 0-9 years)	36.291	6.044	1,814	707	1.227	0.167	24.202	48.379
Under-5 mortality (last 0-9 years)	115.828	11.958	1,797	702	1.318	0.103	91.913	139.743
MEN								
Urban residence	0.273	0.035	665	254	2.000	0.127	0.204	0.342
Literacy	0.654	0.032	665	254	1.718	0.049	0.590	0.717
No education	0.129	0.022	665	254	1.662	0.168	0.086	0.172
Secondary education or higher	0.515	0.027	665	254	1.411	0.053	0.460	0.570
Never married (in union)	0.369	0.030	665	254	1.574	0.080	0.310	0.428
Currently married (in union)	0.582	0.027	665	254	1.431	0.047	0.527	0.636
Had first sexual intercourse before age 18	0.552	0.026	513	199	1.171	0.047	0.501	0.604
Knows any contraceptive method	0.999	0.001	375	148	0.627	0.001	0.997	1.001
Knows any modern contraceptive method	0.999	0.001	375	148	0.627	0.001	0.997	1.001
Want no more children	0.214	0.020	375	148	0.960	0.095	0.174	0.255
Want to delay birth at least 2 years	0.377	0.032	375	148	1.275	0.085	0.313	0.441
Ideal number of children	6.641	0.286	597	227	1.293	0.043	6.068	7.214
Had 2+ sexual partners in past 12 months	0.353	0.029	665	254	1.567	0.082	0.294	0.411
Condom use at last sex	0.169	0.034	214	90	1.333	0.203	0.100	0.237
Abstinence among never-married youth (never had sex)	0.324	0.035	218	79	1.106	0.109	0.253	0.394
Paid for sexual intercourse in past 12 months	0.043	0.013	665	254	1.602	0.293	0.018	0.068
Had HIV test and received results in past 12 months	0.170	0.020	665	254	1.383	0.118	0.130	0.211
Discriminatory attitudes towards people living with HIV	0.680	0.026	653	250	1.401	0.038	0.629	0.731

Table B.8 Sampling errors: South Eastern B sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.610	0.024	1,491	473	1.884	0.039	0.562	0.657
Access to an ITN	0.422	0.021	7,480	2,335	1.868	0.049	0.381	0.464
Use of an ITN	0.383	0.022	7,480	2,335	1.867	0.057	0.339	0.427
WOMEN								
Urban residence	0.385	0.028	1,486	441	2.190	0.072	0.330	0.441
Literacy	0.482	0.024	1,486	441	1.858	0.050	0.434	0.530
No education	0.377	0.018	1,486	441	1.430	0.048	0.341	0.413
Secondary education or higher	0.302	0.025	1,486	441	2.074	0.082	0.252	0.351
Never married (never in union)	0.352	0.019	1,486	441	1.493	0.053	0.315	0.389
Currently married (in union)	0.576	0.017	1,486	441	1.346	0.030	0.542	0.611
Married before age 18	0.322	0.018	1,133	337	1.288	0.056	0.286	0.358
Had sexual intercourse before age 18	0.827	0.018	1,133	337	1.631	0.022	0.791	0.864
Currently pregnant	0.088	0.008	1,486	441	1.110	0.093	0.072	0.105
Know any contraceptive method	0.997	0.002	858	254	1.000	0.002	0.994	1.001
Know a modern method	0.997	0.002	858	254	1.000	0.002	0.994	1.001
Currently using any method	0.433	0.020	858	254	1.181	0.046	0.393	0.473
Currently using a modern method	0.432	0.020	858	254	1.174	0.046	0.392	0.472
Currently using pill	0.048	0.010	858	254	1.326	0.201	0.029	0.068
Currently using male condoms	0.007	0.003	858	254	1.159	0.476	0.000	0.013
Currently using injectables	0.242	0.014	858	254	0.991	0.060	0.213	0.271
Currently using implants	0.132	0.011	858	254	0.951	0.083	0.110	0.154
Currently using female sterilization	0.002	0.002	858	254	0.910	0.642	0.000	0.005
Currently using withdrawal	0.001	0.001	858	254	0.994	1.007	0.000	0.003
Currently using rhythm	0.000	0.000	858	254	na	na	0.000	0.000
Using public sector source	0.837	0.026	701	204	1.844	0.031	0.786	0.889
Want no more children	0.332	0.019	858	254	1.179	0.057	0.294	0.370
Want to delay next birth at least 2 years	0.305	0.019	858	254	1.215	0.063	0.267	0.343
Ideal number of children	4.932	0.105	1,359	409	1.546	0.021	4.723	5.142
Mothers protected against tetanus for last birth	0.839	0.024	743	222	1.818	0.029	0.790	0.888
Births with skilled attendant at delivery	0.812	0.034	971	290	2.390	0.042	0.744	0.880
Received 3+ doses of SP/Fansidar	0.385	0.028	379	112	1.127	0.073	0.329	0.442
Treated with ORS	0.551	0.043	171	49	1.108	0.078	0.465	0.637
Sought medical treatment for diarrhea	0.739	0.037	171	49	1.095	0.050	0.664	0.813
Ever had vaccination card	0.931	0.034	178	50	1.741	0.036	0.863	0.999
Received BCG vaccination	0.898	0.039	178	50	1.689	0.044	0.819	0.977
Received DPT-HepB-Hib vaccination (3 doses)	0.712	0.054	178	50	1.531	0.075	0.605	0.819
Received birth dose polio 0 vaccination	0.874	0.042	178	50	1.625	0.048	0.791	0.957
Received polio vaccination (3 doses)	0.620	0.058	178	50	1.552	0.094	0.503	0.736
Received pneumococcal vaccination (3 doses)	0.717	0.051	178	50	1.469	0.071	0.615	0.819
Received rotavirus vaccination (2 doses)	0.836	0.043	178	50	1.523	0.052	0.749	0.923
Received measles-containing vaccination 1	0.671	0.049	178	50	1.350	0.073	0.573	0.769
Received yellow fever vaccination	0.635	0.048	178	50	1.281	0.075	0.540	0.731
Received all basic vaccinations (12-23 months)	0.471	0.055	178	50	1.411	0.116	0.361	0.580
Received all age-appropriate vaccinations (12-23 months)	0.429	0.054	178	50	1.406	0.126	0.320	0.537
Received all age-appropriate vaccinations (24-35 months)	0.413	0.061	176	53	1.637	0.148	0.291	0.536
Height-for-age (-2SD)	0.340	0.022	507	157	0.984	0.063	0.297	0.383
Weight-for-height (-2SD)	0.047	0.009	509	158	0.880	0.181	0.030	0.064
Weight-for-age (-2SD)	0.122	0.014	511	158	0.964	0.116	0.094	0.151
Body mass index (BMI) <18.5	0.047	0.009	678	200	1.157	0.200	0.028	0.066
Body mass index (BMI) ≥25	0.272	0.021	678	200	1.213	0.076	0.230	0.313
Prevalence of anemia (children 6-59 months)	0.765	0.023	469	144	1.126	0.029	0.720	0.810
Prevalence of anemia (women 15-49)	0.487	0.027	753	222	1.484	0.056	0.432	0.541
Ever experienced any physical violence since age 15	0.588	0.018	546	162	0.872	0.031	0.552	0.625
Ever experienced any sexual violence	0.072	0.013	546	162	1.173	0.181	0.046	0.098
Ever experienced any physical/sexual violence by husband/partner	0.542	0.033	397	106	1.306	0.060	0.477	0.607
Ever experienced any emotional/physical/sexual violence by husband/partner	0.652	0.032	397	106	1.327	0.049	0.588	0.715
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.504	0.030	397	106	1.179	0.059	0.444	0.563
Had 2+ sexual partners in past 12 months	0.062	0.008	1,486	441	1.321	0.133	0.046	0.079
Condom use at last sex	0.199	0.041	85	27	0.944	0.207	0.117	0.281
Abstinence among never-married youth (never had sex)	0.173	0.020	439	127	1.091	0.114	0.133	0.212

Continued...

Table B.8—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.211	0.015	1,486	441	1.445	0.073	0.181	0.242
Discriminatory attitudes towards people living with HIV	0.662	0.024	1,449	430	1.926	0.036	0.614	0.710
Prevalence of female circumcision	0.029	0.006	1,189	349	1.246	0.208	0.017	0.041
Total fertility rate (last 3 years)	4.526	0.345	4,089	1,219	1.542	0.076	3.837	5.215
Neonatal mortality (last 0-9 years)	43.011	8.593	2,116	628	1.427	0.200	25.825	60.198
Postneonatal mortality (last 0-9 years)	26.443	3.818	2,125	629	0.905	0.144	18.807	34.078
Infant mortality (last 0-9 years)	69.454	7.688	2,120	629	1.110	0.111	54.079	84.829
Child mortality (last 0-9 years)	35.542	5.818	2,158	636	1.382	0.164	23.906	47.179
Under-5 mortality (last 0-9 years)	102.528	10.118	2,135	635	1.311	0.099	82.292	122.764
MEN								
Urban residence	0.338	0.032	741	226	1.856	0.096	0.274	0.403
Literacy	0.694	0.030	741	226	1.785	0.044	0.634	0.755
No education	0.147	0.020	741	226	1.518	0.135	0.107	0.186
Secondary education or higher	0.514	0.035	741	226	1.894	0.068	0.445	0.584
Never married (in union)	0.459	0.025	741	226	1.342	0.054	0.410	0.508
Currently married (in union)	0.481	0.024	741	226	1.325	0.051	0.432	0.529
Had first sexual intercourse before age 18	0.479	0.025	562	171	1.181	0.052	0.429	0.529
Knows any contraceptive method	0.996	0.003	365	109	0.918	0.003	0.989	1.002
Knows any modern contraceptive method	0.996	0.003	365	109	0.918	0.003	0.989	1.002
Want no more children	0.220	0.026	365	109	1.189	0.117	0.168	0.272
Want to delay birth at least 2 years	0.247	0.027	365	109	1.185	0.109	0.193	0.301
Ideal number of children	5.314	0.172	704	218	1.167	0.032	4.971	5.657
Had 2+ sexual partners in past 12 months	0.245	0.016	741	226	1.030	0.066	0.213	0.278
Condom use at last sex	0.142	0.026	200	56	1.062	0.185	0.089	0.194
Abstinence among never-married youth (never had sex)	0.418	0.039	273	83	1.306	0.094	0.339	0.496
Paid for sexual intercourse in past 12 months	0.041	0.011	741	226	1.456	0.258	0.020	0.063
Had HIV test and received results in past 12 months	0.086	0.016	741	226	1.548	0.186	0.054	0.118
Discriminatory attitudes towards people living with HIV	0.708	0.024	696	212	1.411	0.034	0.659	0.756

na = Not applicable

Table B.9 Sampling errors: North Central sample, Liberia DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.679	0.016	2,106	2,784	1.572	0.024	0.647	0.711
Access to an ITN	0.495	0.018	10,054	13,620	1.906	0.037	0.458	0.531
Use of an ITN	0.501	0.017	10,054	13,620	1.649	0.034	0.467	0.534
WOMEN								
Urban residence	0.505	0.035	1,925	2,439	3.045	0.069	0.435	0.574
Literacy	0.400	0.034	1,925	2,439	3.012	0.084	0.333	0.468
No education	0.379	0.029	1,925	2,439	2.647	0.077	0.320	0.437
Secondary education or higher	0.322	0.032	1,925	2,439	3.043	0.101	0.257	0.387
Never married (never in union)	0.310	0.021	1,925	2,439	2.006	0.068	0.267	0.352
Currently married (in union)	0.600	0.024	1,925	2,439	2.140	0.040	0.553	0.648
Married before age 18	0.356	0.019	1,549	1,968	1.527	0.052	0.318	0.393
Had sexual intercourse before age 18	0.832	0.015	1,549	1,968	1.576	0.018	0.802	0.862
Currently pregnant	0.079	0.012	1,925	2,439	1.942	0.151	0.055	0.103
Know any contraceptive method	0.986	0.005	1,162	1,464	1.321	0.005	0.976	0.995
Know a modern method	0.986	0.005	1,162	1,464	1.321	0.005	0.976	0.995
Currently using any method	0.221	0.019	1,162	1,464	1.542	0.085	0.183	0.258
Currently using a modern method	0.212	0.019	1,162	1,464	1.598	0.091	0.173	0.250
Currently using pill	0.046	0.008	1,162	1,464	1.233	0.165	0.031	0.061
Currently using male condoms	0.006	0.003	1,162	1,464	1.394	0.542	0.000	0.012
Currently using injectables	0.119	0.012	1,162	1,464	1.237	0.099	0.096	0.143
Currently using implants	0.032	0.006	1,162	1,464	1.225	0.197	0.020	0.045
Currently using female sterilization	0.005	0.002	1,162	1,464	0.963	0.387	0.001	0.009
Currently using withdrawal	0.006	0.004	1,162	1,464	1.662	0.609	0.000	0.014
Currently using rhythm	0.003	0.002	1,162	1,464	1.226	0.713	0.000	0.006
Using public sector source	0.640	0.049	400	515	2.045	0.077	0.541	0.739
Want no more children	0.338	0.017	1,162	1,464	1.220	0.050	0.304	0.372
Want to delay next birth at least 2 years	0.224	0.019	1,162	1,464	1.523	0.083	0.187	0.261
Ideal number of children	5.066	0.101	1,786	2,290	2.081	0.020	4.864	5.269
Mothers protected against tetanus for last birth	0.842	0.012	1,114	1,400	1.140	0.015	0.817	0.867
Births with skilled attendant at delivery	0.917	0.012	1,512	1,880	1.498	0.013	0.892	0.941
Received 3+ doses of SP/Fansidar	0.468	0.027	614	733	1.310	0.058	0.413	0.522
Treated with ORS	0.461	0.052	196	220	1.336	0.112	0.358	0.565
Sought medical treatment for diarrhea	0.623	0.051	196	220	1.416	0.082	0.521	0.726
Ever had vaccination card	0.936	0.015	288	343	1.010	0.016	0.905	0.966
Received BCG vaccination	0.924	0.016	288	343	1.011	0.018	0.892	0.957
Received DPT-HepB-Hib vaccination (3 doses)	0.726	0.035	288	343	1.277	0.048	0.657	0.796
Received birth dose polio 0 vaccination	0.874	0.020	288	343	1.014	0.023	0.834	0.915
Received polio vaccination (3 doses)	0.658	0.033	288	343	1.147	0.051	0.592	0.725
Received pneumococcal vaccination (3 doses)	0.698	0.037	288	343	1.312	0.053	0.624	0.772
Received rotavirus vaccination (2 doses)	0.787	0.027	288	343	1.069	0.034	0.733	0.840
Received measles-containing vaccination 1	0.744	0.034	288	343	1.280	0.046	0.676	0.812
Received yellow fever vaccination	0.713	0.036	288	343	1.303	0.050	0.641	0.785
Received all basic vaccinations (12-23 months)	0.546	0.038	288	343	1.261	0.070	0.469	0.622
Received all age-appropriate vaccinations (12-23 months)	0.397	0.038	288	343	1.275	0.096	0.320	0.473
Received all age-appropriate vaccinations (24-35 months)	0.346	0.026	262	325	0.859	0.076	0.293	0.399
Height-for-age (-2SD)	0.337	0.020	802	1,037	1.167	0.060	0.296	0.377
Weight-for-height (-2SD)	0.022	0.005	807	1,041	1.010	0.235	0.012	0.033
Weight-for-age (-2SD)	0.093	0.013	810	1,045	1.155	0.135	0.068	0.119
Body mass index (BMI) <18.5	0.041	0.007	901	1,131	1.098	0.177	0.027	0.056
Body mass index (BMI) ≥25	0.264	0.022	901	1,131	1.478	0.083	0.220	0.308
Prevalence of anemia (children 6-59 months)	0.688	0.024	718	926	1.327	0.035	0.640	0.737
Prevalence of anemia (women 15-49)	0.373	0.018	990	1,231	1.185	0.049	0.336	0.409
Ever experienced any physical violence since age 15	0.524	0.024	746	920	1.318	0.046	0.476	0.572
Ever experienced any sexual violence	0.121	0.020	746	920	1.662	0.164	0.081	0.161
Ever experienced any physical/sexual violence by husband/partner	0.433	0.025	567	669	1.194	0.057	0.383	0.483
Ever experienced any emotional/physical/sexual violence by husband/partner	0.564	0.025	567	669	1.179	0.044	0.515	0.613
Experienced any emotional/physical/sexual violence in the last 12 months by husband/partner	0.442	0.023	567	669	1.103	0.052	0.396	0.488
Had 2+ sexual partners in past 12 months	0.040	0.007	1,925	2,439	1.640	0.184	0.025	0.054
Condom use at last sex	0.148	0.037	73	97	0.876	0.247	0.075	0.221
Abstinence among never-married youth (never had sex)	0.239	0.033	442	581	1.602	0.136	0.174	0.304

Table B.9—Continued

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Had an HIV test and received results in past 12 months	0.233	0.016	1,925	2,439	1.640	0.068	0.201	0.264
Discriminatory attitudes towards people living with HIV	0.751	0.017	1,789	2,266	1.626	0.022	0.718	0.784
Prevalence of female circumcision	0.542	0.026	1,582	2,005	2.041	0.047	0.491	0.594
Total fertility rate (last 3 years)	4.971	0.244	5,398	6,832	1.532	0.049	4.484	5.458
Neonatal mortality (last 0-9 years)	30.094	4.503	2,953	3,711	1.337	0.150	21.087	39.100
Postneonatal mortality (last 0-9 years)	26.235	2.935	2,949	3,706	0.912	0.112	20.365	32.104
Infant mortality (last 0-9 years)	56.328	5.653	2,956	3,714	1.232	0.100	45.023	67.634
Child mortality (last 0-9 years)	28.536	4.184	2,938	3,702	1.242	0.147	20.168	36.904
Under-5 mortality (last 0-9 years)	83.257	6.980	2,973	3,732	1.254	0.084	69.296	97.218
MEN								
Urban residence	0.459	0.045	830	1,107	2.605	0.098	0.369	0.550
Literacy	0.668	0.036	830	1,107	2.178	0.053	0.597	0.739
No education	0.179	0.019	830	1,107	1.422	0.106	0.141	0.217
Secondary education or higher	0.528	0.036	830	1,107	2.080	0.068	0.455	0.600
Never married (in union)	0.434	0.047	830	1,107	2.736	0.109	0.340	0.529
Currently married (in union)	0.538	0.045	830	1,107	2.613	0.084	0.448	0.629
Had first sexual intercourse before age 18	0.481	0.030	648	868	1.511	0.062	0.422	0.541
Knows any contraceptive method	0.999	0.001	481	596	0.735	0.001	0.997	1.001
Knows any modern contraceptive method	0.999	0.001	481	596	0.735	0.001	0.997	1.001
Want no more children	0.276	0.028	481	596	1.369	0.101	0.220	0.332
Want to delay birth at least 2 years	0.348	0.035	481	596	1.591	0.099	0.279	0.418
Ideal number of children	5.614	0.227	756	997	1.842	0.041	5.160	6.069
Had 2+ sexual partners in past 12 months	0.258	0.027	830	1,107	1.743	0.103	0.205	0.311
Condom use at last sex	0.206	0.046	215	286	1.640	0.221	0.115	0.297
Abstinence among never-married youth (never had sex)	0.352	0.060	266	383	2.019	0.169	0.233	0.471
Paid for sexual intercourse in past 12 months	0.034	0.007	830	1,107	1.095	0.203	0.020	0.048
Had HIV test and received results in past 12 months	0.227	0.032	830	1,107	2.173	0.140	0.163	0.290
Discriminatory attitudes towards people living with HIV	0.759	0.021	779	1,048	1.382	0.028	0.717	0.802

Table B.10 Sampling errors for adult and maternal mortality rates, Liberia DHS 2019-20

Table B.20 Sampling errors for adult and maternal mortality rates, Liberia DHS 2019-20								
Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (NW)			Lower (R-2SE)	Upper (R+2SE)
WOMEN								
Adult mortality rates								
15-19	2.530	0.553	15,233	15,104	1.323	0.219	1.424	3.636
20-24	3.357	0.586	16,481	16,195	1.244	0.174	2.186	4.528
25-29	4.252	0.726	16,319	15,581	1.381	0.171	2.800	5.704
30-34	5.014	0.732	15,480	14,352	1.209	0.146	3.550	6.478
35-39	5.997	1.104	12,500	11,315	1.491	0.184	3.789	8.206
40-44	7.440	1.229	8,503	7,365	1.172	0.165	4.982	9.897
45-49	9.396	1.814	5,355	4,382	1.203	0.193	5.769	13.023
15-49 (age-adjusted)	4.760	0.295	89,871	84,294	1.286	0.062	4.171	5.349
Adult mortality probabilities								
³⁵ Q ₁₅ 2019-20 LDHS	173.097	10.745	89,871	84,294	1.650	0.062	151.607	194.586
³⁵ Q ₁₅ 2013 LDHS	175.832	14.755	107,173	105,273	1.855	0.084	146.323	205.341
³⁵ Q ₁₅ 2007 LDHS	163.812	12.833	73,432	74,086	1.615	0.078	138.146	189.477
Maternal mortality rates								
15-19	0.508	0.336	15,233	15,104	1.830	0.661	0.000	1.179
20-24	1.634	0.471	16,481	16,195	1.486	0.288	0.693	2.576
25-29	0.782	0.292	16,319	15,581	1.303	0.374	0.198	1.365
30-34	1.091	0.323	15,480	14,352	1.171	0.296	0.444	1.737
35-39	1.398	0.698	12,500	11,315	1.982	0.499	0.002	2.794
40-44	1.471	0.481	8,503	7,365	1.079	0.327	0.508	2.434
45-49	0.737	0.348	5,355	4,382	0.772	0.472	0.042	1.432
15-49 (age-adjusted)	1.068	0.177	89,871	84,294	1.465	0.166	0.714	1.421
Maternal mortality ratio (MMR) 2019-20	742.434	128.857	89,871	84,294	1.465	0.174	484.720	1,000.148
Pregnancy-related mortality ratio (PRMR) 2019-20 LDHS	913.497	137.722	89,871	84,294	1.436	0.151	638.054	1,188.941
Pregnancy-related mortality ratio (PRMR) 2013 LDHS	1,072.150	147.836	107,173	105,273	1.396	0.138	776.478	1,367.823
Pregnancy-related mortality ratio (PRMR) 2007 LDHS	993.864	158.061	73,432	74,086	1.379	0.159	677.742	1,309.985
MEN								
Adult mortality rates								
15-19	3.634	0.808	14,480	14,253	1.597	0.222	2.018	5.249
20-24	3.635	0.884	15,973	15,457	1.804	0.243	1.868	5.403
25-29	4.991	0.874	16,296	15,352	1.515	0.175	3.242	6.739
30-34	5.322	0.861	14,850	13,707	1.369	0.162	3.600	7.044
35-39	5.616	0.920	12,298	11,061	1.251	0.164	3.776	7.457
40-44	8.293	1.695	8,465	7,448	1.561	0.204	4.902	11.683
45-49	10.488	2.129	5,319	4,707	1.392	0.203	6.230	14.745
15-49 (age-adjusted)	5.325	0.406	87,681	81,985	1.505	0.076	4.514	6.136
Adult mortality probabilities								
³⁵ Q ₁₅ 2019-20 LDHS	189.465	14.574	87,681	81,985	2.218	0.077	160.317	218.612
³⁵ Q ₁₅ 2013 LDHS	150.802	11.145	99,793	98,447	1.720	0.074	128.511	173.093
³⁵ Q ₁₅ 2007 LDHS	185.835	16.262	69,702	70,793	1.741	0.088	153.311	218.358

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Liberia DHS 2019-20

Age	Female		Male		Age	Female		Male	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	602	2.9	593	3.0	37	222	1.1	208	1.1
1	544	2.6	522	2.7	38	230	1.1	208	1.1
2	550	2.7	524	2.7	39	198	1.0	237	1.2
3	621	3.0	689	3.5	40	284	1.4	264	1.3
4	641	3.1	609	3.1	41	97	0.5	138	0.7
5	560	2.7	652	3.3	42	201	1.0	191	1.0
6	613	3.0	665	3.4	43	126	0.6	170	0.9
7	645	3.1	667	3.4	44	123	0.6	140	0.7
8	622	3.0	564	2.9	45	166	0.8	218	1.1
9	531	2.6	553	2.8	46	112	0.5	107	0.5
10	723	3.5	642	3.3	47	116	0.6	133	0.7
11	530	2.6	553	2.8	48	151	0.7	164	0.8
12	655	3.2	619	3.2	49	82	0.4	101	0.5
13	639	3.1	554	2.8	50	204	1.0	129	0.7
14	562	2.7	549	2.8	51	186	0.9	126	0.6
15	338	1.6	487	2.5	52	197	1.0	133	0.7
16	409	2.0	466	2.4	53	120	0.6	95	0.5
17	310	1.5	341	1.7	54	125	0.6	81	0.4
18	354	1.7	349	1.8	55	127	0.6	95	0.5
19	419	2.0	365	1.9	56	107	0.5	84	0.4
20	381	1.9	356	1.8	57	93	0.5	92	0.5
21	378	1.8	292	1.5	58	78	0.4	52	0.3
22	331	1.6	267	1.4	59	84	0.4	50	0.3
23	336	1.6	273	1.4	60	201	1.0	136	0.7
24	262	1.3	236	1.2	61	51	0.2	87	0.4
25	344	1.7	285	1.5	62	76	0.4	99	0.5
26	279	1.4	225	1.1	63	51	0.2	62	0.3
27	312	1.5	290	1.5	64	42	0.2	56	0.3
28	291	1.4	201	1.0	65	124	0.6	104	0.5
29	317	1.5	265	1.4	66	24	0.1	35	0.2
30	314	1.5	275	1.4	67	47	0.2	47	0.2
31	212	1.0	176	0.9	68	47	0.2	40	0.2
32	270	1.3	203	1.0	69	18	0.1	54	0.3
33	241	1.2	215	1.1	70+	594	2.9	426	2.2
34	224	1.1	220	1.1					
35	288	1.4	305	1.6	Total	20,584	100.0	19,618	100.0
36	231	1.1	208	1.1					

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Liberia DHS 2019-20

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	3,108	na	na	na
15-19	1,830	1,653	20.5	90.3
20-24	1,689	1,525	18.9	90.3
25-29	1,543	1,391	17.2	90.2
30-34	1,260	1,134	14.1	90.0
35-39	1,169	1,059	13.1	90.6
40-44	831	743	9.2	89.4
45-49	629	560	6.9	89.1
50-54	833	na	na	na
15-49	8,951	8,065	100.0	90.1

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, number and percent distribution of interviewed men age 15-59, and percentage of eligible men who were interviewed (weighted), by 5-year age groups, Liberia DHS 2019-20

Age group	Household population of men age 10-64	Interviewed men age 15-59		Percentage of eligible men interviewed
		Number	Percentage	
10-14	1,578	na	na	na
15-19	977	922	21.7	94.4
20-24	675	626	14.7	92.7
25-29	598	536	12.6	89.6
30-34	540	502	11.8	93.0
35-39	561	497	11.7	88.6
40-44	444	414	9.8	93.3
45-49	382	337	7.9	88.2
50-54	278	258	6.1	92.8
55-59	173	155	3.6	89.8
60-64	246	na	na	na
15-59	4,630	4,249	100.0	91.8

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Liberia DHS 2019-20

Subject	Percentage with information missing	Number of cases
Day only (births in the 15 years preceding the survey)	0.50	14,873
Month only (births in the 15 years preceding the survey)	0.34	14,873
Month and year (births in the 15 years preceding the survey)	0.05	14,873
Age at death (deceased children born in the 15 years preceding the survey)	0.00	1,475
Age/date at first union ¹ (ever-married women age 15-49)	0.00	4,936
Age/date at first union (ever-married men age 15-59)	0.00	2,548
Respondent's education (all women age 15-49)	0.00	8,065
Respondent's education (all men age 15-59)	0.00	4,249
Diarrhea in last 2 weeks (living children age 0-59 months)	3.51	4,866
Height (living children age 0-59 months from the Biomarker Questionnaire)	7.38	3,062
Weight (living children age 0-59 months from the Biomarker Questionnaire)	7.35	3,062
Height or weight (living children age 0-59 months from the Biomarker Questionnaire)	7.38	3,062
Height (women age 15-49 from the Biomarker Questionnaire)	8.53	4,787
Weight (women age 15-49 from the Biomarker Questionnaire)	8.50	4,787
Height or weight (women age 15-49 from the Biomarker Questionnaire)	8.53	4,787
Anemia (living children age 6-59 months from the Biomarker Questionnaire)	9.03	2,775
Anemia (all women from the Biomarker Questionnaire)	9.87	4,787

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Liberia DHS 2019-20

Calendar year	Number of births			Percentage with year and month of birth given			Sex ratio at birth ¹			Calendar year ratio ²		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2019	991	51	1,042	100.0	100.0	100.0	102.8	153.5	104.9	na	na	na
2018	971	62	1,034	100.0	98.2	99.9	93.6	88.4	93.3	na	na	na
2017	865	98	963	100.0	100.0	100.0	93.9	121.0	96.3	89.0	132.7	92.1
2016	972	85	1,057	100.0	100.0	100.0	103.1	118.6	104.2	106.0	86.2	104.1
2015	969	100	1,069	99.9	100.0	99.9	101.8	117.9	103.2	100.9	111.0	101.7
2014	950	94	1,044	100.0	100.0	100.0	121.2	104.3	119.5	98.1	83.5	96.6
2013	968	126	1,094	99.8	98.0	99.6	99.7	116.4	101.5	100.5	125.9	102.9
2012	976	106	1,082	99.8	95.6	99.4	107.9	97.3	106.8	105.4	96.5	104.4
2011	885	94	979	99.8	99.1	99.8	91.8	194.3	98.4	99.5	80.0	97.2
2010	802	129	931	99.7	97.9	99.5	115.5	106.1	114.2	88.6	139.8	93.3
2015-2019	4,768	397	5,165	100.0	99.7	100.0	99.1	117.4	100.4	na	na	na
2010-2014	4,580	550	5,130	99.8	98.0	99.6	106.6	117.4	107.7	na	na	na
2005-2009	4,006	527	4,533	99.5	96.8	99.2	97.2	130.6	100.6	na	na	na
2000-2004	2,614	557	3,171	99.3	95.3	98.6	99.3	109.7	101.1	na	na	na
<2000	2,376	925	3,300	98.6	97.1	98.2	93.2	143.5	105.1	na	na	na
All	18,344	2,956	21,300	99.6	97.2	99.2	99.7	125.7	103.0	na	na	na

na = Not applicable

¹ (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively

² [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at age 0-6 days, for 5-year periods preceding the survey (weighted), Liberia DHS 2019-20

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	104	98	75	86	363
1	25	29	32	23	109
2	19	11	4	14	49
3	7	6	8	9	30
4	4	6	5	2	17
5	4	4	4	1	12
6	1	4	0	1	6
7	10	17	10	6	44
8	2	0	1	1	4
9	1	0	5	0	6
10	2	0	0	0	3
11	0	0	0	0	0
12	3	0	0	0	3
13	0	0	0	0	1
14	5	3	2	10	20
15	1	1	3	1	6
16	0	2	0	13	15
17	0	3	0	0	3
20	0	0	0	1	1
21	4	3	4	4	15
23	2	0	0	2	4
24	1	0	0	0	1
25	0	0	0	1	1
28	0	0	4	0	4
30	0	1	2	0	2
Total 0-30	194	189	160	175	719
Percentage early neonatal ¹	84	84	81	77	81

¹ 0-6 days / 0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and percentage of infant deaths reported to occur under age 1 month, for 5-year periods preceding the survey (weighted), Liberia DHS 2019-20

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 ^a	194	189	160	175	719
1	11	34	24	10	80
2	6	17	31	16	70
3	13	23	23	25	84
4	8	9	17	20	55
5	18	14	13	10	55
6	14	14	24	22	75
7	14	13	11	24	62
8	10	7	10	14	41
9	12	19	13	23	67
10	7	8	2	4	21
11	5	14	3	7	29
12	11	21	20	22	73
13	3	9	3	2	17
14	12	7	6	7	33
15	8	5	7	13	33
16	1	4	9	3	17
17	0	4	2	2	8
18	4	14	6	23	47
19	2	3	5	2	12
20	1	1	2	2	7
21	7	7	1	0	15
22	4	0	0	4	8
23	1	4	0	0	5
Total 0-11	313	360	332	352	1,356
Percentage neonatal ¹	62.1	52.5	48.3	49.8	53.0

^a Includes deaths under 1 month reported in days

¹ Under 1 month/under 1 year

Table C.7 Standardization exercise results from anthropometry training

Trainees' precision and accuracy for height measurements taken during the standardization exercise for anthropometry, Liberia DHS 2019-20

Measurer	Standardization exercise ¹		Re-standardization exercise ¹	
	Trainees' precision ²	Trainees' accuracy ²	Trainees' precision ²	Trainees' accuracy ²
Trainee 1	0.32	0.70	na	na
Trainee 2	0.43	0.37	na	na
Trainee 3	0.80	0.93	0.32	0.67
Trainee 4	0.67	0.33	na	na
Trainee 5	0.20	0.50	na	na
Trainee 6	0.44	0.92	2.44	1.55
Trainee 7	0.47	0.70	na	na
Trainee 8	0.38	0.63	na	na
Trainee 9	0.41	0.57	na	na
Trainee 10	0.49	0.75	na	na
Trainee 11	0.79	0.59	0.62	0.52
Trainee 12	0.54	0.64	na	na
Trainee 13	0.64	0.61	0.58	0.56
Trainee 14	0.29	0.88	0.34	0.77
Trainee 15	0.02	0.97	0.35	0.87
Trainee 16	0.30	0.69	na	na
Trainee 17	0.38	0.91	0.55	0.88
Trainee 18	0.49	1.01	na	na
Trainee 19	0.43	0.60	na	na
Trainee 20	0.55	0.49	na	na
Trainee 21	0.15	0.61	na	na
Trainee 22	0.42	0.36	na	na
Trainee 23	0.50	0.59	na	na
Trainee 24	0.48	0.79	na	na
Trainee 25	0.25	0.48	na	na
Trainee 26	0.24	0.36	na	na
Average	0.43	0.65	0.74	0.83

na = Not applicable

¹ Nine children were measured in the first standardization group, while 10 children were measured in the second standardization group and re-standardization. In all standardization exercises, the participating children were measured twice.

² Trainees' precision and accuracy are defined in terms of a technical error of measurement (TEM), which is calculated as $\sqrt{\sum(D^2)/(2N)}$, where D is the difference in height and N is the number of repeat measurements. An acceptable TEM according to WHO-UNICEF is a TEM of <0.6 cm for precision and <0.8 cm for accuracy.

Table C.8. Height and weight data completeness and quality for children

Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing data for height, weight, or month or year of birth; among children with complete height and age, percentage with implausible data for height-for-age; among children with complete weight and height, percentage with implausible data for weight-for-height; among children with complete weight and age, percentage with implausible data for weight-for-age; and among all children under age 5 who were eligible for anthropometry, percentage with valid data for height-for-age, weight-for-height, or weight-for-age, according to background characteristics (unweighted), Liberia DHS 2019-20

Background characteristic	Percentage with data incomplete or missing for:					Percentage with implausible data for:					Percentage with valid data for ^a :				
	Height ¹	Weight ²	Age in months ³	Number of children	Height-for-age ⁴	Number of children with complete height and age ⁵	Weight-for-height ⁶	Number of children with complete weight and height	Weight-for-age ⁷	Number of children with complete weight and age ⁵	Height-for-age	Weight-for-height	Weight-for-age	Number of children	
Age in months															
<6	4.4	4.1	0.0	295	2.8	282	1.1	282	1.1	283	92.9	94.6	94.9	295	
6-8	4.5	4.0	0.5	200	1.0	191	0.5	191	0.0	192	94.5	95.0	96.0	200	
9-11	5.3	5.3	0.7	151	0.7	143	0.0	143	0.0	143	94.0	94.7	94.7	151	
12-17	2.8	2.8	0.0	319	1.0	310	0.3	310	0.3	310	96.2	96.9	96.9	319	
18-23	4.3	4.3	0.0	277	0.4	265	0.4	265	0.0	265	95.3	95.3	95.7	277	
24-35	6.6	6.6	0.3	592	0.7	552	0.4	553	0.2	552	92.6	93.1	93.1	592	
36-47	5.4	5.4	0.7	669	0.3	632	0.2	633	0.0	632	94.2	94.5	94.5	669	
48-59	5.5	5.5	0.3	635	0.5	600	0.8	600	0.2	600	94.0	93.7	94.3	635	
Sex															
Male	5.5	5.4	0.4	1,561	1.2	1,474	0.5	1,475	0.1	1,476	93.3	94.0	94.4	1,561	
Female	4.8	4.8	0.3	1,577	0.5	1,501	0.5	1,502	0.3	1,501	94.7	94.8	94.9	1,577	
Mother's interview status															
Interviewed	3.6	3.6	0.0	2,556	0.9	2,463	0.4	2,463	0.2	2,465	95.5	95.9	96.2	2,556	
Not interviewed but in household	37.6	37.6	9.4	85	0.0	53	0.0	53	0.0	53	62.4	62.4	62.4	85	
Not interviewed and not in the household ⁸	7.2	7.2	0.6	497	0.2	459	0.7	461	0.0	459	92.2	92.2	92.4	497	
County															
Bomi	6.3	5.6	0.0	143	1.5	134	0.0	134	0.0	135	92.3	93.7	94.4	143	
Bong	1.1	1.1	0.0	275	0.4	272	0.0	272	0.0	272	98.5	98.9	98.9	275	
Gbarpolu	4.1	4.1	0.0	148	0.0	142	0.0	142	0.0	142	95.9	95.9	95.9	148	
Grand Bassa	4.6	4.6	0.0	240	0.0	229	0.0	229	0.0	229	95.4	95.4	95.4	240	
Grand Cape Mount	8.5	8.5	0.5	189	1.2	173	1.7	173	0.0	173	90.5	89.9	91.5	189	
Grand Gedeh	0.7	0.7	0.0	139	0.7	138	1.4	138	0.0	138	98.6	97.8	99.3	139	
Grand Kru	3.3	3.3	0.0	182	1.7	176	0.0	176	0.6	176	95.1	96.7	96.2	182	
Lofa	11.9	11.9	0.5	218	1.0	192	0.0	192	0.0	192	87.2	88.1	88.1	218	
Margibi	3.3	3.3	0.0	182	1.1	176	0.6	176	1.1	176	95.6	96.2	95.6	182	
Maryland	0.0	0.0	0.0	186	0.5	186	0.0	186	0.0	186	99.5	100.0	100.0	186	
Montserrado	12.6	12.6	1.1	366	0.6	318	0.6	320	0.3	318	86.3	86.9	86.6	366	
Nimba	3.4	3.4	0.0	358	1.4	346	0.9	346	0.0	346	95.3	95.8	96.6	358	
River Cess	4.0	4.0	1.1	176	1.2	169	0.6	169	1.2	169	94.9	95.5	94.9	176	
River Gee	4.5	3.8	1.9	156	0.0	149	1.3	149	0.0	150	95.5	94.2	96.2	156	
Sinoe	2.8	2.8	0.0	180	0.6	175	0.0	175	0.0	175	96.7	97.2	97.2	180	
Region															
North Western	6.5	6.3	0.2	480	0.9	449	0.7	449	0.0	450	92.7	92.9	93.8	480	
South Central	8.0	8.0	0.5	788	0.6	723	0.4	725	0.4	723	91.2	91.6	91.4	788	
South Eastern A	2.6	2.6	0.4	495	0.8	482	0.6	482	0.4	482	96.6	96.8	97.0	495	
South Eastern B	2.5	2.3	0.6	524	0.8	511	0.4	511	0.2	512	96.8	97.1	97.5	524	
North Central	4.8	4.8	0.1	851	1.0	810	0.4	810	0.0	810	94.2	94.8	95.2	851	
Mother's education															
No education	5.9	5.8	0.5	1,076	1.2	1,013	0.6	1,013	0.3	1,014	93.0	93.6	94.0	1,076	
Elementary	4.0	3.9	0.2	849	0.6	815	0.4	815	0.1	816	95.4	95.6	96.0	849	
Junior high	3.6	3.6	0.2	413	1.3	398	0.3	398	0.5	398	95.2	96.1	95.9	413	
Senior high	3.2	3.2	0.0	252	0.0	244	0.0	244	0.0	244	96.8	96.4	96.8	252	
Higher	9.8	9.8	0.0	51	2.2	46	0.0	46	0.0	46	88.2	90.2	90.2	51	

Continued...

Table C.8—Continued

Background characteristic	Percentage with data incomplete or missing for:				Percentage with implausible data for:				Percentage with valid data for ⁸ :					
	Height ¹	Weight ²	Age in months ³	Number of children	Height-for-age ⁴	Number of children with complete height and age ⁵	Weight-for-height ⁶	Number of children with complete weight and height	Weight-for-age ⁷	Height-for-age	Weight-for-height	Weight-for-age	Number of children	
Measurer														
5015	3.5	3.5	0.0	173	1.2	167	0.0	167	0.6	167	95.4	96.5	96.0	173
5025	4.0	4.0	0.0	126	0.8	121	0.8	121	0.0	121	95.2	95.2	96.0	126
5026	0.0	0.0	0.0	4	0.0	4	0.0	4	0.0	4	100.0	100.0	100.0	4
5035	1.0	1.0	0.0	210	0.0	208	1.0	208	0.0	208	99.0	98.1	99.0	210
5036	0.0	0.0	0.0	1	0.0	1	0.0	1	0.0	1	100.0	100.0	100.0	1
5045	4.0	3.2	2.4	124	0.8	119	0.0	119	0.0	120	95.2	96.0	96.8	124
5046	3.8	3.8	0.0	53	0.0	51	0.0	51	0.0	51	96.2	96.2	96.2	53
5055	1.9	1.9	0.0	162	0.0	159	0.6	159	0.0	159	98.1	97.5	98.1	162
5056	0.0	0.0	0.0	2	0.0	2	0.0	2	0.0	2	100.0	100.0	100.0	2
5065	1.5	1.5	0.0	194	0.0	191	0.0	191	0.0	191	98.5	98.5	98.5	194
5066	0.0	0.0	0.0	7	0.0	7	0.0	7	0.0	7	100.0	100.0	100.0	7
5075	6.3	6.3	0.0	192	6.3	180	0.0	180	0.0	180	93.8	93.8	93.8	192
5076	0.0	0.0	0.0	2	0.0	2	0.0	2	0.0	2	100.0	100.0	100.0	2
5085	5.1	5.1	0.0	176	0.6	167	0.6	167	0.0	167	94.3	94.3	94.9	176
5095	4.3	4.3	0.6	162	1.3	155	1.3	155	0.0	155	94.4	94.4	95.7	162
5096	0.0	0.0	0.0	37	0.0	37	0.0	37	0.0	37	100.0	100.0	100.0	37
5105	6.7	6.2	0.0	193	2.2	180	0.6	180	1.1	181	91.2	92.7	92.7	193
5115	1.7	1.7	1.2	173	0.6	170	0.6	170	0.6	170	97.7	97.7	97.7	173
5116	50.0	50.0	0.0	2	0.0	1	0.0	1	0.0	1	50.0	50.0	50.0	2
5125	9.0	9.0	0.0	144	3.1	131	1.5	131	1.5	131	88.2	89.6	89.6	144
5126	0.0	0.0	0.0	4	0.0	4	0.0	4	0.0	4	100.0	100.0	100.0	4
5135	7.8	7.8	0.0	192	0.6	177	0.0	177	0.0	177	91.7	92.2	92.2	192
5136	0.0	0.0	0.0	1	0.0	1	0.0	1	0.0	1	100.0	100.0	100.0	1
5145	13.8	13.8	1.3	152	0.0	131	0.0	131	0.0	131	86.2	86.2	86.2	152
5146	0.0	0.0	0.0	1	0.0	1	0.0	1	0.0	1	100.0	100.0	100.0	1
5155	7.9	7.9	1.8	164	0.0	149	0.0	151	0.0	149	90.9	92.1	90.9	164
5156	20.0	20.0	0.0	10	0.0	8	0.0	8	0.0	8	80.0	80.0	80.0	10
5165	5.7	5.7	0.0	123	0.0	116	0.0	116	0.0	116	94.3	94.3	94.3	123
5166	11.4	11.4	0.0	132	1.7	117	0.9	117	0.0	117	87.1	87.9	88.6	132
5175	0.0	0.0	0.0	45	0.0	45	0.0	45	0.0	45	100.0	100.0	100.0	45
5176	2.3	2.3	0.0	177	2.9	173	1.2	173	0.0	173	94.9	96.6	97.7	177
Total	5.1	5.1	0.4	3,138	0.8	2,975	0.5	2,977	0.2	2,977	94.0	94.4	94.7	3,138

¹ Child's height in centimeters is missing, child was not present, measurement of child was refused, and "other" result codes.

² Child's weight in kilograms is missing, child was not present, measurement of child was refused, and "other" result codes.

³ Incomplete date of birth; a complete date of birth is month/day/year or month/year.

⁴ Implausible cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete height and month/year of birth data.

⁵ Complete age is calculated from month and year of birth.

⁶ Implausible cases for weight-for-height are defined as more than 5 SD above or below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete weight and height data.

⁷ Implausible cases for weight-for-age are defined as more than 5 SD above or 6 SD below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete weight and month/year of birth data.

⁸ No missing data, incomplete data, or implausible data

⁹ Includes children whose mothers are deceased

Table C.9 Height measurements from random subsample of measured children

Differences in first height measurement and second height measurement among children under age 5 (0-59 months) randomly selected and remeasured, according to region and measurer (unweighted), Liberia DHS 2019-20

Region and measurer	Median difference in height measurements ¹	Percentage of height measurements with a difference >1 cm	Number of children randomly selected and remeasured
Region			
North Western	0.1	8.0	87
South Central	0.1	4.6	151
South Eastern A	0.1	7.2	83
South Eastern B	0.1	6.0	84
North Central	0.1	2.9	105
Measurer			
5015	0.1	0.0	29
5025	0.1	7.1	28
5026	*	*	1
5035	0.1	3.2	31
5045	0.1	17.4	23
5046	*	*	9
5055	0.1	9.4	32
5065	0.2	5.6	36
5075	0.2	9.1	33
5085	0.1	0.0	30
5095	0.1	0.0	23
5096	*	*	4
5105	0.2	9.1	33
5115	0.1	12.9	31
5125	0.1	3.0	33
5126	*	*	1
5135	0.1	6.9	29
5136	*	*	1
5145	0.1	0.0	27
5155	0.0	0.0	27
5165	*	*	7
5166	0.1	6.7	15
5175	*	*	6
5176	0.1	0.0	21
Total	0.1	5.5	510

Note: An asterisk indicates that a figure is based on fewer than 10 children, which is the minimum number of children needed to calculate technical error of measurement.

¹ Median absolute difference between measurers' first and second height measurement in centimeters.

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2019-20 LIBERIA DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

LAST UPDATED: 1-Oct-19

GOVERNMENT OF LIBERIA
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

IDENTIFICATION												
PLACE NAME _____												
NAME OF HOUSEHOLD HEAD _____												
CLUSTER NUMBER				<table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
HOUSEHOLD NUMBER				<table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
HOUSEHOLD SELECTED FOR MAN'S SURVEY AND BIOMARKERS? (1=YES, 2=NO)												
INTERVIEWER VISITS												
	1	2	3	FINAL VISIT								
DATE	_____	_____	_____	DAY MONTH YEAR INT. NO. RESULT*								
INTERVIEWER'S NAME	_____	_____	_____	<table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
RESULT*	_____	_____	_____	<table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
NEXT VISIT: DATE TIME	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
*RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ (SPECIFY)				TOTAL PERSONS IN HOUSEHOLD TOTAL ELIGIBLE WOMEN TOTAL ELIGIBLE MEN LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE								
SUPERVISOR NAME _____ <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table> NUMBER _____												

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INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Liberia Institute of Statistics and Geo-Information Services. We are conducting a survey about health and other topics all over Liberia. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES
TO BE INTERVIEWED .. 1
↓

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED .. 2 → END

100	RECORD THE TIME.	HOURS	<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				
		MINUTES	<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	IF HOUSEHOLD SELECTED FOR MAN'S SURVEY CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS 		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

2A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed?	YES ☐	→ ADD TO TABLE	NO ☐
2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?	YES ☐	→ ADD TO TABLE	NO ☐
2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?	YES ☐	→ ADD TO TABLE	NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD	07 = PARENT-IN-LAW
02 = WIFE OR HUSBAND	08 = BROTHER OR SISTER
03 = SON OR DAUGHTER	09 = OTHER RELATIVE
04 = SON-IN-LAW OR DAUGHTER-IN-LAW	10 = ADOPTED/FOSTER/STEPCHILD
05 = GRANDCHILD	11 = NOT RELATED
06 = PARENT	98 = DON'T KNOW

IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 0-4 YEARS
SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
12	13	14	15	16	17	18	19	20
Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2019-2020 school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
Y N DK 1 2 8 ↓ GO TO 14		Y N DK 1 2 8 ↓ GO TO 16		Y N 1 2 ↓ NEXT LINE	LEVEL GRADE 1 2 ↓ NEXT LINE	Y N 1 2 ↓ NEXT LINE	LEVEL GRADE 1 2 ↓ NEXT LINE	
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		
1 2 8 ↓ GO TO 14		1 2 8 ↓ GO TO 16		1 2 ↓ NEXT LINE		1 2 ↓ NEXT LINE		

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL

1 = ELEMENTARY (GRADES 1-6)
 2 = JUNIOR HIGH (GRADES 7-9)
 3 = SENIOR HIGH (GRADES 10-12)
 4 = HIGHER
 6 = PRESCHOOL/NURSERY/KINDERGARTEN
 8 = DON'T KNOW

GRADE

00 = LESS THAN 1 GRADE COMPLETED AT THAT LEVEL
 (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
 98 = DON'T KNOW

SELECTION OF ONE CHILD FOR CHILD LABOR/CHILD DISCIPLINE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES																																																																		
21	CHECK COL. 7 IN THE LIST OF HOUSEHOLD MEMBERS AND WRITE THE TOTAL NUMBER OF CHILDREN AGE 1-17 YEARS.	TOTAL NUMBER <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>																																																																		
22	CHECK THE NUMBER OF CHILDREN AGE 1-17 YEARS IN Q. 21: ZERO <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table> → SKIP TO Q. 60 TWO OR MORE <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table> ↓ ONE <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table> → SKIP TO Q. 29 AND RECORD THE RANK NUMBER AS '1', ENTER THE LINE NUMBER, CHILD'S NAME AND AGE																																																																			
22A	LIST EACH OF THE CHILDREN AGE 1-17 YEARS BELOW IN THE ORDER THEY APPEAR IN THE LIST OF HOUSEHOLD MEMBERS. DO NOT INCLUDE OTHER HOUSEHOLD MEMBERS OUTSIDE OF THE AGE RANGE 1-17 YEARS. RECORD THE LINE NUMBER, NAME, SEX, AND AGE FOR EACH CHILD. <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width:10%;">23. RANK NUMBER</th> <th style="width:10%;">24. HH LINE NUMBER</th> <th style="width:30%;">25. NAME FROM COL. 2</th> <th colspan="2" style="width:10%;">26. SEX FROM COL. 4</th> <th style="width:10%;">27. AGE FROM COL. 7</th> </tr> <tr> <th>RANK</th> <th>LINE</th> <th>NAME</th> <th>M</th> <th>F</th> <th>AGE</th> </tr> </thead> <tbody> <tr><td>1</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>3</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>4</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>5</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>6</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>7</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>8</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> <tr><td>9</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td><td>_____</td><td>1</td><td>2</td><td><table border="1" style="display: inline-table; width: 40px; height: 20px;"></table></td></tr> </tbody> </table>		23. RANK NUMBER	24. HH LINE NUMBER	25. NAME FROM COL. 2	26. SEX FROM COL. 4		27. AGE FROM COL. 7	RANK	LINE	NAME	M	F	AGE	1	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	3	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	4	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	5	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	6	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	7	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	8	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	9	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	_____	1	2	<table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>
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SELECTION OF ONE CHILD FOR CHILD LABOR/CHILD DISCIPLINE

28 LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE CHILDREN **Q.21** ON THE PREVIOUS PAGE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE RANK NUMBER OF THE CHILD SELECTED FOR THE CHILD LABOUR/CHILD DISCIPLINE QUESTIONS FROM THE BOX OF ELIGIBLE CHILDREN IN **Q. 23**. WRITE THE NAME, AGE, LINE NUMBER, AND RANK NUMBER OF THE SELECTED CHILD IN THE SPACE BELOW THE TABLE.

EXAMPLE: THE HOUSEHOLD NUMBER IS '7126' AND **Q. 21** SHOWS THAT THERE ARE THREE ELIGIBLE CHILDREN AGE 1-17 IN THE HOUSEHOLD. SINCE THE LAST DIGIT OF THE HOUSEHOLD NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE CHILDREN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO **Q. 23** AND FIND THE SECOND CHILD. WRITE THE NAME, AGE, LINE NUMBER, AND RANK NUMBER OF THE CHILD IN THE SPACE BELOW THE TABLE.

LAST DIGIT OF THE HOUSE- HOLD NUMBER	TOTAL NUMBER OF ELIGIBLE CHILDREN AGE 1-17 IN HOUSEHOLD FROM Q. 21							
	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

29 NAME
OF SELECTED CHILD _____

AGE
OF SELECTED CHILD

HH LINE NUMBER
OF SELECTED CHILD

RANK NUMBER
OF SELECTED CHILD

CHILD LABOR

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP															
30	CHECK THE AGE OF THE SELECTED CHILD FROM Q. 29: 5-17 YEARS ☐ 1-4 YEARS ☐		→ 51															
31	Now I would like to ask about any work children in this household may do. Since last (DAY OF THE WEEK), did (NAME) do any of the following activities, even for only one hour? a) Did (NAME) do any work or help on (his/her) own or the household's plot/farm/food garden or looked after animals? For example, growing farm produce, harvesting, or feeding, grazing, milking animals? b) Did (NAME) help in family business or relative's business with or without pay, or run (his/her) own business? c) Did (NAME) produce or sell articles, handicrafts, clothes, food or agricultural products? d) Since last (DAY OF THE WEEK), did (NAME) engage in any other activity in return for income in cash or in kind, even for only one hour? IF NO PROBE: Please include any activity (NAME) performed as a regular or casual employee, self-employed or employer; or as an unpaid family worker helping out in household business or farm.	<table> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>a) WORKED ON PLOT/ FARM/FOOD GARDEN/ LOOKED AFTER ANIMALS</td><td>1</td><td>2</td></tr> <tr> <td>b) HELPED IN FAMILY / RELATIVE'S BUSINESS/OWN BUSINESS</td><td>1</td><td>2</td></tr> <tr> <td>c) PRODUCE / SELL ARTICLES / HANDICRAFTS / CLOTHES / FOOD OR AGRICULTURAL PRODUCTS . . .</td><td>1</td><td>2</td></tr> <tr> <td>d) ANY OTHER ACTIVITY</td><td>1</td><td>2</td></tr> </tbody> </table>		YES	NO	a) WORKED ON PLOT/ FARM/FOOD GARDEN/ LOOKED AFTER ANIMALS	1	2	b) HELPED IN FAMILY / RELATIVE'S BUSINESS/OWN BUSINESS	1	2	c) PRODUCE / SELL ARTICLES / HANDICRAFTS / CLOTHES / FOOD OR AGRICULTURAL PRODUCTS . . .	1	2	d) ANY OTHER ACTIVITY	1	2	
	YES	NO																
a) WORKED ON PLOT/ FARM/FOOD GARDEN/ LOOKED AFTER ANIMALS	1	2																
b) HELPED IN FAMILY / RELATIVE'S BUSINESS/OWN BUSINESS	1	2																
c) PRODUCE / SELL ARTICLES / HANDICRAFTS / CLOTHES / FOOD OR AGRICULTURAL PRODUCTS . . .	1	2																
d) ANY OTHER ACTIVITY	1	2																
32	CHECK 31, a) THROUGH d) AT LEAST ONE 'YES' ☐ ALL ANSWERS ARE 'NO' ☐		→ 37															
33	Since last (DAY OF THE WEEK) about how many hours did (NAME) engage in (this activity/these activities), in total? IF LESS THAN 1 HOUR, RECORD '00'	NUMBER OF HOURS																
34	(Does the activity/Do these activities) require carrying heavy loads?	YES 1 NO 2	→ 37															
35	(Does the activity/Do these activities) require working with dangerous tools, knives, etc., or operating heavy machinery?	YES 1 NO 2	→ 37															

CHILD LABOR

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
36	How would you describe the work environment of (NAME)?																										
	a) Is (NAME) exposed to dust, fumes or gas?	YES 1 NO 2	→ 37																								
	b) Is (NAME) exposed to extreme cold, heat or humidity?	YES 1 NO 2	→ 37																								
	c) Is (NAME) exposed to loud noise or vibration?	YES 1 NO 2	→ 37																								
	d) Is (NAME) required to work at heights?	YES 1 NO 2	→ 37																								
	e) Is (NAME) required to work with chemicals, pesticides, glues, etc., or explosives?	YES 1 NO 2	→ 37																								
	f) Is (NAME) exposed to other things, processes or conditions bad for (NAMES)'s health or safety?	YES 1 NO 2																									
37	Since last (DAY OF THE WEEK), did (NAME) fetch water or collect firewood for household use?	YES 1 NO 2	→ 39																								
38	In total, how many hours did (NAME) spend on fetching water or collecting firewood for household use, since last (DAY OF THE WEEK)? IF LESS THAN 1 HOUR, RECORD '00'	NUMBER OF HOURS																									
39	Since last (DAY OF THE WEEK), did (NAME) do any of the following for this household?	<table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>a) SHOPPING FOR HOUSEHOLD</td><td>1</td><td>2</td></tr> <tr> <td>b) REPAIR HOUSEHOLD EQUIP</td><td>1</td><td>2</td></tr> <tr> <td>c) COOKING/CLEANING UTENSILS/HOUSE</td><td>1</td><td>2</td></tr> <tr> <td>d) WASHING CLOTHES</td><td>1</td><td>2</td></tr> <tr> <td>e) CARING FOR CHILDREN</td><td>1</td><td>2</td></tr> <tr> <td>f) CARING FOR OLD/SICK</td><td>1</td><td>2</td></tr> <tr> <td>g) OTHER HOUSEHOLD TASKS</td><td>1</td><td>2</td></tr> </tbody> </table>		YES	NO	a) SHOPPING FOR HOUSEHOLD	1	2	b) REPAIR HOUSEHOLD EQUIP	1	2	c) COOKING/CLEANING UTENSILS/HOUSE	1	2	d) WASHING CLOTHES	1	2	e) CARING FOR CHILDREN	1	2	f) CARING FOR OLD/SICK	1	2	g) OTHER HOUSEHOLD TASKS	1	2	
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40	CHECK 39 a) THROUGH g): AT LEAST ☐ ONE 'YES' ↓	ALL ANSWERS ☐ ARE 'NO' →	50																								
41	Since last (DAY OF THE WEEK), about how many hours did (NAME) engage in (this activity/these activities), in total? IF LESS THAN ONE HOUR, RECORD '00'	NUMBER OF HOURS																									

CHILD DISCIPLINE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																				
50	CHECK THE AGE OF THE SELECTED CHILD FROM Q. 29: 1-14 YEARS ☐ 15-17 YEARS ☐ → 60																																						
51	WRITE THE LINE NUMBER AND NAME OF THE CHILD FROM Q. 29.	LINE NUMBER NAME																																					
52	Adults use certain ways to teach children the right behavior or to address a behavior problem. I will read various methods that are used. Please tell me if you or anyone else in the household has used this method with (NAME) in the past month.	<table> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>a) TOOK AWAY PRIVILEGES 1</td><td>1</td><td>2</td></tr> <tr> <td>b) EXPLAINED WRONG BEHAVIOUR .. 1</td><td>1</td><td>2</td></tr> <tr> <td>c) SHOOK HIM/HER 1</td><td>1</td><td>2</td></tr> <tr> <td>d) SHOUTED, YELLED, SCREAMED .. 1</td><td>1</td><td>2</td></tr> <tr> <td>e) GAVE SOMETHING ELSE TO DO 1</td><td>1</td><td>2</td></tr> <tr> <td>f) HIT ON BOTTOM WITH BARE HAND .. 1</td><td>1</td><td>2</td></tr> <tr> <td>g) HIT WITH HARD OBJECT 1</td><td>1</td><td>2</td></tr> <tr> <td>h) CALLED NAME 1</td><td>1</td><td>2</td></tr> <tr> <td>i) HIT ON HEAD/FACE/EARS 1</td><td>1</td><td>2</td></tr> <tr> <td>j) HIT ON HAND/ARM/LEG 1</td><td>1</td><td>2</td></tr> <tr> <td>k) BEAT HIM/HER UP 1</td><td>1</td><td>2</td></tr> </tbody> </table>		YES	NO	a) TOOK AWAY PRIVILEGES 1	1	2	b) EXPLAINED WRONG BEHAVIOUR .. 1	1	2	c) SHOOK HIM/HER 1	1	2	d) SHOUTED, YELLED, SCREAMED .. 1	1	2	e) GAVE SOMETHING ELSE TO DO 1	1	2	f) HIT ON BOTTOM WITH BARE HAND .. 1	1	2	g) HIT WITH HARD OBJECT 1	1	2	h) CALLED NAME 1	1	2	i) HIT ON HEAD/FACE/EARS 1	1	2	j) HIT ON HAND/ARM/LEG 1	1	2	k) BEAT HIM/HER UP 1	1	2	
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j) HIT ON HAND/ARM/LEG 1	1	2																																					
k) BEAT HIM/HER UP 1	1	2																																					
53	Do you believe that in order to bring up, raise or educate a child properly, the child needs to be physically punished?	YES 1 NO 2 DON'T KNOW / NO OPINION 8																																					

SELECTION OF WOMAN FOR THE DOMESTIC VIOLENCE QUESTIONS

60	CHECK COVER PAGE: HOUSEHOLD SELECTED FOR MAN'S SURVEY? YES ☐ NO ☐ → 101								
LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN (COLUMN 9) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE. EXAMPLE: THE HOUSEHOLD NUMBER IS '3893' AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE TWO ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD (LINE NUMBERS 02, 06). SINCE THE LAST DIGIT OF THE HOUSEHOLD NUMBER IS '3' GO TO ROW '3' AND SINCE THERE ARE TWO ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '2'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('1') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE FIRST WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '02' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.									
LAST DIGIT OF THE HOUSE- HOLD NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9								
	1	2	3	4	5	6	7	8+	
	0	1	2	2	4	3	6	5	4
	1	1	1	3	1	4	1	6	5
	2	1	2	1	2	5	2	7	6
	3	1	1	2	3	1	3	1	7
	4	1	2	3	4	2	4	2	8
	5	1	1	1	1	3	5	3	1
	6	1	2	2	2	4	6	4	2
	7	1	1	3	3	5	1	5	3
	8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5	
61	NAME OF SELECTED WOMAN _____ HH LINE NUMBER OF SELECTED WOMAN IF NO ELIGIBLE WOMAN IN THE HOUSEHOLD WRITE '00'.								

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING 11 PIPED TO YARD/PLOT 12 PIPED TO NEIGHBOR 13 PUBLIC TAP/STANDPIPE 14 HAND PUMP/ TUBE WELL OR BOREHOLE 21 DUG WELL PROTECTED WELL 31 UNPROTECTED WELL 32 WATER FROM SPRING PROTECTED SPRING 41 UNPROTECTED SPRING 42 RAINWATER 51 TANKER TRUCK 61 CART WITH SMALL TANK 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) 81 BOTTLED WATER 91 MINERAL WATER IN SACHET 92 OTHER 96 (SPECIFY)	→ 106 → 103 → 103
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	PIPED WATER PIPED INTO DWELLING 11 PIPED TO YARD/PLOT 12 PIPED TO NEIGHBOR 13 PUBLIC TAP/STANDPIPE 14 HAND PUMP/ TUBE WELL OR BOREHOLE 21 DUG WELL PROTECTED WELL 31 UNPROTECTED WELL 32 WATER FROM SPRING PROTECTED SPRING 41 UNPROTECTED SPRING 42 RAINWATER 51 TANKER TRUCK 61 CART WITH SMALL TANK 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) 81 OTHER 96 (SPECIFY)	→ 106
103	Where is that water source located?	IN OWN DWELLING 1 IN OWN YARD/PLOT 2 ELSEWHERE 3	→ 105
104	How long does it take to go there, get water, and come back?	MINUTES DON'T KNOW 998	
105	CHECK 101 AND 102: CODE '14' OR '21' CIRCLED?	YES ☐ NO ☐	→ 107

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	In the past two weeks, was the water from this source not available for at least one full day?	YES 1 NO 2 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES 1 NO 2 DON'T KNOW 8	→ 109
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL A ADD BLEACH/CHLORINE B PUR C WATERGUARD D STRAIN THROUGH A CLOTH E USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/etc) F SOLAR DISINFECTION G LET IT STAND AND SETTLE H OTHER _____ X (SPECIFY) DON'T KNOW Z	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM .. 11 FLUSH TO SEPTIC TANK 12 FLUSH TO PIT LATRINE 13 FLUSH TO SOMEWHERE ELSE 14 FLUSH, DON'T KNOW WHERE 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE 21 PIT LATRINE WITH SLAB 22 PIT LATRINE WITHOUT SLAB/OPEN PIT 23 COMPOSTING TOILET 31 BUCKET TOILET 41 HANGING TOILET/HANGING LATRINE 51 NO FACILITY/BUSH/FIELD 61 OTHER _____ 96 (SPECIFY)	→ 113
110	Do you share this toilet facility with other households?	YES 1 NO 2	→ 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 0 10 OR MORE HOUSEHOLDS 95 DON'T KNOW 98	
112	Where is this toilet facility located?	IN OWN DWELLING 1 IN OWN YARD/PLOT 2 ELSEWHERE 3	

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY 01 GAS CYLINDER 02 KEROSENE STOVE 03 FIRE COAL/CHARCOAL 04 WOOD 05 STRAW/SHRUBS/GRASS 06 AGRICULTURAL CROP 07 ANIMAL DUNG 08 NO FOOD COOKED IN HOUSEHOLD 95 OTHER 96 (SPECIFY)	→ 116
114	Is the cooking usually done in the house, on a porch, in a separate building, or outdoors?	IN THE HOUSE 1 ON A PORCH 2 IN A SEPARATE BUILDING 3 OUTDOORS 4 OTHER 6 (SPECIFY)	→ 116
115	Do you have a separate room which is used as a kitchen?	YES 1 NO 2	
116	How many rooms in this household are used for sleeping?	ROOMS	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES 1 NO 2	→ 119
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Cows or bulls? b) Pigs? c) Goats? d) Sheep? e) Chickens, ducks, or guinea fowl?	a) COWS/BULLS b) PIGS c) GOATS d) SHEEP e) CHICKENS/DUCKS/FOWL	
119	Does any member of this household own any agricultural land?	YES 1 NO 2	→ 121
120	How many acres of agricultural land do members of this household own? IF 95 OR MORE, CIRCLE '950'.	ACRES 95 OR MORE ACRES 950 DON'T KNOW 998	

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
121	Does your household have:	YES NO		
	a) Electricity that is connected?	a) ELECTRICITY 1	2	
	b) A generator?	b) GENERATOR 1	2	
	c) A solar panel?	c) SOLAR PANEL 1	2	
	d) A radio?	d) RADIO 1	2	
	e) A television?	e) TELEVISION 1	2	
	f) A non-mobile telephone?	f) NON-MOBILE TELEPHONE 1	2	
	g) A computer?	g) COMPUTER 1	2	
	h) An ice box / refrigerator?	h) REFRIGERATOR 1	2	
	i) A table?	i) TABLE 1	2	
	j) Chairs?	j) CHAIRS 1	2	
	k) A cupboard?	k) CUPBOARD 1	2	
	l) A mattress (not made of straw or grass)?	l) MATTRESS 1	2	
	m) A sewing machine?	m) SEWING MACHINE 1	2	
122	Does any member of this household own:	YES NO		
	a) A watch?	a) WATCH 1	2	
	b) A mobile phone?	b) MOBILE PHONE 1	2	
	c) A bicycle?	c) BICYCLE 1	2	
	d) A motorcycle or tricycle?	d) MOTORCYCLE/TRICYCLE .. 1	2	
	e) A car or truck?	e) CAR/TRUCK 1	2	
	f) A boat or canoe?	f) BOAT/CANOE 1	2	
123	I don't want to know the amount, but does any member of this household have a bank account?	YES 1	NO 2	
124	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never?	DAILY 1	WEEKLY 2	
		MONTHLY 3	LESS OFTEN THAN ONCE A MONTH 4	
		NEVER 5		
127	Does your household have any mosquito nets?	YES 1	NO 2	→ 139
	PROBE: Any mosquito nets at all?			
128	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS		

MOSQUITO NETS

		NET #1	NET #2	NET #3						
129	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD. IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED 1 NOT OBSERVED 2	OBSERVED 1 NOT OBSERVED 2	OBSERVED 1 NOT OBSERVED 2						
130	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> AGO MORE THAN 36 MONTHS AGO 95 NOT SURE 98			MONTHS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> AGO MORE THAN 36 MONTHS AGO 95 NOT SURE 98			MONTHS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> AGO MORE THAN 36 MONTHS AGO 95 NOT SURE 98		
131	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	LONG-LASTING INSECTICIDE-TREATED NET (LLIN) OLYSET 11 PERMANET 12 BASF NET 13 DURANET 14 OTHER/DON'T KNOW BRAND BUT LLIN 16 OTHER TYPE 96 DON'T KNOW TYPE 98	LONG-LASTING INSECTICIDE-TREATED NET (LLIN) OLYSET 11 PERMANET 12 BASF NET 13 DURANET 14 OTHER/DON'T KNOW BRAND BUT LLIN 16 OTHER TYPE 96 DON'T KNOW TYPE 98	LONG-LASTING INSECTICIDE-TREATED NET (LLIN) OLYSET 11 PERMANET 12 BASF NET 13 DURANET 14 OTHER/DON'T KNOW BRAND BUT LLIN 16 OTHER TYPE 96 DON'T KNOW TYPE 98						
134	Did you get the net through a mass distribution campaign, during a prenatal care visit, or during an immunization visit?	YES, MASS DIST. CAMPAIGN 1 YES, PNC 2 YES, IMMUNIZATION VISIT 3 (SKIP TO 136) ← NO 4	YES, MASS DIST. CAMPAIGN 1 YES, PNC 2 YES, IMMUNIZATION VISIT 3 (SKIP TO 136) ← NO 4	YES, MASS DIST. CAMPAIGN 1 YES, PNC 2 YES, IMMUNIZATION VISIT 3 (SKIP TO 136) ← NO 4						
135	Where did you get the net?	GOVT. HEALTH FACILITY 01 PRIVATE HEALTH FACILITY 02 PHARMACY 03 SHOP/MARKET 04 COMMUNITY HEALTH VOLUNTEER/ ASSISTANT 05 RELIGIOUS INSTITUTION 06 SCHOOL 07 STREET CORNER 08 NEIGHBOR/ FRIEND / RELATIVE 09 OTHER 96 DON'T KNOW 98	GOVT. HEALTH FACILITY 01 PRIVATE HEALTH FACILITY 02 PHARMACY 03 SHOP/MARKET 04 COMMUNITY HEALTH VOLUNTEER/ ASSISTANT 05 RELIGIOUS INSTITUTION 06 SCHOOL 07 STREET CORNER 08 NEIGHBOR/ FRIEND / RELATIVE 09 OTHER 96 DON'T KNOW 98	GOVT. HEALTH FACILITY 01 PRIVATE HEALTH FACILITY 02 PHARMACY 03 SHOP/MARKET 04 COMMUNITY HEALTH VOLUNTEER/ ASSISTANT 05 RELIGIOUS INSTITUTION 06 SCHOOL 07 STREET CORNER 08 NEIGHBOR/ FRIEND / RELATIVE 09 OTHER 96 DON'T KNOW 98						

MOSQUITO NETS

		NET #1	NET #2	NET #3
136	Did anyone sleep under this mosquito net last night?	YES 1 NO 2 (SKIP TO 138) ← NOT SURE 8	YES 1 NO 2 (SKIP TO 138) ← NOT SURE 8	YES 1 NO 2 (SKIP TO 138) ← NOT SURE 8
137	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO.	NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO.	NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO.
138		GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO TO 129 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 139.

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
139	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE 1 OBSERVED, MOBILE 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT 3 NOT OBSERVED, NO PERMISSION TO SEE 4 NOT OBSERVED, OTHER REASON 5	→ 142
140	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE 1 WATER IS NOT AVAILABLE 2	
141	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) A ASH, MUD, SAND B NONE Y	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND/MUD 11 DUNG 12 RUDIMENTARY FLOOR WOOD PLANKS 21 PALM/BAMBOO 22 FINISHED FLOOR PARQUET OR POLISHED WOOD 31 FLOOR MAT/LINOLEUM/VINYL 32 CERAMIC TILES/TERRAZO 33 CONCRETE/CEMENT 34 CARPET 35 OTHER _____ 96 (SPECIFY)	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	NATURAL ROOFING NO ROOF 11 THATCH/PALM LEAF 12 SOD 13 RUDIMENTARY ROOFING RUSTIC MAT 21 PALM/BAMBOO 22 WOOD PLANKS 23 CARDBOARD 24 TARPAULIN, PLASTIC 25 FINISHED ROOFING ZINC/METAL/ALUMINUM 31 WOOD 32 CALAMINE/CEMENT FIBER 33 CERAMIC TILES 34 CONCRETE/CEMENT 35 ASBESTOS SHEETS/ROOFING SHINGLES 36 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
144	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	NATURAL WALLS NO WALLS 11 CANE/PALM/TRUNKS 12 STRAW/ THATCH MATS 13 DIRT 14 RUDIMENTARY WALLS MUD AND STICKS 21 STONE WITH MUD 22 UNCOVERED ADOBE 23 PLYWOOD 24 CARDBOARD/PLASTIC 25 REUSED WOOD 26 FINISHED WALLS ZINC/METAL 31 CEMENT 32 STONE WITH LIME/CEMENT 33 BRICKS 34 CEMENT BLOCKS 35 COVERED ADOBE 36 WOOD PLANKS/SHINGLES 37 OTHER 96 (SPECIFY)									
145	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? TEST SALT FOR IODINE.	IODINE PRESENT 1 NO IODINE 2 NO SALT IN HOUSEHOLD 3 SALT NOT TESTED 6 (SPECIFY REASON)									
146	RECORD THE TIME.	HOURS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr></table> MINUTES <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr></table>									

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

2019-20 LIBERIA DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

LAST UPDATED: 15-Sep-19

GOVERNMENT OF LIBERIA
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

IDENTIFICATION																				
PLACE NAME _____																				
NAME OF HOUSEHOLD HEAD _____																				
CLUSTER NUMBER				<table border="1" style="width: 40px; height: 20px; margin: 0 auto;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>																
HOUSEHOLD NUMBER				<table border="1" style="width: 40px; height: 20px; margin: 0 auto;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>																
NAME AND LINE NUMBER OF WOMAN _____																				
CHECK COVER PAGE OF HOUSEHOLD QUESTIONNAIRE: HOUSEHOLD SELECTED FOR MAN'S SURVEY AND BIOMARKERS? (1=YES, 2=NO)				<table border="1" style="width: 20px; height: 20px; margin: 0 auto;"> <tr><td> </td></tr> <tr><td> </td></tr> </table>																
CHECK HOUSEHOLD QUESTIONNAIRE Q.61: WOMAN SELECTED FOR DV MODULE? (1=YES, 2=NO)				<table border="1" style="width: 20px; height: 20px; margin: 0 auto;"> <tr><td> </td></tr> <tr><td> </td></tr> </table>																
INTERVIEWER VISITS																				
	1	2	3	FINAL VISIT																
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RESULT*	_____	_____	_____	DAY MONTH YEAR INT. NO. RESULT* <table border="1" style="width: 60px; height: 40px; margin: 0 auto;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>2</td><td>0</td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>									2	0						
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NEXT VISIT: DATE TIME	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="width: 20px; height: 20px; margin: 0 auto;"> <tr><td> </td></tr> <tr><td> </td></tr> </table>																
*RESULT CODES: 1 COMPLETED 4 REFUSED 2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER _____ 3 POSTPONED 6 INCAPACITATED SPECIFY _____																				
SUPERVISOR <table border="1" style="width: 40px; height: 20px; margin: 0 auto;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table> NAME NUMBER																				

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Liberia Institute of Statistics and Geo-Information Services. We are conducting a survey about health and other topics all over Liberia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 45 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES
TO BE INTERVIEWED .. 1

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED .. 2 → END



SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> MINUTES <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	
102	How long have you been living continuously in (NAME OF CURRENT COUNTY)?	YEARS <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> ALWAYS 95 IF LESS THAN ONE YEAR, RECORD '00' YEARS. VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY 1 TOWN 2 RURAL AREA 3	
104	Before you moved here, which county did you live in?	BOMI 01 BONG 02 GBARPOLU 03 GRAND BASSA 04 GRAND CAPE MOUNT 05 GRAND GEDEH 06 GRAND KRU 07 LOFA 08 MARGIBI 09 MARYLAND 10 MONTSERRADO 11 NIMBA 12 RIVER CESS 13 RIVER GEE 14 SINOE 15 OUTSIDE OF LIBERIA 96	
105	In what month and year were you born?	MONTH <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> DON'T KNOW MONTH 98 YEAR <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> DON'T KNOW YEAR 9998	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
107	Have you ever attended school?	YES 1 NO 2	→ 111
108	What is the highest level of school you attended: elementary, junior high, senior high, or higher?	ELEMENTARY (GRADES 1-6) 1 JUNIOR HIGH (GRADES 7-9) 2 SENIOR HIGH (GRADES 10-12) 3 HIGHER 4	
109	What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE	
110	CHECK 108: ELEMENTARY, JUNIOR HIGH, OR ☐ SENIOR HIGH ↓	HIGHER ☐	→ 113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL 1 ABLE TO READ ONLY PART OF THE SENTENCE 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' ☐ CIRCLED ↓	CODE '1' OR '5' CIRCLED ☐	→ 114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES 1 NO 2	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
119	Have you ever used the internet?	YES 1 NO 2	→ 122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES 1 NO 2	→ 122
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4	
122	What is your religion?	CHRISTIAN 1 MUSLIM 2 TRADITIONAL RELIGION 3 NO RELIGION 4 OTHER 6 (SPECIFY)	
123	What dialect do you speak (besides English)?	BASSA 01 GBANDI 02 BELLE 03 DEY 04 GIO 05 GOLA 06 GREBO 07 KISSI 08 KPELLE 09 KRAHN 10 KRU 11 LORMA 12 MANDINGO 13 MANO 14 MENDE 15 SAPRO 16 VAI 17 NONE / ONLY ENGLISH 18 OTHER 96	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about all the births you have had during your life. Have you ever born a child?	YES 1 NO 2	→ 206								
202	Do you have any sons or daughters you born who are now living with you? I mean your own belly born.	YES 1 NO 2	→ 204								
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters you born who are alive but do not live with you?	YES 1 NO 2	→ 206								
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES 1 NO 2	→ 208								
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) GIRLS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL ____ births during your life. Is that correct? YES ☐ ↓ NO ☐ ↓ PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208: ONE OR MORE BIRTHS ☐ ↓ NO BIRTHS ☐ → 226										

SECTION 2. REPRODUCTION

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had. RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 5 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.									
212 What name was given to your (first/next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMPLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Did you born any other child between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 220)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (NEXT BIRTH)	DAYS 1 MONTHS 2 YEARS 3	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 220)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 220)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 220)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 220)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES 1 (RECORD BIRTH(S) IN TABLE) ← NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ (PROBE AND RECONCILE) ←		
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2014-2020	NUMBER OF BIRTHS NONE 0	→ 226
225	C FOR EACH BIRTH IN 2014-2020, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES 1 NO 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. C ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS	
228	When you got pregnant, did you want to get pregnant at that time?	YES 1 NO 2	→ 230
229	CHECK 208: TOTAL NUMBER OF BIRTHS ONE OR MORE ☐ a) Did you want to have a baby later on or did you not want any more children? NONE ☐ b) Did you want to have a baby later on or did you not want any children?	LATER 1 NO MORE/NONE 2	
230	Did you ever have a pregnancy that got spoiled: was miscarried, was aborted, or the baby was born dead (stillbirth)?	YES 1 NO 2	→ 239
231	When was the last time it happened?	MONTH YEAR	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
232	CHECK 231: LAST PREGNANCY ENDED IN 2014-2020 ☐			→ 234
		LAST PREGNANCY ENDED IN 2013 OR EARLIER ☐		→ 239
LINE NO.	233 In what month and year did the preceding such pregnancy end?	234 How many months pregnant were you when that pregnancy ended (spoiled)?	235 Since January 2014, have you had any other pregnancies that got spoiled or aborted?	
01		 NUMBER OF MONTHS	YES 1 NO 2	→ NEXT LINE → 236
02	MONTH YEAR	 NUMBER OF MONTHS	YES 1 NO 2	→ NEXT LINE → 236
03	MONTH YEAR	 NUMBER OF MONTHS	YES 1 NO 2	→ NEXT LINE → 236
04	MONTH YEAR	 NUMBER OF MONTHS	YES 1 NO 2	→ 236
236	C FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2014-2020, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY. IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.			
237	Did you have any miscarriages, abortions or stillbirths that ended before 2014?	YES 1 NO 2		→ 239
238	When did the last such pregnancy that terminated before 2014 end?	MONTH YEAR		

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
239	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4 IN MENOPAUSE/ HAS HAD HYSTERECTOMY 994 BEFORE LAST BIRTH 995 NEVER MENSTRUATED 996	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES 1 NO 2 DON'T KNOW 8	→ 242								
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS 1 DURING HER PERIOD 2 RIGHT AFTER HER PERIOD HAS ENDED 3 HALFWAY BETWEEN TWO PERIODS 4 OTHER 6 (SPECIFY) DON'T KNOW 8									
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES 1 NO 2 DON'T KNOW 8									

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization, Tube Tie, Turning the Womb. PROBE: Women can have an operation to avoid having any more children.	YES 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
04	Injectables, Depo. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES 1 NO 2
05	Implants, Jadelle. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES 1 NO 2
07	Condom, Raincoat. PROBE: Men can put a rubber sheath on their penis before woman business.	YES 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before man business.	YES 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within five days after unprotected man business, women can take special pills to prevent pregnancy.	YES 1 NO 2
10	CycleBeads/ Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not do man business.	YES 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not do man business on the days of the month they think they can get pregnant.	YES 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐		→ 312
303	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES 1 NO 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION A MALE STERILIZATION B IUD C INJECTABLES D IMPLANTS E PILL F CONDOM G FEMALE CONDOM H EMERGENCY CONTRACEPTION I CYCLEBEADS/ STANDARD DAYS METHOD .. J LACTATIONAL AMENORRHEA METHOD K RHYTHM METHOD L WITHDRAWAL M OTHER MODERN METHOD X OTHER TRADITIONAL METHOD Y	→ 307 → 309 → 306 → 309
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MICROLUT 01 MICROGYNON 02 PLANNED PARENTHOOD ASSN. OF LIBERIA (PPAL) BRAND 03 OTHER 96 (SPECIFY) DON'T KNOW 98	→ 309
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	STAR 01 MINISTRY OF HEALTH/NATIONAL AIDS CONTROL PROGRAM FREE CONDOMS .. 02 OTHER 96 (SPECIFY) DON'T KNOW 98	→ 309

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER 12 FAMILY PLANNING CLINIC 13 MOBILE CLINIC 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC 21 PRIVATE DOCTOR'S OFFICE 22 MOBILE CLINIC 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98													
308	In what month and year was the sterilization performed?	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>													→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>													
310	CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308 OR 309 NO ☐ GO BACK TO 308 OR 309, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION). YES ☐														

SECTION 3. CONTRACEPTION

311	CHECK 308 AND 309: YEAR IS 2014-2020 C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. THEN CONTINUE YEAR IS 2013 OR EARLIER C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2014 . THEN (SKIP TO 324)																																								
312	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. C USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2014. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.																																								
	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:20%;"></th><th style="width:20%; text-align: center;">COLUMN 1</th><th style="width:20%; text-align: center;">COLUMN 2</th><th style="width:20%; text-align: center;">COLUMN 3</th></tr> <tr> <td style="text-align: center; vertical-align: top;">312A</td><td style="padding: 5px;"> MONTH YEAR </td><td style="padding: 5px;"> MONTH YEAR </td><td style="padding: 5px;"> MONTH YEAR </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312B</td><td style="padding: 5px;"> Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception? YES 1 NO 2 (SKIP TO 312I) </td><td style="padding: 5px;"> YES 1 NO 2 (SKIP TO 312I) </td><td style="padding: 5px;"> YES 1 NO 2 (SKIP TO 312I) </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312C</td><td style="padding: 5px;"> Which method was that? METHOD CODE .. </td><td style="padding: 5px;"> METHOD CODE .. </td><td style="padding: 5px;"> METHOD CODE .. </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312D</td><td style="padding: 5px;"> How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD. IMMEDIATELY 00 MONTHS .. (SKIP TO 312F) DATE GIVEN 95 </td><td style="padding: 5px;"> IMMEDIATELY 00 MONTHS .. (SKIP TO 312F) DATE GIVEN 95 </td><td style="padding: 5px;"> IMMEDIATELY 00 MONTHS .. (SKIP TO 312F) DATE GIVEN 95 </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312E</td><td style="padding: 5px;"> RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD. MONTH YEAR </td><td style="padding: 5px;"> MONTH YEAR </td><td style="padding: 5px;"> MONTH YEAR </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312F</td><td style="padding: 5px;"> For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE. MONTHS .. (SKIP TO 312H) DATE GIVEN 95 </td><td style="padding: 5px;"> MONTHS .. (SKIP TO 312H) DATE GIVEN 95 </td><td style="padding: 5px;"> MONTHS .. (SKIP TO 312H) DATE GIVEN 95 </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312G</td><td style="padding: 5px;"> RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD. MONTH YEAR </td><td style="padding: 5px;"> MONTH YEAR </td><td style="padding: 5px;"> MONTH YEAR </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312H</td><td style="padding: 5px;"> Why did you stop using (METHOD)? REASON STOPPED </td><td style="padding: 5px;"> REASON STOPPED </td><td style="padding: 5px;"> REASON STOPPED </td></tr> <tr> <td style="text-align: center; vertical-align: top;">312I</td><td style="padding: 5px;"> GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313. </td><td style="padding: 5px;"> GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313. </td><td style="padding: 5px;"> GO BACK TO 312A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 313. </td></tr> </table>		COLUMN 1	COLUMN 2	COLUMN 3	312A	MONTH YEAR	MONTH YEAR	MONTH YEAR	312B	Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception? YES 1 NO 2 (SKIP TO 312I)	YES 1 NO 2 (SKIP TO 312I)	YES 1 NO 2 (SKIP TO 312I)	312C	Which method was that? METHOD CODE ..	METHOD CODE ..	METHOD CODE ..	312D	How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD. IMMEDIATELY 00 MONTHS .. (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY 00 MONTHS .. (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY 00 MONTHS .. (SKIP TO 312F) DATE GIVEN 95	312E	RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD. MONTH YEAR	MONTH YEAR	MONTH YEAR	312F	For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE. MONTHS .. (SKIP TO 312H) DATE GIVEN 95	MONTHS .. (SKIP TO 312H) DATE GIVEN 95	MONTHS .. (SKIP TO 312H) DATE GIVEN 95	312G	RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD. MONTH YEAR	MONTH YEAR	MONTH YEAR	312H	Why did you stop using (METHOD)? REASON STOPPED	REASON STOPPED	REASON STOPPED	312I	GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 313.
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SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ANY METHOD USED ☐		→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES 1 NO 2	→ 326
315	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED 00 FEMALE STERILIZATION 01 MALE STERILIZATION 02 IUD 03 INJECTABLES 04 IMPLANTS 05 PILL 06 CONDOM 07 FEMALE CONDOM 08 EMERGENCY CONTRACEPTION 09 CYCLE BEADS/ STANDARD DAYS METHOD 10 LACTATIONAL AMENORRHEA METHOD 11 RHYTHM METHOD 12 WITHDRAWAL 13 OTHER MODERN METHOD 95 OTHER TRADITIONAL METHOD 96	→ 326 → 319 → 327 → 323
316	You first started using (CURRENT METHOD) in (DATE FROM 309). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER 12 GOVERNMENT HEALTH CLINIC 13 MOBILE CLINIC 14 OTHER PUBLIC SECTOR 16 _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 21 PHARMACY 22 PRIVATE DOCTOR 23 PLANNED PARENTHOOD ASSN. LIB. 24 MOBILE CLINIC 25 OTHER PRIVATE MEDICAL SECTOR 26 _____ (SPECIFY) OTHER SOURCE SHOP/MARKET 31 CHURCH 32 FRIEND/RELATIVE 33 OTHER 96 _____ (SPECIFY)	
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD 03 INJECTABLES 04 IMPLANTS 05 PILL 06 CONDOM 07 FEMALE CONDOM 08 EMERGENCY CONTRACEPTION 09 CYCLE BEADS/ STANDARD DAYS METHOD 10 OTHER MODERN METHOD 95 OTHER TRADITIONAL METHOD 96	→ 323 → 322 → 323

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
318	At that time, were you told about side effects or problems you might have with the method?	YES	1	→ 321
		NO	2	→ 320
319	When you got sterilized, were you told about side effects or problems you might have with the method?	YES	1	→ 321
		NO	2	
320	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES	1	
		NO	2	→ 322
321	Were you told what to do if you experienced side effects or problems?	YES	1	
		NO	2	
322	CHECK 318 AND 319: ANY ☐ 'YES' ↓ a) At that time, were you told about other methods of family planning that you could use? OTHER ☐ ↓ b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of family planning that you could use?	YES NO	1 2	→ 324
323	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES	1	
		NO	2	
324	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION MALE STERILIZATION IUD INJECTABLES IMPLANTS PILL CONDOM FEMALE CONDOM EMERGENCY CONTRACEPTION CYCLE BEADS/ STANDARD DAYS METHOD .. LACTATIONAL AMENORRHEA METHOD RHYTHM METHOD WITHDRAWAL OTHER MODERN METHOD OTHER TRADITIONAL METHOD	01 02 03 04 05 06 07 08 09 10 11 12 13 95 96	→ 327 → 327 → 327

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER 12 GOVERNMENT HEALTH CLINIC 13 MOBILE CLINIC 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 21 PHARMACY 22 PRIVATE DOCTOR 23 PLANNED PARENTHOOD ASSN. LIB. 24 MOBILE CLINIC 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE SHOP/MARKET 31 CHURCH 32 FRIEND/RELATIVE 33 OTHER _____ 96 (SPECIFY)	→ 327
326	Do you know of a place where you can obtain a method of family planning?	YES 1 NO 2	
327	In the last 12 months, were you visited by a fieldworker?	YES 1 NO 2	→ 329
328	Did the fieldworker talk to you about family planning?	YES 1 NO 2	
329	CHECK 202: CHILDREN LIVING WITH THE RESPONDENT YES ☐ NO ☐ a) In the last 12 months, have you visited a health facility for care for yourself or your children? b) In the last 12 months, have you visited a health facility for care for yourself?	YES 1 NO 2	→ 401
330	Did any staff member at the health facility speak to you about family planning methods?	YES 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS ☐ IN 2014-2020 NO BIRTHS IN ☐ 2014-2020 → 648		
402	CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2014-2020. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER
404	FROM 212 AND 216:	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES 1 (SKIP TO 408) ← NO 2	YES 1 (SKIP TO 426) ← NO 2
406	CHECK 208: ONLY ONE BIRTH ☐ a) Did you want to have a baby later on, or did you not want any children? MORE THAN ONE BIRTH ☐ b) Did you want to have a baby later on, or did you not want any more children?	LATER 1 NO MORE/NONE 2 (SKIP TO 408) ←	LATER 1 NO MORE/NONE 2 (SKIP TO 426) ←
407	How much longer did you want to wait?	MONTHS 1 YEARS 2 DON'T KNOW 998	MONTHS 1 YEARS 2 DON'T KNOW 998
408	Did you see anyone for prenatal care for this pregnancy?	YES 1 NO 2 (SKIP TO 413AB) ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR A NURSE/MIDWIFE B PHYSICIAN ASSISTANT .. C OTHER PERSON TRADITIONAL MIDWIFE .. D OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____												
410	Where did you receive prenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME A OTHER HOME B PUBLIC SECTOR GOVERNMENT HOSPITAL C GOVERNMENT HEALTH CENTER D GOVERNMENT HEALTH CLINIC E OTHER PUBLIC SECTOR F _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC G OTHER PRIVATE MEDICAL SECTOR H _____ (SPECIFY) OTHER X _____ (SPECIFY)													
411	How many months pregnant were you when you first received prenatal care for this pregnancy?	MONTHS DON'T KNOW 98													
412	How many times did you receive prenatal care during this pregnancy?	NUMBER OF TIMES DON'T KNOW 98													
413	As part of your prenatal care during this pregnancy, were any of the following done at least once: a) Was your blood pressure measured? b) Did you give a urine sample? c) Did you give a blood sample?	<table border="0"> <tr> <td></td> <td align="center">YES</td> <td align="center">NO</td> </tr> <tr> <td>a) BP</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>b) URINE</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>c) BLOOD</td> <td align="center">1</td> <td align="center">2</td> </tr> </table>		YES	NO	a) BP	1	2	b) URINE	1	2	c) BLOOD	1	2	
	YES	NO													
a) BP	1	2													
b) URINE	1	2													
c) BLOOD	1	2													
413AA	CHECK 412:	3 OR FEWER TIMES ☐ 4+ TIMES ☐ (SKIP TO 414) ←													
413AB	Why did you (not receive any prenatal care / only receive care a few times)? Any other reason? PROBE FOR REASONS AND RECORD ALL MENTIONED.	FEAR OF SEXUAL ASSAULT .. A FEAR OF OTHER VIOLENCE ON ROAD B NO TRANSPORTATION C NO MONEY TO PAY FOR TRANSPORTATION D NO TIME E HUSBAND/PARTNER DID NOT GIVE PERMISSION F OTHER MALE FAMILY MEMBER DID NOT GIVE PERMISSION G FEMALE FAMILY MEMBER DID NOT GIVE PERMISSION ... H OTHER X _____ (SPECIFY)													

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, jerking after birth?	YES 1 NO 2 (SKIP TO 417) ← DON'T KNOW 8	
415	During this pregnancy, how many times did you get a tetanus injection?	TIMES DON'T KNOW 8	
416	CHECK 415:	2 OR MORE TIMES ☐ OTHER ☐ (SKIP TO 420) ←	
417	At any time before this pregnancy, did you receive any tetanus injections?	YES 1 NO 2 (SKIP TO 420) ← DON'T KNOW 8	
418	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES DON'T KNOW 8	
419	CHECK 418: ONLY ONE ☐ ↓ How many years ago did you receive that tetanus injection? MORE THAN ONE ☐ ↓ How many years ago did you receive the last tetanus injection prior to this pregnancy?	YEARS AGO	
420	During this pregnancy, were you given or did you buy any iron tablets (blood tablets)? SHOW TABLETS.	YES 1 NO 2 (SKIP TO 422) ← DON'T KNOW 8	
421	During the whole pregnancy, for how many days did you take the tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS DON'T KNOW 998	
422	During this pregnancy, did you take any worm medicine?	YES 1 NO 2 DON'T KNOW 8	
423	During this pregnancy, did you take SP/Fansidar to keep you from getting malaria?	YES 1 NO 2 (SKIP TO 426) ← DON'T KNOW 8	
424	How many times did you take SP/Fansidar during this pregnancy?	TIMES	
425	Did you get the SP/Fansidar during any prenatal care visit, during another visit to a health facility or from another source? IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST.	PRENATAL VISIT 1 ANOTHER FACILITY VISIT 2 OTHER SOURCE 6	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
426	When (NAME) was born, was (NAME) very big, bigger than normal, normal, smaller than normal, or very small?	VERY BIG 1 BIGGER THAN NORMAL 2 NORMAL 3 SMALLER THAN NORMAL 4 VERY SMALL 5 DON'T KNOW 8	VERY BIG 1 BIGGER THAN NORMAL 2 NORMAL 3 SMALLER THAN NORMAL 4 VERY SMALL 5 DON'T KNOW 8
427	Was (NAME) weighed at birth?	YES 1 NO 2 (SKIP TO 429) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 429) ← DON'T KNOW 8
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 . KG FROM RECALL 2 . DON'T KNOW 99998	KG FROM CARD 1 . KG FROM RECALL 2 . DON'T KNOW 99998
429	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR A NURSE/MIDWIFE B PHYSICIAN ASSISTANT .. C OTHER PERSON TRADITIONAL BIRTH MIDWIFE D RELATIVE/FRIEND E OTHER (SPECIFY) X NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR A NURSE/MIDWIFE B PHYSICIAN ASSISTANT .. C OTHER PERSON TRADITIONAL BIRTH MIDWIFE D RELATIVE/FRIEND E OTHER (SPECIFY) X NO ONE ASSISTED Y
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 (SKIP TO 434) ← OTHER HOME 12 PUBLIC SECTOR GOVERNMENT HOSPITAL.. 21 GOVERNMENT HEALTH CENTER 22 GOVERNMENT HEALTH CLINIC 23 OTHER PUBLIC SECTOR (SPECIFY) 26 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 31 OTHER PRIVATE MEDICAL SECTOR (SPECIFY) 36 OTHER 96 (SPECIFY) (SKIP TO 434) ←	HOME HER HOME 11 (SKIP TO 434) ← OTHER HOME 12 PUBLIC SECTOR GOVERNMENT HOSPITAL.. 21 GOVERNMENT HEALTH CENTER 22 GOVERNMENT HEALTH CLINIC 23 OTHER PUBLIC SECTOR (SPECIFY) 26 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 31 OTHER PRIVATE MEDICAL SECTOR (SPECIFY) 36 OTHER 96 (SPECIFY) (SKIP TO 434) ←

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____												
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW 998													
432	Was (NAME) delivered by C-section, that is, did they cut your belly open to take the baby out?	YES 1 NO 2 (SKIP TO 434) ←	YES 1 NO 2 (SKIP TO 434) ←												
433	When was the decision made to have the C-section? Was it before or after your labor pains started?	BEFORE 1 AFTER 2	BEFORE 1 AFTER 2												
434	Immediately after the birth, was (NAME) put on your chest?	YES 1 NO 2 (SKIP TO 434AA) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 459) ← DON'T KNOW 8												
434A	Was (NAME)'s bare skin touching your bare skin?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8												
434AA	CHECK 430: PLACE OF DELIVERY	CODE CODE <table border="1"><tr><td></td></tr></table> 11, 12, OR 96 21 - 36 CIRCLED <table border="1"><tr><td></td></tr></table> (SKIP TO 434AE) ←													
434AB	What was used to cut the cord?	RAZOR BLADE 1 KNIFE 2 SCISSORS 3 OTHER 6 (SPECIFY) DON'T KNOW 8													
434AC	Was it new or had it ever been used before?	NEW 1 USED BEFORE 2 DON'T KNOW 8													
434AD	Was it boiled before it was used to cut the cord?	YES 1 NO 2 DON'T KNOW 8													
434AE	Was anything applied to the stump of the cord at any time?	YES 1 NO 2 (SKIP TO 434B) ← DON'T KNOW 8													
434AF	What was applied? Anything else?	CHLORHEXIDINE A OTHER ANTISEPTIC (ALCOHOL, SPIRIT, GENTIAN VIOLET) .. B MUSTARD OIL C ASH D ANIMAL DUNG E OTHER X (SPECIFY)													

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____																		
434B	CHECK 430: PLACE OF DELIVERY	CODE 11, 12, OR 96 ☐ OTHER ☐ CIRCLED (SKIP TO 449) ←																			
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES 1 NO 2 (SKIP TO 438) ←																			
436	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW 998																			
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 PHYSICIAN ASSISTANT .. 13 OTHER PERSON TRADITIONAL BIRTH MIDWIFE 21 OTHER 96 (SPECIFY)																			
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES 1 NO 2 (SKIP TO 441) ← DON'T KNOW 8																			
439	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW 998																			
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 PHYSICIAN ASSISTANT .. 13 OTHER PERSON TRADITIONAL BIRTH MIDWIFE 21 OTHER 96 (SPECIFY)																			

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____						
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES 1 NO 2 (SKIP TO 445) ←							
442	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> DAYS 2 WEEKS 3 DON'T KNOW 998							
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 PHYSICIAN ASSISTANT .. 13 OTHER PERSON TRADITIONAL BIRTH MIDWIFE 21 OTHER 96 (SPECIFY)							
444	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR GOVERNMENT HOSPITAL.. 21 GOVERNMENT HEALTH CENTER 22 GOVERNMENT HEALTH CLINIC 23 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 31 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY) OTHER 96 (SPECIFY)							

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____							
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES 1 NO 2 (SKIP TO 457) ← DON'T KNOW 8								
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 DAYS 2 WEEKS 3 DON'T KNOW 998 <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 PHYSICIAN ASSISTANT .. 13 OTHER PERSON TRADITIONAL BIRTH MIDWIFE 21 OTHER 96 (SPECIFY)								
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR GOVERNMENT HOSPITAL... 21 GOVERNMENT HEALTH CENTER 22 GOVERNMENT HEALTH CLINIC 23 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 31 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY) OTHER 96 (SPECIFY) (SKIP TO 457) ←								

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____							
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES 1 NO 2 (SKIP TO 453) ←								
450	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 DAYS 2 WEEKS 3 DON'T KNOW 998 <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
451	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 PHYSICIAN ASSISTANT .. 13 OTHER PERSON TRADITIONAL BIRTH MIDWIFE 21 OTHER 96 (SPECIFY)								
452	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR GOVERNMENT HOSPITAL... 21 GOVERNMENT HEALTH CENTER 22 GOVERNMENT HEALTH CLINIC 23 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 31 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY) OTHER 96 (SPECIFY)								

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH																		
		NAME _____	NAME _____																		
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES 1 NO 2 (SKIP TO 457) ← DON'T KNOW 8																			
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAYS AFTER BIRTH 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> WEEKS AFTER BIRTH 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DON'T KNOW 998																			
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 PHYSICIAN ASSISTANT .. 13 OTHER PERSON TRADITIONAL BIRTH MIDWIFE 21 COMMUNITY/ VILLAGE HEALTH WORKER 22 OTHER 96 (SPECIFY)																			
456	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR GOVERNMENT HOSPITAL .. 21 GOVERNMENT HEALTH CENTER 22 GOVERNMENT HEALTH CLINIC 23 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC 31 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY) OTHER 96 (SPECIFY)																			

SECTION 4. PREGNANCY AND POSTNATAL CARE

		LAST BIRTH	NEXT-TO-LAST BIRTH	
NO.	QUESTIONS AND FILTERS	NAME _____	NAME _____	
457	During the first two days after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s temperature? c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding?	YES NO DK a) CORD 1 2 8 b) TEMP. 1 2 8 c) SIGNS 1 2 8 d) COUNSEL BREAST-FEED 1 2 8 e) OBSERVE BREAST-FEED 1 2 8		
458	Has your menstrual period returned since the birth of (NAME)?	YES 1 (SKIP TO 460) ← NO 2 (SKIP TO 461) ←		
459	Did your period return between the birth of (NAME) and your next pregnancy?			YES 1 NO 2 (SKIP TO 463) ←
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS [][] DON'T KNOW 98		MONTHS [][] DON'T KNOW 98
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT [] PREGNANT OR UNSURE [] (SKIP TO 463) ←		
462	Have you started man business again since the birth of (NAME)?	YES 1 NO 2 (SKIP TO 464) ←		
463	For how many months after the birth of (NAME) did you not do man business?	MONTHS [][] DON'T KNOW 98	MONTHS [][] DON'T KNOW 98	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH											
		NAME _____		NAME _____											
464	Did you ever give titi water to (NAME)?	YES 1 (SKIP TO 466) ←		YES 1											
		NO 2		NO 2											
465	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 470) ←	DEAD ☐ (SKIP TO 471) ←												
466	How long after birth did you first give (NAME) the titi? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY 000 HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>													
467	In the first three days after delivery, was (NAME) given anything to drink beside titi?	YES 1 NO 2													
468	CHECK 404: IS CHILD LIVING?	LIVING ☐ ↓ (SKIP TO 471) ←	DEAD ☐ (SKIP TO 471) ←	LIVING ☐ ↓ (SKIP TO 471) ←	DEAD ☐ (SKIP TO 471) ←										
469	Are you still giving titi water to (NAME)?	YES 1 NO 2													
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES 1 NO 2 DON'T KNOW 8		YES 1 NO 2 DON'T KNOW 8											
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.		GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.											

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2016-2020? ONE OR MORE BIRTHS IN 2016-2020 ☐ NO BIRTHS IN 2016-2020 ☐		→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2016-2020. NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER		
503A	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD 1 YES, HAS ONLY AN OTHER DOCUMENT 2 YES, HAS CARD AND OTHER DOCUMENT 3 NO, NO CARD AND NO OTHER DOCUMENT .. 4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN 1 YES, ONLY OTHER DOCUMENT SEEN 2 YES, CARD AND OTHER DOCUMENT SEEN .. 3 NO CARD AND NO OTHER DOCUMENT SEEN .. 4	→ 511A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																												
	NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER <table border="1"><tr><td></td><td></td></tr></table>																																																																														
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED. <table border="1"> <thead> <tr> <th></th><th>DAY</th><th>MONTH</th><th>YEAR</th></tr> </thead> <tbody> <tr> <td>POLIO-0 / ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)</td><td></td><td></td><td></td></tr> <tr> <td>BCG</td><td></td><td></td><td></td></tr> <tr> <td>POLIO-1 / ORAL POLIO VACCINE (OPV) 1</td><td></td><td></td><td></td></tr> <tr> <td>ROTA-1 / ROTAVIRUS 1</td><td></td><td></td><td></td></tr> <tr> <td>PENTA-1 / DPT-HEP.B-HIB (PENTAVALENT) 1</td><td></td><td></td><td></td></tr> <tr> <td>PNEUMO-1 / PNEUMOCOCCAL 1</td><td></td><td></td><td></td></tr> <tr> <td>POLIO-2 / ORAL POLIO VACCINE (OPV) 2</td><td></td><td></td><td></td></tr> <tr> <td>ROTA-2 / ROTAVIRUS 2</td><td></td><td></td><td></td></tr> <tr> <td>PENTA-2 / DPT-HEP.B-HIB (PENTAVALENT) 2</td><td></td><td></td><td></td></tr> <tr> <td>PNEUMO-2 / PNEUMOCOCCAL 2</td><td></td><td></td><td></td></tr> <tr> <td>POLIO-3 / ORAL POLIO VACCINE (OPV) 3</td><td></td><td></td><td></td></tr> <tr> <td>ROTA-3 / ROTAVIRUS 3</td><td></td><td></td><td></td></tr> <tr> <td>PENTA-3 / DPT-HEP.B-HIB (PENTAVALENT) 3</td><td></td><td></td><td></td></tr> <tr> <td>PNEUMO-3 / PNEUMOCOCCAL 3</td><td></td><td></td><td></td></tr> <tr> <td>IPV / INACTIVATED POLIO VACCINE</td><td></td><td></td><td></td></tr> <tr> <td>MEASLES</td><td></td><td></td><td></td></tr> <tr> <td>YELLOW FEVER</td><td></td><td></td><td></td></tr> <tr> <td>VITAMIN A (MOST RECENT)</td><td></td><td></td><td></td></tr> </tbody> </table>		DAY	MONTH	YEAR	POLIO-0 / ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)				BCG				POLIO-1 / ORAL POLIO VACCINE (OPV) 1				ROTA-1 / ROTAVIRUS 1				PENTA-1 / DPT-HEP.B-HIB (PENTAVALENT) 1				PNEUMO-1 / PNEUMOCOCCAL 1				POLIO-2 / ORAL POLIO VACCINE (OPV) 2				ROTA-2 / ROTAVIRUS 2				PENTA-2 / DPT-HEP.B-HIB (PENTAVALENT) 2				PNEUMO-2 / PNEUMOCOCCAL 2				POLIO-3 / ORAL POLIO VACCINE (OPV) 3				ROTA-3 / ROTAVIRUS 3				PENTA-3 / DPT-HEP.B-HIB (PENTAVALENT) 3				PNEUMO-3 / PNEUMOCOCCAL 3				IPV / INACTIVATED POLIO VACCINE				MEASLES				YELLOW FEVER				VITAMIN A (MOST RECENT)					
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509A	CHECK 508A: 'POLIO-0' TO 'YELLOW FEVER' ALL RECORDED? NO ☐ YES ☐		→ 525A																																																																												
510A	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A) NO 2 DON'T KNOW 8 (WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A)																																																																													

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES 1 NO 2 DON'T KNOW 8	☐ → 525A
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES 1 NO 2 DON'T KNOW 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES 1 NO 2 DON'T KNOW 8	☐ → 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS 1 LATER 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
516A1	The last time (NAME) received the polio drops, did (NAME) also get an IPV injection in the arm to protect against polio?	YES 1 NO 2 DON'T KNOW 8	
517A	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the left thigh at the same time as polio drops?	YES 1 NO 2 DON'T KNOW 8	☐ → 519A
518A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES 1 NO 2 DON'T KNOW 8	☐ → 521A
520A	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521A	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES 1 NO 2 DON'T KNOW 8	☐ → 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a measles vaccination, that is, an injection in the left arm to prevent measles?	YES 1 NO 2 DON'T KNOW 8	☐ → 525A
524A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
524AA	Has (NAME) ever received a yellow fever injection, that is, an injection in the right arm at the age of 9 months or older to prevent him/her from getting yellow fever?	YES 1 NO 2 DON'T KNOW 8	

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>													
525A	In the last 7 days was (NAME) given: a) A powder that came in a sachet that looked like this? SHOW SACHET TO RESPONDENT. b) PlumpyNut / Peanut butter?	<table> <tr> <td></td> <td align="center">YES</td> <td align="center">NO</td> <td align="center">DK</td> </tr> <tr> <td>a) Powder</td> <td align="center">1</td> <td align="center">2</td> <td align="center">8</td> </tr> <tr> <td>b) PlumpyNut / Peanut butter</td> <td align="center">1</td> <td align="center">2</td> <td align="center">8</td> </tr> </table>		YES	NO	DK	a) Powder	1	2	8	b) PlumpyNut / Peanut butter	1	2	8	
	YES	NO	DK												
a) Powder	1	2	8												
b) PlumpyNut / Peanut butter	1	2	8												
526A	CONTINUE WITH 501B.														

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2020? MORE BIRTHS IN 2016-2020 ☐ NO MORE BIRTHS IN 2016-2020 ☐		→ 601
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2016-2020. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER		
503B	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 526B
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD 1 YES, HAS ONLY AN OTHER DOCUMENT 2 YES, HAS CARD AND OTHER DOCUMENT 3 NO, NO CARD AND NO OTHER DOCUMENT .. 4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506B	CHECK 504B: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511B
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN 1 YES, ONLY OTHER DOCUMENT SEEN 2 YES, CARD AND OTHER DOCUMENT SEEN .. 3 NO CARD AND NO OTHER DOCUMENT SEEN .. 4	→ 511B

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																	
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508B	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th><th style="width: 10%;">DAY</th><th style="width: 10%;">MONTH</th><th style="width: 10%;">YEAR</th><th style="width: 10%;">YEAR</th><th style="width: 10%;">YEAR</th><th style="width: 10%;">YEAR</th></tr> </thead> <tbody> <tr> <td>POLIO-0 / ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE) BCG</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>POLIO-1 / ORAL POLIO VACCINE (OPV) 1 ROTA-1 / ROTAVIRUS 1 PENTA-1 / DPT-HEP.B-HIB (PENTAVALENT) 1 PNEUMO-1 / PNEUMOCOCCAL 1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>POLIO-2 / ORAL POLIO VACCINE (OPV) 2 ROTA-2 / ROTAVIRUS 2 PENTA-2 / DPT-HEP.B-HIB (PENTAVALENT) 2 PNEUMO-2 / PNEUMOCOCCAL 2</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>POLIO-3 / ORAL POLIO VACCINE (OPV) 3 ROTA-3 / ROTAVIRUS 3 PENTA-3 / DPT-HEP.B-HIB (PENTAVALENT) 3 PNEUMO-3 / PNEUMOCOCCAL 3 IPV / INACTIVATED POLIO VACCINE</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>MEASLES YELLOW FEVER</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>VITAMIN A (MOST RECENT)</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		DAY	MONTH	YEAR	YEAR	YEAR	YEAR	POLIO-0 / ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE) BCG							POLIO-1 / ORAL POLIO VACCINE (OPV) 1 ROTA-1 / ROTAVIRUS 1 PENTA-1 / DPT-HEP.B-HIB (PENTAVALENT) 1 PNEUMO-1 / PNEUMOCOCCAL 1							POLIO-2 / ORAL POLIO VACCINE (OPV) 2 ROTA-2 / ROTAVIRUS 2 PENTA-2 / DPT-HEP.B-HIB (PENTAVALENT) 2 PNEUMO-2 / PNEUMOCOCCAL 2							POLIO-3 / ORAL POLIO VACCINE (OPV) 3 ROTA-3 / ROTAVIRUS 3 PENTA-3 / DPT-HEP.B-HIB (PENTAVALENT) 3 PNEUMO-3 / PNEUMOCOCCAL 3 IPV / INACTIVATED POLIO VACCINE							MEASLES YELLOW FEVER							VITAMIN A (MOST RECENT)								
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SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES 1 NO 2 DON'T KNOW 8	☐ → 525B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES 1 NO 2 DON'T KNOW 8	
514B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES 1 NO 2 DON'T KNOW 8	☐ → 517B
515B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS 1 LATER 2	
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
516B1	The last time (NAME) received the polio drops, did (NAME) also get an IPV injection in the arm to protect against polio?	YES 1 NO 2 DON'T KNOW 8	
517B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the left thigh at the same time as polio drops?	YES 1 NO 2 DON'T KNOW 8	☐ → 519B
518B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES 1 NO 2 DON'T KNOW 8	☐ → 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521B	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES 1 NO 2 DON'T KNOW 8	☐ → 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523B	Has (NAME) ever received a measles vaccination, that is, an injection in the left arm to prevent measles?	YES 1 NO 2 DON'T KNOW 8	☐ → 525B
524B	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
524BB	Has (NAME) ever received a yellow fever injection, that is, an injection in the right arm at the age of 9 months or older to prevent him/her from getting yellow fever?	YES 1 NO 2 DON'T KNOW 8	

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER													
525B	In the last 7 days was (NAME) given: a) A powder that came in a sachet that looked like this? SHOW SACHET TO RESPONDENT. b) PlumpyNut / Peanut butter?	<table> <tr> <td></td> <td align="center">YES</td> <td align="center">NO</td> <td align="center">DK</td> </tr> <tr> <td>a) Powder</td> <td align="center">1</td> <td align="center">2</td> <td align="center">8</td> </tr> <tr> <td>b) PlumpyNut / Peanut butter</td> <td align="center">1</td> <td align="center">2</td> <td align="center">8</td> </tr> </table>		YES	NO	DK	a) Powder	1	2	8	b) PlumpyNut / Peanut butter	1	2	8	
	YES	NO	DK												
a) Powder	1	2	8												
b) PlumpyNut / Peanut butter	1	2	8												
526B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2020? MORE BIRTHS IN 2016-2020 ☐ (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE) ← NO MORE BIRTHS IN 2016-2020 ☐ →		601												

SECTION 6. CHILD HEALTH AND NUTRITION

601	CHECK 224: ONE OR MORE BIRTHS IN 2014-2020 NO BIRTHS IN 2014-2020 648		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2014-2020. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER
604	FROM 212 AND 216:	NAME LIVING DEAD (SKIP TO 646) ←	NAME LIVING DEAD (SKIP TO 646) ←
605	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? SHOW COMMON TYPES OF CAPSULES.	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
606	In the last seven days, was (NAME) given iron pills or iron syrup like [this/any of these]? SHOW COMMON TYPES OF PILLS/SYRUPS.	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
607	Was (NAME) given any worm medicine in the last six months?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
608	Has (NAME) had running stomach in the last 2 weeks?	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
609	CHECK 469: CURRENTLY BREASTFEEDING? YES ☐ NO/ NOT ASKED ☐ a) Now I would like to know how much (NAME) was given to drink during the running stomach including titi water. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? b) Now I would like to know how much (NAME) was given to drink during the running stomach. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8
610	When (NAME) had running stomach, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
611	Did you seek advice or treatment for the running stomach from any source?	YES 1 NO 2 (SKIP TO 615) ←	YES 1 NO 2 (SKIP TO 615) ←

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C MOBILE CLINIC D OTHER PUBLIC SECTOR _____ E (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC F PHARMACY G PRIVATE DOCTOR H MOBILE CLINIC I OTHER PRIVATE MEDICAL SECTOR _____ J (SPECIFY) OTHER SOURCE SHOP K TRADITIONAL PRACTITIONER L BLACK BAGGER/ DRUG PEDDLER M OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C MOBILE CLINIC D OTHER PUBLIC SECTOR _____ E (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC F PHARMACY G PRIVATE DOCTOR H MOBILE CLINIC I OTHER PRIVATE MEDICAL SECTOR _____ J (SPECIFY) OTHER SOURCE SHOP K TRADITIONAL PRACTITIONER L BLACK BAGGER/ DRUG PEDDLER M OTHER _____ X (SPECIFY)
613	CHECK 612:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 615) ←	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 615) ←
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE ☐	FIRST PLACE ☐

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
615	Was (NAME) given any of the following at any time since (NAME) started having the running stomach: a) A fluid made from a special packet called ORS? b) A government-recommended homemade fluid? c) Zinc tablets or syrup?	YES NO DK a) FLUID FROM ORS PACKET .. 1 2 8 b) HOMEMADE FLUID 1 2 8 c) ZINC 1 2 8	YES NO DK a) FLUID FROM ORS PACKET .. 1 2 8 b) HOMEMADE FLUID 1 2 8 c) ZINC 1 2 8
616	CHECK 615: ANY 'YES' ☐ ALL 'NO' OR 'DK' ☐ a) Was anything else given to treat the running stomach? b) Was anything given to treat the running stomach?	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8
617	CHECK 615: ANY 'YES' ☐ ALL 'NO' OR 'DK' ☐ a) What else was given to treat the running stomach? b) What was given to treat the running stomach? Anything else? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC A FLAGYL B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) C UNKNOWN PILL OR SYRUP D INJECTION ANTIBIOTIC E NON-ANTIBIOTIC F UNKNOWN INJECTION G (IV) INTRAVENOUS H HOME REMEDY/ HERBAL MEDICINE I OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC A FLAGYL B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) C UNKNOWN PILL OR SYRUP D INJECTION ANTIBIOTIC E NON-ANTIBIOTIC F UNKNOWN INJECTION G (IV) INTRAVENOUS H HOME REMEDY/ HERBAL MEDICINE I OTHER _____ X (SPECIFY)
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES 1 NO 2 (SKIP TO 620) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 620) ← DON'T KNOW 8
619	At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES 1 NO 2 (SKIP TO 623) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 623) ← DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY 1 NOSE ONLY 2 BOTH 3 OTHER 6 (SPECIFY) DON'T KNOW 8 (SKIP TO 624) ←	CHEST ONLY 1 NOSE ONLY 2 BOTH 3 OTHER 6 (SPECIFY) DON'T KNOW 8 (SKIP TO 624) ←
623	CHECK 618: HAD FEVER?	YES NO OR DK ☐ ☐ ☐ (SKIP TO 646) ←	YES NO OR DK ☐ ☐ ☐ (SKIP TO 646) ←
624	Did you seek advice or treatment for the illness from any source?	YES 1 NO 2 (SKIP TO 629) ←	YES 1 NO 2 (SKIP TO 629) ←
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL... A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C MOBILE CLINIC D OTHER PUBLIC SECTOR _____ E (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC F PHARMACY G PRIVATE DOCTOR H MOBILE CLINIC I FAITH-BASED ORGANIZATION J OTHER PRIVATE MEDICAL SECTOR _____ K (SPECIFY) OTHER SOURCE SHOP L TRADITIONAL PRACTITIONER M BLACK BAGGER/ DRUG PEDDLER N OTHER X (SPECIFY)	PUBLIC SECTOR GOVERNMENT HOSPITAL... A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C MOBILE CLINIC D OTHER PUBLIC SECTOR _____ E (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC F PHARMACY G PRIVATE DOCTOR H MOBILE CLINIC I FAITH-BASED ORGANIZATION J OTHER PRIVATE MEDICAL SECTOR _____ K (SPECIFY) OTHER SOURCE SHOP L TRADITIONAL PRACTITIONER M BLACK BAGGER/ DRUG PEDDLER N OTHER X (SPECIFY)
626	CHECK 625:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ ☐ ☐ (SKIP TO 628) ←	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ ☐ ☐ (SKIP TO 628) ←

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE ☐	FIRST PLACE ☐
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS	DAYS
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES 1 NO 2 (SKIP TO 646) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 646) ← DON'T KNOW 8
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED. IF AMODIAQUINE IS MENTIONED, PROBE TO CLARIFY IF IT IS AN ACT.	ANTIMALARIAL DRUGS ARTEMISININ COMBINATION THERAPY (ACT) A SP/FANSIDAR B CHLOROQUINE C AMODIAQUINE D QUININE PILLS E INJECTION/IV F ARTESUNATE RECTAL G INJECTION/IV H OTHER ANTIMALARIAL _____ I (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP J INJECTION/IV K OTHER DRUGS ASPIRIN L PARACETAMOL M IBUPROFEN N OTHER _____ X (SPECIFY) DON'T KNOW Z	ANTIMALARIAL DRUGS ARTEMISININ COMBINATION THERAPY (ACT) A SP/FANSIDAR B CHLOROQUINE C AMODIAQUINE D QUININE PILLS E INJECTION/IV F ARTESUNATE RECTAL G INJECTION/IV H OTHER ANTIMALARIAL _____ I (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP J INJECTION/IV K OTHER DRUGS ASPIRIN L PARACETAMOL M IBUPROFEN N OTHER _____ X (SPECIFY) DON'T KNOW Z
631	CHECK 630: ANY CODE A-I CIRCLED?	YES NO ☐ ☐ (SKIP TO 646) ←	YES NO ☐ ☐ (SKIP TO 646) ←

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
632	CHECK 630: ARTEMISININ COMBINATION THERAPY ('A') GIVEN	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ ↓ (SKIP TO 634) ←	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ ↓ (SKIP TO 634) ←
633	How long after the fever started did (NAME) first take an artemisinin combination therapy?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
634	CHECK 630: SP/FANSIDAR ('B') GIVEN	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐ ↓ (SKIP TO 636) ←	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐ ↓ (SKIP TO 636) ←
635	How long after the fever started did (NAME) first take SP/Fansidar?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
636	CHECK 630: CHLOROQUINE ('C') GIVEN	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ ↓ (SKIP TO 638) ←	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ ↓ (SKIP TO 638) ←
637	How long after the fever started did (NAME) first take chloroquine?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
638	CHECK 630: AMODIAQUINE ('D') GIVEN	CODE 'D' CIRCLED ☐ CODE 'D' NOT CIRCLED ☐ ↓ (SKIP TO 640) ←	CODE 'D' CIRCLED ☐ CODE 'D' NOT CIRCLED ☐ ↓ (SKIP TO 640) ←
639	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
640	CHECK 630: QUININE ('E' OR 'F') GIVEN	CODE 'E' OR 'F' CIRCLED ☐ ↓ CODE 'E' OR 'F' NOT CIRCLED ☐ ↓ (SKIP TO 642) ←	CODE 'E' OR 'F' CIRCLED ☐ ↓ CODE 'E' OR 'F' NOT CIRCLED ☐ ↓ (SKIP TO 642) ←
641	How long after the fever started did (NAME) first take quinine?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
642	CHECK 630: ARTESUNATE ('G' OR 'H') GIVEN	CODE 'G' OR 'H' CIRCLED ☐ ↓ CODE 'G' OR 'H' NOT CIRCLED ☐ ↓ (SKIP TO 644) ←	CODE 'G' OR 'H' CIRCLED ☐ ↓ CODE 'G' OR 'H' NOT CIRCLED ☐ ↓ (SKIP TO 644) ←
643	How long after the fever started did (NAME) first take artesunate?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
644	CHECK 630: OTHER ANTIMALARIAL ('I') GIVEN	CODE 'I' CIRCLED ☐ ↓ CODE 'I' NOT CIRCLED ☐ ↓ (SKIP TO 646) ←	CODE 'I' CIRCLED ☐ ↓ CODE 'I' NOT CIRCLED ☐ ↓ (SKIP TO 646) ←
645	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647.

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ↓ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ → 649		
648	Have you ever heard of a special product called ORS or oral rehydration salts you can get for the treatment of running stomach?	YES 1 NO 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2017-2020 LIVING WITH THE RESPONDENT" ONE OR MORE ☐ ↓ NONE ☐ → 701 _____ (NAME OF YOUNGEST CHILD LIVING WITH HER) ↓		

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:		YES	NO	DK
	a) Plain water?	a)	1	2	8
	b) Juice or juice drinks?	b)	1	2	8
	c) Clear broth?	c)	1	2	8
	d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	d)	1	2	8
			NUMBER OF TIMES DRANK		
	e) Guigoz, Sma Progress or other infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e)	1	2	8
			NUMBER OF TIMES DRANK		
	f) Any other liquids?	f)	1	2	8
	g) Yogurt? IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	g)	1	2	8
			NUMBER OF TIMES ATE		
	h) Any Gerber, Cerelac or other commercially fortified baby food?	h)	1	2	8
	i) Bread, rice, noodles, porridge, cereal, corn/maize or other foods made from grains?	i)	1	2	8
	j) Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	j)	1	2	8
	k) Cassava, eddoes, white potatoes, white yams or any other foods made from roots?	k)	1	2	8
	l) Potato greens, bitter leaf, cassava leaf or any dark green, leafy vegetables?	l)	1	2	8
	m) Ripe mangoes or pawpaws?		1	2	8
	n) Any other fruits or vegetables?	n)	1	2	8
	o) Liver, kidney, heart, or other organ meats?	o)	1	2	8
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p)	1	2	8
	q) Eggs?	q)	1	2	8
	r) Fresh or dried fish or crawfish, crab or kissmeat?	r)	1	2	8
	s) Any foods made from beans, peas, lentils, or nuts?	s)	1	2	8
	t) Cheese or other food made from milk?	t)	1	2	8
	u) Red palm oil?	u)	1	2	8
	v) Any other solid, semi-solid, or soft food?	v)	1	2	8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
651	CHECK 650 (CATEGORIES 'g' THROUGH 'v'): NOT A SINGLE 'YES' ☐ AT LEAST ONE 'YES' ☐		→ 653
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES 1 (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 653) NO 2	→ 654
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DON'T KNOW 8	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE 01 PUT/RINSED INTO TOILET OR LATRINE 02 PUT/RINSED INTO DRAIN OR DITCH 03 THROWN INTO GARBAGE 04 BURIED 05 LEFT IN THE OPEN/BUSH/FIELD 06 OTHER 96 (SPECIFY)	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED 1 YES, LIVING WITH A MAN 2 NO, NOT IN UNION 3	☐ → 704
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED 1 YES, LIVED WITH A MAN 2 NO 3	→ 712
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED 1 DIVORCED 2 SEPARATED 3	☐ → 709
704	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER 1 STAYING ELSEWHERE 2	
705	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
706	Does your (husband/partner) have other wives or does he live with other women as if married?	YES 1 NO 2 DON'T KNOW 8	☐ → 709
707	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS DON'T KNOW 98	
708	Are you the first, second, ... wife?	RANK	
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE 1 MORE THAN ONCE 2	
710	CHECK 709: MARRIED/ LIVED WITH A MAN ONLY ONCE ☐ MARRIED/ LIVED WITH A MAN MORE THAN ONCE ☐ a) In what month and year did you start living with your (husband/partner)? b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	→ 712
711	How old were you when you first started living with him?	AGE	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
712	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
713	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you did man business for the very first time?	NEVER HAD SEXUAL INTERCOURSE 00 AGE IN YEARS	→ 731
714	I would like to ask you about your recent sexual activity. When was the last time you did man business? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	→ 716 → 727

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
715	When was the last time you did man business?		DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3
716	The last time you did man business with this person, was a condom used?	YES 1 NO 2 (SKIP TO 718) ←	YES 1 NO 2 (SKIP TO 718) ←	YES 1 NO 2 (SKIP TO 718) ←
717	Was a condom used every time you did man business with this person in the last 12 months?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
718	What was your relationship to this person with whom you did man business? IF BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND 1 LIVE-IN PARTNER 2 BOYFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)	HUSBAND 1 LIVE-IN PARTNER 2 BOYFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)	HUSBAND 1 LIVE-IN PARTNER 2 BOYFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)
719	How long ago did you first do man business with this person?	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4
720	How many times during the last 12 months did you do man business with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
721	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
722	Apart from this person, have you done man business with any other person in the last 12 months?	YES 1 (GO BACK TO 715 IN NEXT COLUMN) ← NO 2 (SKIP TO 724) ←	YES 1 (GO BACK TO 715 IN NEXT COLUMN) ← NO 2 (SKIP TO 724) ←	
723	In total, with how many different people have you done man business in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS .. DON'T KNOW 98

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
724	CHECK 106: AGE 15-24 ☐ ↓ AGE 25-49 ☐	→ 727	
725	CHECK 701: NOT ☐ IN A UNION ↓ CURRENTLY MARRIED/ LIVING WITH A MAN ☐	→ 727	
726	In the past 12 months have you done man business or been sexually involved with anyone because he gave you or told you he would give you gifts, cash, or anything else?	YES 1 NO 2	
727	In total, with how many different people have you done man business in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME DON'T KNOW 98	
731	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 1 2 MALE ADULTS 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304: NEITHER ☐ STERILIZED ↓	HE OR SHE ☐ STERILIZED →	813
802	CHECK 226: PREGNANT ☐ ↓	NOT PREGNANT ☐ OR UNSURE →	804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/DON'T KNOW 8	805 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED/DON'T KNOW 8	807 813 811
805	CHECK 226: NOT PREGNANT ☐ OR UNSURE ↓ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ ↓ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS 1 YEARS 2 SOON/NOW 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE 995 OTHER 996 (SPECIFY) DON'T KNOW 998	811 813 811
806	CHECK 226: NOT PREGNANT ☐ OR UNSURE ↓	PREGNANT ☐ →	812
807	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ☐ CURRENTLY USING ↓	CURRENTLY ☐ USING →	813
808	CHECK 805: '24' OR MORE MONTHS ☐ OR '02' OR MORE YEARS ↓ NOT ☐ ASKED ↓	'00-'23' MONTHS ☐ OR '00-'01' YEAR →	812
809	CHECK 714: DAYS, WEEKS OR ☐ MONTHS AGO ↓	YEARS ☐ AGO → NOT ☐ ASKED →	811 811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE ☐ A/ANOTHER CHILD a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ ☐ NONE b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED A FERTILITY-RELATED REASONS NOT HAVING SEX B INFREQUENT SEX C MENOPAUSAL/HYSTERECTOMY D CAN'T GET PREGNANT E NOT MENSTRUATED SINCE LAST BIRTH F BREASTFEEDING G UP TO GOD/FATALISTIC H OPPOSITION TO USE RESPONDENT OPPOSED I HUSBAND/PARTNER OPPOSED J OTHERS OPPOSED K RELIGIOUS PROHIBITION L LACK OF KNOWLEDGE KNOWS NO METHOD M KNOWS NO SOURCE N METHOD-RELATED REASONS SIDE EFFECTS/HEALTH CONCERNS O LACK OF ACCESS/TOO FAR P COSTS TOO MUCH Q PREFERRED METHOD NOT AVAILABLE R NO METHOD AVAILABLE S INCONVENIENT TO USE T INTERFERES WITH BODY'S NORMAL PROCESSES U OTHER X (SPECIFY) DON'T KNOW Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ☐ ASKED NO, NOT ☐ CURRENTLY USING YES, ☐ CURRENTLY USING		→ 813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES 1 NO 2 DON'T KNOW 8	
813	CHECK 216: HAS LIVING ☐ CHILDREN a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING ☐ CHILDREN b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE 00 NUMBER OTHER 96 (SPECIFY)	→ 815 → 815
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER .. OTHER 96 (SPECIFY)	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP															
815	In the last few months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Received a voice or text message about family planning on a mobile phone?	<table> <tr> <td></td><td>YES</td><td>NO</td></tr> <tr> <td>a) RADIO</td><td>1</td><td>2</td></tr> <tr> <td>b) TELEVISION</td><td>1</td><td>2</td></tr> <tr> <td>c) NEWSPAPER OR MAGAZINE</td><td>1</td><td>2</td></tr> <tr> <td>d) MOBILE PHONE</td><td>1</td><td>2</td></tr> </table>		YES	NO	a) RADIO	1	2	b) TELEVISION	1	2	c) NEWSPAPER OR MAGAZINE	1	2	d) MOBILE PHONE	1	2	
	YES	NO																
a) RADIO	1	2																
b) TELEVISION	1	2																
c) NEWSPAPER OR MAGAZINE	1	2																
d) MOBILE PHONE	1	2																
817	CHECK 701: YES, ☐ CURRENTLY MARRIED YES, ☐ LIVING WITH A MAN NO, ☐ NOT IN A UNION		→ 901															
818	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY ☐ USING NOT ☐ CURRENTLY USING NOT ☐ ASKED		→ 820 → 822															
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	<table> <tr> <td>MAINLY RESPONDENT</td><td>1</td></tr> <tr> <td>MAINLY HUSBAND/PARTNER</td><td>2</td></tr> <tr> <td>JOINT DECISION</td><td>3</td></tr> <tr> <td>OTHER _____</td><td>6</td></tr> <tr> <td align="center" colspan="2">(SPECIFY)</td></tr> </table>	MAINLY RESPONDENT	1	MAINLY HUSBAND/PARTNER	2	JOINT DECISION	3	OTHER _____	6	(SPECIFY)		→ 821					
MAINLY RESPONDENT	1																	
MAINLY HUSBAND/PARTNER	2																	
JOINT DECISION	3																	
OTHER _____	6																	
(SPECIFY)																		
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	<table> <tr> <td>MAINLY RESPONDENT</td><td>1</td></tr> <tr> <td>MAINLY HUSBAND/PARTNER</td><td>2</td></tr> <tr> <td>JOINT DECISION</td><td>3</td></tr> <tr> <td>OTHER _____</td><td>6</td></tr> <tr> <td align="center" colspan="2">(SPECIFY)</td></tr> </table>	MAINLY RESPONDENT	1	MAINLY HUSBAND/PARTNER	2	JOINT DECISION	3	OTHER _____	6	(SPECIFY)							
MAINLY RESPONDENT	1																	
MAINLY HUSBAND/PARTNER	2																	
JOINT DECISION	3																	
OTHER _____	6																	
(SPECIFY)																		
821	CHECK 304: NEITHER ARE ☐ STERILIZED HE OR SHE ARE ☐ STERILIZED		→ 901															
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	<table> <tr> <td>SAME NUMBER</td><td>1</td></tr> <tr> <td>MORE CHILDREN</td><td>2</td></tr> <tr> <td>FEWER CHILDREN</td><td>3</td></tr> <tr> <td>DON'T KNOW</td><td>8</td></tr> </table>	SAME NUMBER	1	MORE CHILDREN	2	FEWER CHILDREN	3	DON'T KNOW	8								
SAME NUMBER	1																	
MORE CHILDREN	2																	
FEWER CHILDREN	3																	
DON'T KNOW	8																	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐	NOT IN ☐ UNION	→ 909
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS	
903	Did your (husband/partner) ever attend school?	YES 1 NO 2	→ 906
904	What was the highest level of school he attended: elementary, junior high, senior high, or higher?	ELEMENTARY (GRADES 1-6) 1 JUNIOR HIGH (GRADES 7-9) 2 SENIOR HIGH (GRADES 10-12) 3 HIGHER 4 DON'T KNOW 8	→ 906
905	What was the highest grade he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE DON'T KNOW 98	
906	Has your (husband/partner) done any work in the last 7 days?	YES 1 NO 2 DON'T KNOW 8	→ 908
907	Has your (husband/partner) done any work in the last 12 months?	YES 1 NO 2 DON'T KNOW 8	→ 909
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?	_____ _____ _____	
909	Aside from your own housework, have you done any work in the last seven days?	YES 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES 1 NO 2	→ 917
913	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ _____	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER 1 FOR SOMEONE ELSE 2 SELF-EMPLOYED 3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	
917	CHECK 701: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐		→ 925
918	CHECK 916: CODE '1' OR '2' CIRCLED ☐ OTHER ☐		→ 921
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 OTHER _____ 6 (SPECIFY)	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM 1 LESS THAN HIM 2 ABOUT THE SAME 3 HUSBAND/PARTNER HAS NO EARNINGS 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 HUSBAND/PARTNER HAS NO EARNINGS 4 OTHER _____ 6 (SPECIFY)	
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 SOMEONE ELSE 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 SOMEONE ELSE 4 OTHER 6	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 SOMEONE ELSE 4 OTHER 6																									
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 928																								
926	Do you have a title deed for any house you own?	YES 1 NO 2 DON'T KNOW 8	→ 928																								
927	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8																									
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 931																								
929	Do you have a title deed for any land you own?	YES 1 NO 2 DON'T KNOW 8	→ 931																								
930	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8																									
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	<table> <tr> <th></th><th>PRES./ LISTEN.</th><th>PRES./ NOT LISTEN.</th><th>NOT PRES.</th></tr> <tr> <td>CHILDREN < 10</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>HUSBAND</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>OTHER MALES</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>OTHER FEMALES</td><td>1</td><td>2</td><td>3</td></tr> </table>		PRES./ LISTEN.	PRES./ NOT LISTEN.	NOT PRES.	CHILDREN < 10	1	2	3	HUSBAND	1	2	3	OTHER MALES	1	2	3	OTHER FEMALES	1	2	3					
	PRES./ LISTEN.	PRES./ NOT LISTEN.	NOT PRES.																								
CHILDREN < 10	1	2	3																								
HUSBAND	1	2	3																								
OTHER MALES	1	2	3																								
OTHER FEMALES	1	2	3																								
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	<table> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> <tr> <td>a) GOES OUT</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) NEGLECTS CHILDREN ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) ARGUES</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>d) REFUSES SEX</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>e) BURNS FOOD</td><td>1</td><td>2</td><td>8</td></tr> </table>		YES	NO	DK	a) GOES OUT	1	2	8	b) NEGLECTS CHILDREN ..	1	2	8	c) ARGUES	1	2	8	d) REFUSES SEX	1	2	8	e) BURNS FOOD	1	2	8	
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e) BURNS FOOD	1	2	8																								

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
1001	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES 1 NO 2	→ 1042																
1002	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES 1 NO 2 DON'T KNOW 8																	
1003	Can people get HIV from mosquito bites?	YES 1 NO 2 DON'T KNOW 8																	
1004	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8																	
1005	Can people get HIV by sharing food with a person who has HIV?	YES 1 NO 2 DON'T KNOW 8																	
1006	Can people get HIV because of witchcraft or other supernatural means?	YES 1 NO 2 DON'T KNOW 8																	
1007	Is it possible for a healthy-looking person to have HIV?	YES 1 NO 2 DON'T KNOW 8																	
1008	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	<table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>a) DURING PREGNANCY ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) DURING DELIVERY</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) BREASTFEEDING</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	a) DURING PREGNANCY ..	1	2	8	b) DURING DELIVERY	1	2	8	c) BREASTFEEDING	1	2	8	
	YES	NO	DK																
a) DURING PREGNANCY ..	1	2	8																
b) DURING DELIVERY	1	2	8																
c) BREASTFEEDING	1	2	8																
1009	CHECK 1008: AT LEAST ONE 'YES' ☐ OTHER ☐ → 1011																		
1010	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES 1 NO 2 DON'T KNOW 8																	
1011	CHECK 208 AND 215: LAST BIRTH IN 2017-2020 ☐ NO BIRTHS ☐ → 1027 LAST BIRTH IN 2016 OR EARLIER ☐ → 1027																		
1012	CHECK 408 FOR LAST BIRTH: HAD PRENATAL CARE ☐ NO PRENATAL CARE ☐ → 1020																		
1013	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.																		
1014	During any of the prenatal visits for your last birth were you given any information about: a) Babies getting HIV from their mother? b) Things that you can do to prevent getting HIV? c) Getting tested for HIV?	<table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>a) HIV FROM MOTHER ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) THINGS TO DO</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) TESTED FOR HIV</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	a) HIV FROM MOTHER ..	1	2	8	b) THINGS TO DO	1	2	8	c) TESTED FOR HIV	1	2	8	
	YES	NO	DK																
a) HIV FROM MOTHER ..	1	2	8																
b) THINGS TO DO	1	2	8																
c) TESTED FOR HIV	1	2	8																

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1015	Were you offered a test for HIV as part of your prenatal care?	YES 1 NO 2	
1016	I don't want to know the results, but were you tested for HIV as part of your prenatal care?	YES 1 NO 2	→ 1020
1017	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER 12 GOVERNMENT HEALTH CLINIC 13 STAND-ALONE VTC CENTER 14 NATIONAL AIDS CONTROL PROGRAM 15 OTHER PUBLIC SECTOR 16 _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR 21 STAND-ALONE VTC CENTER 22 PHARMACY 23 PLANNED PARENTHOOD ASSN. LIB 24 MOBILE CLINIC 25 OTHER PRIVATE MEDICAL SECTOR 26 _____ (SPECIFY) OTHER SOURCE HOME 31 SHOP 32 OTHER 96 _____ (SPECIFY)	
1017A	All women are supposed to receive counseling before being tested. Before you were tested, did you receive counseling?	YES 1 NO 2 DON'T KNOW 8	
1018	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	→ 1020
1019	All women are supposed to receive counseling after being tested. After you were tested, did you receive counseling?	YES 1 NO 2 DON'T KNOW 8	
1020	CHECK 430 FOR LAST BIRTH: ANY CODE ☐ OTHER ☐ '21-36' CIRCLED ↓		→ 1024
1021	Between the time you went for delivery but before the baby was born, were you offered an HIV test?	YES 1 NO 2	
1022	I don't want to know the results, but were you tested for HIV at that time?	YES 1 NO 2	→ 1024
1023	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	→ 1025

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1024	CHECK 1016: YES ☐ NO OR ☐ NOT ASKED		→ 1027
1025	Have you been tested for HIV since that time you were tested during your pregnancy?	YES 1 NO 2	→ 1028
1026	How many months ago was your most recent HIV test?	MONTHS AGO TWO OR MORE YEARS 95	→ 1033
1027	I don't want to know the results, but have you ever been tested for HIV?	YES 1 NO 2	→ 1031
1028	How many months ago was your most recent HIV test?	MONTHS AGO TWO OR MORE YEARS 95	
1029	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	
1030	Where was the test done? (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER 12 GOVERNMENT HEALTH CLINIC 13 STAND-ALONE VTC CENTER 14 NATIONAL AIDS CONTROL PROGRAM 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR 21 STAND-ALONE VTC CENTER 22 PHARMACY 23 PLANNED PARENTHOOD ASSN. LIB 24 MOBILE CLINIC 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE HOME 31 SHOP 32 OTHER 96 _____ 96 (SPECIFY)	→ 1033

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1031	Do you know of a place where people can go to get an HIV test?	YES 1 NO 2	→ 1033
1032	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C STAND-ALONE VTC CENTER D NATIONAL AIDS CONTROL PROGRAM E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR G STAND-ALONE VTC CENTER H PHARMACY I PLANNED PARENTHOOD ASSN. LIB J MOBILE CLINIC K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER _____ X (SPECIFY)	
1033	Have you heard of test kits people can use to test themselves for HIV?	YES 1 NO 2	→ 1035
1034	Have you ever tested yourself for HIV using a self-test kit?	YES 1 NO 2	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1035	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1036	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1037	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1038	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1039	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1040	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE 1 DISAGREE 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1041	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES 1 NO 2 SAYS SHE HAS HIV 3 DON'T KNOW/NOT SURE/DEPENDS 8	
1042	CHECK 1001: HEARD ABOUT ☐ HIV OR AIDS NOT HEARD ABOUT ☐ HIV OR AIDS a) Apart from HIV, have you heard about other infections that can be transmitted through man business? b) Have you heard about infections that can be transmitted through man business?	YES 1 NO 2	
1043	CHECK 713: HAS HAD SEXUAL ☐ INTERCOURSE NEVER HAD SEXUAL ☐ INTERCOURSE		→ 1051
1044	CHECK 1042: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ NO ☐		→ 1046
1045	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through man business?	YES 1 NO 2 DON'T KNOW 8	
1046	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES 1 NO 2 DON'T KNOW 8	
1047	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES 1 NO 2 DON'T KNOW 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1048	CHECK 1045, 1046, AND 1047: HAS HAD AN INFECTION (ANY 'YES') ☐	HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐	→ 1051
1049	The last time you had (PROBLEM FROM 1045/1046/1047), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 1051
1050	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C STAND-ALONE VTC CENTER D NATIONAL AIDS CONTROL PROGRAM E OTHER PUBLIC SECTOR _____ (SPECIFY) F PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR G STAND-ALONE VTC CENTER H PHARMACY I PLANNED PARENTHOOD ASSN. LIB J MOBILE CLINIC K OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) L OTHER SOURCE SHOP M OTHER _____ (SPECIFY) X	
1051	If a wife knows her husband has a disease that she can get from doing man business, is she justified in asking that they use a condom when they do man business?	YES 1 NO 2 DON'T KNOW 8	
1052	Is a wife justified in refusing to do man business with her husband when she knows he has sex with other women?	YES 1 NO 2 DON'T KNOW 8	
1053	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐	NOT IN UNION ☐	→ 1101
1054	Can you say no to your (husband/partner) if you do not want to do man business?	YES 1 NO 2 DEPENDS/NOT SURE 8	
1055	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES 1 NO 2 DEPENDS/NOT SURE 8	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP		
1104	Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 1106		
1105	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES <table><tr><td></td><td></td></tr></table>			
1106	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 1107A		
1107	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPES FULL OF TOBACCO A CIGARS, CHEROOTS, OR CIGARILLOS B WATER PIPE / SHISHA C SNUFF BY MOUTH D SNUFF BY NOSE E CHEWING TOBACCO F OTHER X (SPECIFY)			
1107A	Have you ever heard of an illness called tuberculosis or TB?	YES 1 NO 2	→ 1108		
1107B	What are the things that can happen to you when you have tuberculosis? Anything else? RECORD ALL MENTIONED.	COUGHING FOR 2 OR MORE WEEKS A COUGHING UP BLOOD B CHEST PAIN/ PAINFUL BREATHING OR COUGHING C WEIGHT LOSS D FATIGUE E FEVER F NIGHT SWEATS G OTHER X (SPECIFY) DON'T KNOW Z			
1107C	How does tuberculosis spread from one person to another? Any other way? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING A THROUGH SHARING UTENSTILS B THROUGH TOUCHING A PERSON WITH TB C THROUGH FOOD D THROUGH SEXUAL CONTACT E THROUGH MOSQUITO BITES F OTHER X (SPECIFY) DON'T KNOW Z			
1107D	Can tuberculosis be cured?	YES 1 NO 2 DON'T KNOW 8			
1107E	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET 1 NO 2 DON'T KNOW/ NOT SURE/ DEPENDS 8			

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP																					
1108	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem: a) Getting permission to go to the doctor? b) Getting money needed for advice or treatment? c) The distance to the health facility? d) Not wanting to go alone?	BIG PROBLEM a) PERMISSION TO GO 1 b) GETTING MONEY 1 c) DISTANCE 1 d) GO ALONE 1	NOT A BIG PROBLEM 2 2 2 2																						
1109	Are you covered by any health insurance?	YES 1 NO 2		→ 1110A																					
1110	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE A HEALTH INSURANCE THROUGH EMPLOYER B SOCIAL SECURITY C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE D OTHER _____ X (SPECIFY)																							
1110A	Do you currently possess a form of identity document for yourself, such as a birth certificate, voter card, or national ID?	YES 1 NO 2		→ 1110BB																					
1110B	A. Do you currently possess a: a) Birth certificate b) Voter card c) National ID	B. Have you ever tried to obtain a [document from 1110B A]? <table border="1"> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>YES 1</td><td></td><td></td></tr> <tr> <td>NO 2</td><td>→ 1</td><td>2</td></tr> <tr> <td>YES 1</td><td></td><td></td></tr> <tr> <td>NO 2</td><td>→ 1</td><td>2</td></tr> <tr> <td>YES 1</td><td></td><td></td></tr> <tr> <td>NO 2</td><td>→ 1</td><td>2</td></tr> </tbody> </table>		YES	NO	YES 1			NO 2	→ 1	2	YES 1			NO 2	→ 1	2	YES 1			NO 2	→ 1	2		
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SECTION 12. ADULT AND MATERNAL MORTALITY MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																												
1201	Now I would like to ask you some questions about your brothers and sisters belly born to your biological mother, including those who are living with you, those living elsewhere and those who have died. From our experience in prior surveys, we know it may sometimes be difficult to establish a complete list of all the children born to your biological mother. We will work together to draw the most complete list and work to recall all your siblings. Could you please now give me the names of all of your brothers and sisters born to your biological mother. DO NOT FILL IN THE ORDER NUMBER YET. <table border="0"> <thead> <tr> <th>NAME</th><th>ORDER NUMBER</th><th>NAME</th><th>ORDER NUMBER</th></tr> </thead> <tbody> <tr> <td>a _____</td><td> </td><td>k _____</td><td> </td></tr> <tr> <td>b _____</td><td> </td><td>l _____</td><td> </td></tr> <tr> <td>c _____</td><td> </td><td>m _____</td><td> </td></tr> <tr> <td>d _____</td><td> </td><td>n _____</td><td> </td></tr> <tr> <td>e _____</td><td> </td><td>o _____</td><td> </td></tr> <tr> <td>f _____</td><td> </td><td>p _____</td><td> </td></tr> <tr> <td>g _____</td><td> </td><td>q _____</td><td> </td></tr> <tr> <td>h _____</td><td> </td><td>r _____</td><td> </td></tr> <tr> <td>i _____</td><td> </td><td>s _____</td><td> </td></tr> <tr> <td>j _____</td><td> </td><td>t _____</td><td> </td></tr> </tbody> </table>	NAME	ORDER NUMBER	NAME	ORDER NUMBER	a _____		k _____		b _____		l _____		c _____		m _____		d _____		n _____		e _____		o _____		f _____		p _____		g _____		q _____		h _____		r _____		i _____		s _____		j _____		t _____			
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1202	CHECK 1201: ONE OR MORE BROTHERS ☐ OR SISTERS LISTED NO BROTHERS ☐ OR SISTERS LISTED		→ 1204																																												
1203	READ THE NAMES OF THE BROTHERS AND SISTERS TO THE RESPONDENT AND AFTER THE LAST ONE ASK: Are there any other brothers and sisters from the same biological mother that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1201.																																														
1204	Sometimes people forget to mention children born to their biological mother because they do not live with them or they do not see them very often. Are there any brothers or sisters who do not live with you that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1201.																																														
1205	Sometimes people forget to mention children born to their biological mother because they have died. Are there any brothers or sisters who died that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1201.																																														
1206	Some people have brothers or sisters from the same mother but a different father. Are there any brothers or sisters born to your biological mother, but who have a different biological father, that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1201.																																														
1207	COUNT THE NUMBER OF BROTHERS AND SISTERS RECORDED IN 1201.	TOTAL BROTHERS AND SISTERS ..																																													

SECTION 12. ADULT AND MATERNAL MORTALITY MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1208	CHECK 1207: Just to make make sure that I have this right: Your mother had in TOTAL _____ births, excluding you, during her lifetime. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 1201 AND/OR 1207.		
1209	CHECK 1207: ONE OR MORE ☐ NO ☐ → 1301 BROTHERS/SISTERS BROTHER OR SISTER		
1210	Please tell me, which brother or sister was born first? And which was born next? RECORD '01' FOR THE ORDER NUMBER IN 1201 FOR THE FIRST BROTHER OR SISTER, '02' FOR THE SECOND, AND SO ON UNTIL YOU HAVE RECORDED THE ORDER NUMBER FOR ALL BROTHERS AND SISTERS.		
1211	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS ..	

SECTION 12. ADULT AND MATERNAL MORTALITY MODULE

1212	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN 1201. ASK 1213 TO 1224 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
1213	NAME OF BROTHER OR SISTER.	(01) _____	(02) _____	(03) _____	(04) _____	(05) _____	(06) _____
1214	Is (NAME) male or female?	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2
1215	Is (NAME) still alive?	YES 1 NO 2 GO TO 1217 DK 8 GO TO (02)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (03)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (04)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (05)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (06)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (07)
1216	How old is (NAME)?	 GO TO (02)	 GO TO (03)	 GO TO (04)	 GO TO (05)	 GO TO (06)	 GO TO (07)
1217	How many years ago did (NAME) die?						
1218	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223
1219	Was (NAME) pregnant when she died?	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2
1220	Did (NAME) die during childbirth?	YES 1 GO TO (02) NO 2	YES 1 GO TO (03) NO 2	YES 1 GO TO (04) NO 2	YES 1 GO TO (05) NO 2	YES 1 GO TO (06) NO 2	YES 1 GO TO (07) NO 2
1221	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223
1222	How many days after the end of the pregnancy did (NAME) die?						
1223	Was (NAME)'s death due to an act of violence?	YES 1 GO TO (02) NO 2	YES 1 GO TO (03) NO 2	YES 1 GO TO (04) NO 2	YES 1 GO TO (05) NO 2	YES 1 GO TO (06) NO 2	YES 1 GO TO (07) NO 2
1224	Was (NAME)'s death due to an accident?	YES 1 NO 2 GO TO (02)	YES 1 NO 2 GO TO (03)	YES 1 NO 2 GO TO (04)	YES 1 NO 2 GO TO (05)	YES 1 NO 2 GO TO (06)	YES 1 NO 2 GO TO (07)
IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.							

SECTION 12. ADULT AND MATERNAL MORTALITY MODULE

1212	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN 1201. ASK 1213 TO 1224 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
1213	NAME OF BROTHER OR SISTER.	(07)	(08)	(09)	(10)	(11)	(12)
1214	Is (NAME) male or female?	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2	MALE 1 FEMALE . 2
1215	Is (NAME) still alive?	YES 1 NO 2 GO TO 1217 DK 8 GO TO (08)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (09)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (10)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (11)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (12)	YES 1 NO 2 GO TO 1217 DK 8 GO TO (13)
1216	How old is (NAME)?	 GO TO (08)	 GO TO (09)	 GO TO (10)	 GO TO (11)	 GO TO (12)	 GO TO (13)
1217	How many years ago did (NAME) die?						
1218	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1223
1219	Was (NAME) pregnant when she died?	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2	YES 1 GO TO 1223 NO 2
1220	Did (NAME) die during childbirth?	YES 1 GO TO (08) NO 2	YES 1 GO TO (09) NO 2	YES 1 GO TO (10) NO 2	YES 1 GO TO (11) NO 2	YES 1 GO TO (12) NO 2	YES 1 GO TO (13) NO 2
1221	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223	YES 1 NO 2 GO TO 1223
1222	How many days after the end of the pregnancy did (NAME) die?						
1223	Was (NAME)'s death due to an act of violence?	YES 1 GO TO (08) NO 2	YES 1 GO TO (09) NO 2	YES 1 GO TO (10) NO 2	YES 1 GO TO (11) NO 2	YES 1 GO TO (12) NO 2	YES 1 GO TO (13) NO 2
1224	Was (NAME)'s death due to an accident?	YES 1 NO 2 GO TO (08)	YES 1 NO 2 GO TO (09)	YES 1 NO 2 GO TO (10)	YES 1 NO 2 GO TO (11)	YES 1 NO 2 GO TO (12)	YES 1 NO 2 GO TO (13)
IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.							

SECTION 13. FEMALE GENITAL CUTTING/MUTILATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
1301	Now I would like to ask about a practice known as female circumcision. Have you ever heard of female circumcision?	YES 1 NO 2	→ 1303								
1302	In some countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES 1 NO 2	→ 1317A								
1303	Have you yourself ever been circumcised?	YES 1 NO 2	→ 1317								
1307	How old were you when you were circumcised? IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> AS A BABY/DURING INFANCY 95 DON'T KNOW 98									
1317	Do you think that female circumcision should be continued, or should it be stopped?	CONTINUED 1 STOPPED 2 DEPENDS 3 DON'T KNOW 8									
1317A	Now I would like to ask you about something else. As you know some women belong to bush societies, like the Sande society. Have you heard of these societies?	YES 1 NO 2	→ 1401								
1317B	Are you a member of the Sande society or a woman's bush society?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1401								
1317C	How long have you been a member of the Sande society or a woman's bush society?	DAYS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> WEEKS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MONTHS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEARS 4 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									

SECTION 14. EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1401	During the Ebola time in Liberia, which counties did you live in? Anywhere else? RECORD ALL MENTIONED.	BOMI A BONG B GBARPOLU C GRAND BASSA D GRAND CAPE MOUNT E GRAND GEDEH F GRAND KRU G LOFA H MARGIBI I MARYLAND J MONTSERRADO K NIMBA L RIVER CESS M RIVER GEE N SINOE O OUTSIDE OF LIBERIA Z	
1401A	CHECK 1401: <u>ONLY</u> "Z - OUTSIDE OF LIBERIA" CIRCLED? NO ☐ <u>ONLY</u> Z CIRCLED ☐		→ 1500
1402	Did you get sick with any illness during the Ebola time in Liberia?	YES 1 NO 2	→ 1408
1403	In what month and year did you first get sick with the illness during Ebola time in Liberia?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	
1404	In what county were you when you first got sick with the illness?	BOMI 1 BONG 2 GBARPOLU 3 GRAND BASSA 4 GRAND CAPE MOUNT 5 GRAND GEDEH 6 GRAND KRU 7 LOFA 8 MARGIBI 9 MARYLAND 10 MONTSERRADO 11 NIMBA 12 RIVER CESS 13 RIVER GEE 14 SINOE 15	
1405	When you were sick with the illness, did you have symptoms like fever, vomiting, diarrhea, severe headache, muscle pain, stomach pain, or unexplained bleeding?	YES 1 NO 2	→ 1408
1406	Did you seek advice or treatment for those symptoms from any source?	YES 1 NO 2	→ 1408

EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1407	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C MOBILE CLINIC D RELATIVE/FRIEND/NEIGHBOR WHO IS A HEALTHCARE WORKER E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC G PHARMACY H PRIVATE DOCTOR I MOBILE CLINIC J RELATIVE/FRIEND/NEIGHBOR WHO IS A HEALTHCARE WORKER K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE EBOLA TREATMENT UNIT M SHOP N TRADITIONAL PRACTITIONER O RELATIVE/FRIEND/NEIGHBOR WHO IS NOT A HEALTHCARE WORKER P BLACK BAGGER/ DRUG PEDDLER Q OTHER _____ X (SPECIFY)	
1408	Were you admitted to an Ebola treatment unit or ETU during the Ebola time in Liberia?	YES 1 NO 2	→ 1411
1409	In what month and year were you admitted to an Ebola treatment unit or ETU?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	
1410	In what county was the Ebola treatment unit or ETU?	BOMI 1 BONG 2 GBARPOLU 3 GRAND BASSA 4 GRAND CAPE MOUNT 5 GRAND GEDEH 6 GRAND KRU 7 LOFA 8 MARGIBI 9 MARYLAND 10 MONTSERRADO 11 NIMBA 12 RIVER CESS 13 RIVER GEE 14 SINOE 15	

EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP						
1411	Did any members of your household or other persons you were close to like relatives or friends get sick with any illness during the Ebola time in Liberia?	YES 1 NO 2	→ 1415						
1412	Were you in close contact with any of these people who got sick? By close contact I mean you took care of them when they were sick or shared, for example, the same bed, cooking utensils, or toilet facilities.	YES 1 NO 2							
1413	Were any of these people who got sick admitted to an Ebola treatment unit or ETU?	YES 1 NO 2 DON'T KNOW 8							
1414	Were you ever on a contact list, that is, did someone ever come to your house to take your temperature two times every day?	YES 1 NO 2 DON'T KNOW 8							
1415	Did any members of your household, other relatives, or close friends die during the Ebola time in Liberia?	YES 1 NO 2 DON'T KNOW 8	→ 1418						
1416	a) How many members of your household died? b) How many other relatives died? c) How many close friends died? IF NONE, RECORD '00'.	a) HOUSEHOLD MEMBERS DEAD .. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> b) OTHER RELATIVES DEAD b) CLOSE FRIENDS DEAD IF NONE, RECORD '00'.							
1417	Did you attend any of the burials for these deaths?	YES 1 NO 2							
1418	Did you ever receive the Ebola vaccine by PREVAIL?	YES 1 NO 2	→ 1420						
1419	In what month and year were you vaccinated for Ebola by PREVAIL?	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> DON'T KNOW MONTH 98 YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr></table> DON'T KNOW YEAR 9998							
1420	During the Ebola time in Liberia, did you work in an Ebola treatment unit or ETU?	YES 1 NO 2							
1421	During the Ebola time in Liberia, did you work in a health facility that was not an Ebola treatment unit or ETU ?	YES 1 NO 2	→ 1422						

EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1421A	Have you <u>ever</u> worked in a health facility?	YES 1 NO 2	
1422	During the Ebola time in Liberia, did you care for someone at home who had Ebola?	YES 1 NO 2	
1423	Have you ever come into contact with animals that were hunted or caught in the bush?	YES 1 NO 2	→ 1500
1424	What kinds of bush animals were they? Any other kind of animal? RECORD ALL MENTIONED.	BUSH HOG A BAT B BIRDS C DEER D GROUNDHOG E MONKEY F PORCUPINE G OTHER X	
1425	What did you do with the bush animal(s) that you came in contact with? Anything else? RECORD ALL MENTIONED.	BUTCHER/SKIN/CLEAN THE ANIMAL A COOK THE ANIMAL B EAT THE ANIMAL C SELL THE ANIMAL D OTHER X	

SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
1500	CHECK COVER PAGE: WOMAN SELECTED FOR DV MODULE? WOMAN SELECTED ☐ FOR THIS SECTION WOMAN ☐ NOT SELECTED		1533																								
1501	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED 1 PRIVACY NOT POSSIBLE 2		1532																								
1501A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Liberia. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.																										
1502	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') ☐ NEVER MARRIED/ NEVER LIVED WITH A MAN ☐		1516																								
1503	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)? a) He (is/was) jealous or angry if you (talk/talked) to other men? b) He frequently (accuses/accused) you of being unfaithful? c) He (does/did) not permit you to meet your female friends? d) He (tries/tried) to limit your contact with your family? e) He (insists/insisted) on knowing where you (are/were) at all times?	<table> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>JEALOUS</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>ACCUSES</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NOT MEET FRIENDS ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NO FAMILY</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>WHERE YOU ARE</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	JEALOUS	1	2	8	ACCUSES	1	2	8	NOT MEET FRIENDS ..	1	2	8	NO FAMILY	1	2	8	WHERE YOU ARE	1	2	8	
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NO FAMILY	1	2	8																								
WHERE YOU ARE	1	2	8																								
1504	Now I need to ask some more questions about your relationship with your (last) (husband/partner). A. Did your (last) (husband/partner) ever: a) say or do something to humiliate you in front of others? b) threaten to hurt or harm you or someone you care about? c) insult you or make you feel bad about yourself?	B. How often did this happen during the last 12 months: often, only sometimes, or not at all? <table> <thead> <tr> <th>EVER</th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> </tbody> </table>	EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	YES 1 NO 2 ↓	→ 1	2	3	YES 1 NO 2 ↓	→ 1	2	3	YES 1 NO 2 ↓	→ 1	2	3									
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SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																												
1505	A. Did your (last) (husband/partner) ever do any of the following things to you:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?																																													
		<table border="1"> <thead> <tr> <th>EVER</th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>a) push you, shake you, or throw something at you? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>b) slap you? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>c) twist your arm or pull your hair? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>d) punch you with his fist or with something that could hurt you? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>e) kick you, drag you, or beat you up? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>f) try to choke you or burn you on purpose? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>g) threaten or attack you with a knife, gun, or other weapon? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>h) physically force you to do man business with him when you did not want to? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>i) physically force you to perform any other sexual acts you did not want to? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>j) force you with threats or in any other way to perform sexual acts you did not want to? YES 1 NO 2</td><td>→ 1</td><td>2</td><td>3</td></tr> </tbody> </table>	EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	a) push you, shake you, or throw something at you? YES 1 NO 2	→ 1	2	3	b) slap you? YES 1 NO 2	→ 1	2	3	c) twist your arm or pull your hair? YES 1 NO 2	→ 1	2	3	d) punch you with his fist or with something that could hurt you? YES 1 NO 2	→ 1	2	3	e) kick you, drag you, or beat you up? YES 1 NO 2	→ 1	2	3	f) try to choke you or burn you on purpose? YES 1 NO 2	→ 1	2	3	g) threaten or attack you with a knife, gun, or other weapon? YES 1 NO 2	→ 1	2	3	h) physically force you to do man business with him when you did not want to? YES 1 NO 2	→ 1	2	3	i) physically force you to perform any other sexual acts you did not want to? YES 1 NO 2	→ 1	2	3	j) force you with threats or in any other way to perform sexual acts you did not want to? YES 1 NO 2	→ 1	2	3	
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1506	CHECK 1505A (a-j): AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐	→ 1509																																													
1507	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95																																													
1508	Did the following ever happen as a result of what your (last) (husband/partner) did to you: a) You had cuts, bruises, or aches? b) You had eye injuries, sprains, dislocations, or burns? c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES 1 NO 2 YES 1 NO 2 YES 1 NO 2																																													

SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
1509	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES 1 NO 2	→ 1511																								
1510	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN 1 SOMETIMES 2 NOT AT ALL 3																									
1511	Does (did) your (last) (husband/partner) drink alcohol?	YES 1 NO 2	→ 1513																								
1512	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN 1 SOMETIMES 2 NEVER 3																									
1513	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID 1 SOMETIMES AFRAID 2 NEVER AFRAID 3																									
1514	CHECK 709: MARRIED/ LIVED ☐ WITH A MAN MORE THAN ONCE ↓ MARRIED/ LIVED ☐ WITH A MAN ONLY ONCE		→ 1516																								
1515	A. So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner). B. How long ago did this last happen? <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th></th><th>EVER</th><th></th><th>0 - 11 MONTHS AGO</th><th>12+ MONTHS AGO</th><th>DON'T REMEMBER</th></tr> </thead> <tbody> <tr> <td>a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>b) Did any previous (husband/partner) physically force you to do man business or perform any other sexual acts against your will?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>c) Did any previous (husband/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> </tbody> </table>		EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER	a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 NO 2 ↓	→	1	2	3	b) Did any previous (husband/partner) physically force you to do man business or perform any other sexual acts against your will?	YES 1 NO 2 ↓	→	1	2	3	c) Did any previous (husband/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES 1 NO 2 ↓	→	1	2	3		
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SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1516	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ a) From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1519
1517	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER A FATHER/STEP-FATHER B SISTER/BROTHER C DAUGHTER/SON D OTHER RELATIVE E CURRENT BOYFRIEND F FORMER BOYFRIEND G MOTHER-IN-LAW H FATHER-IN-LAW I OTHER IN-LAW J TEACHER K EMPLOYER/SOMEONE AT WORK L POLICE/SOLDIER M OTHER _____ X (SPECIFY)	
1518	In the last 12 months, how often (has this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN 1 SOMETIMES 2 NOT AT ALL 3	
1519	CHECK 201, 226, AND 230: EVER BEEN PREGNANT ('YES' ON 201 OR 226 OR 230) ☐ NEVER BEEN PREGNANT ☐		→ 1522

SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1520	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES 1 NO 2	→ 1522
1521	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER A MOTHER/STEP-MOTHER B FATHER/STEP-FATHER C SISTER/BROTHER D DAUGHTER/SON E OTHER RELATIVE F FORMER HUSBAND/PARTNER G CURRENT BOYFRIEND H FORMER BOYFRIEND I MOTHER-IN-LAW J FATHER-IN-LAW K OTHER IN-LAW L TEACHER M EMPLOYER/SOMEONE AT WORK .. N POLICE/SOLDIER O OTHER X (SPECIFY)	
1522	CHECK 701 AND 702: EVER MARRIED/EVER ☐ LIVED WITH A MAN NEVER MARRIED/NEVER ☐ LIVED WITH A MAN		→ 1522B
1522A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to do man business or perform any other sexual acts when you did not want to?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1523 → 1524A
1522B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to do man business or perform any other sexual acts when you did not want to?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1526
1523	Who was the person who was forcing you the very first time this happened?	CURRENT HUSBAND/PARTNER 01 FORMER HUSBAND/PARTNER 02 CURRENT/FORMER BOYFRIEND .. 03 FATHER/STEP-FATHER 04 BROTHER/STEP-BROTHER 05 OTHER RELATIVE 06 IN-LAW 07 OWN FRIEND/ACQUAINTANCE 08 FAMILY FRIEND 09 TEACHER 10 EMPLOYER/SOMEONE AT WORK .. 11 POLICE/SOLDIER 12 PRIEST/RELIGIOUS LEADER 13 STRANGER 14 OTHER 96 (SPECIFY)	

SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1524	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ a) In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to do man business when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ b) In the last 12 months has anyone physically forced you to do man business when you did not want to?	YES 1 NO 2 → 1525	
1524A	CHECK 1505A (h-j) and 1515A(b) AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐	→ 1526	
1525	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ a) How old were you the first time you were forced to do man business or perform any other sexual acts by anyone, including (your/any) husband/partner? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ b) How old were you the first time you were forced to do man business or perform any other sexual acts?	AGE IN COMPLETED YEARS DON'T KNOW 98	
1526	CHECK 1505A (a-j), 1515A (a,b), 1516, 1520, 1522A, AND 1522B: AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐	→ 1530	
1527	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES 1 NO 2 → 1529	
1528	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY A HUSBAND'S/PARTNER'S FAMILY .. B CURRENT/FORMER HUSBAND/PARTNER C CURRENT/FORMER BOYFRIEND .. D FRIEND E NEIGHBOR F RELIGIOUS LEADER G DOCTOR/MEDICAL PERSONNEL H POLICE I LAWYER J SOCIAL SERVICE ORGANIZATION .. K OTHER _____ X (SPECIFY)	
1528A	Do you feel that (any of) this help was useful to solve the situation that was happening at the time or useful in the longer term, or was it not useful at all?	NOT USEFUL AT ALL 1 USEFUL TO SITUATION AT THAT TIME .. 2 USEFUL IN THE LONGER TERM 3	
1528B	After seeking (any of) this help, did the physical or sexual assaults from your husband/partner or others that resulted in you being physically or sexually hurt at that time change in one way or another?	NO CHANGE IN ASSULT 1 ASSAULT REDUCED 2 ASSAULT INCREASED 3 → 1530	

SECTION 15. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
1529	Have you ever told any one about this?	YES 1 NO 2																	
1530	As far as you know, did your father ever beat your mother?	YES 1 NO 2 DON'T KNOW 8																	
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.																		
1531	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	<table> <tr> <td></td><td>YES, ONCE</td><td>YES, MORE THAN ONCE</td><td>NO</td></tr> <tr> <td>HUSBAND</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>OTHER MALE ADULT ..</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>FEMALE ADULT</td><td>1</td><td>2</td><td>3</td></tr> </table>		YES, ONCE	YES, MORE THAN ONCE	NO	HUSBAND	1	2	3	OTHER MALE ADULT ..	1	2	3	FEMALE ADULT	1	2	3	
	YES, ONCE	YES, MORE THAN ONCE	NO																
HUSBAND	1	2	3																
OTHER MALE ADULT ..	1	2	3																
FEMALE ADULT	1	2	3																
1532	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. 																		
1533	RECORD THE TIME.	HOURS <table border="1"><tr><td></td><td></td></tr></table> MINUTES <table border="1"><tr><td></td><td></td></tr></table>																	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

B BIRTHS
P PREGNANCIES
T TERMINATIONS

0 NO METHOD

1 FEMALE STERILIZATION
2 MALE STERILIZATION
3 IUD
4 INJECTABLES
5 IMPLANTS
6 PILL
7 CONDOM
8 FEMALE CONDOM
9 EMERGENCY CONTRACEPTION
J STANDARD DAYS METHOD/ CYCLEBEADS
K LACTATIONAL AMENORRHEA METHOD
L RHYTHM METHOD

M WITHDRAWAL
X OTHER MODERN METHOD
Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

0 INFREQUENT SEX/HUSBAND AWAY
1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND/PARTNER DISAPPROVED
4 WANTED MORE EFFECTIVE METHOD
5 SIDE EFFECTS/HEALTH CONCERNS

6 LACK OF ACCESS/TOO FAR
7 COSTS TOO MUCH
8 INCONVENIENT TO USE
F UP TO GOD/FATALISTIC
A DIFFICULT TO GET PREGNANT/MENOPAUSAL
D MARITAL DISSOLUTION/SEPARATION
X OTHER

(SPECIFY)

Z DON'T KNOW

			COL. 1	COL. 2	
	12	DEC	01		
	11	NOV	02		
	10	OCT	03		
2	09	SEP	04		2
0	08	AUG	05		0
2	07	JUL	06		2
0	06	JUN	07		0
	05	MAY	08		
	04	APR	09		
	03	MAR	10		
	02	FEB	11		
	01	JAN	12		
	12	DEC	13		
	11	NOV	14		
	10	OCT	15		
2	09	SEP	16		2
0	08	AUG	17		0
1	07	JUL	18		1
9	06	JUN	19		9
	05	MAY	20		
	04	APR	21		
	03	MAR	22		
	02	FEB	23		
	01	JAN	24		
	12	DEC	25		
	11	NOV	26		
	10	OCT	27		
2	09	SEP	28		2
0	08	AUG	29		0
1	07	JUL	30		1
8	06	JUN	31		8
	05	MAY	32		
	04	APR	33		
	03	MAR	34		
	02	FEB	35		
	01	JAN	36		
	12	DEC	37		
	11	NOV	38		
	10	OCT	39		
2	09	SEP	40		2
0	08	AUG	41		0
1	07	JUL	42		1
7	06	JUN	43		7
	05	MAY	44		
	04	APR	45		
	03	MAR	46		
	02	FEB	47		
	01	JAN	48		
	12	DEC	49		
	11	NOV	50		
	10	OCT	51		
2	09	SEP	52		2
0	08	AUG	53		0
1	07	JUL	54		1
6	06	JUN	55		6
	05	MAY	56		
	04	APR	57		
	03	MAR	58		
	02	FEB	59		
	01	JAN	60		
	12	DEC	61		
	11	NOV	62		
	10	OCT	63		
2	09	SEP	64		2
0	08	AUG	65		0
1	07	JUL	66		1
5	06	JUN	67		5
	05	MAY	68		
	04	APR	69		
	03	MAR	70		
	02	FEB	71		
	01	JAN	72		
	12	DEC	73		
	11	NOV	74		
	10	OCT	75		
2	09	SEP	76		2
0	08	AUG	77		0
1	07	JUL	78		1
4	06	JUN	79		4
	05	MAY	80		
	04	APR	81		
	03	MAR	82		
	02	FEB	83		
	01	JAN	84		

2019-20 LIBERIA DEMOGRAPHIC AND HEALTH SURVEY
MAN'S QUESTIONNAIRE

LAST UPDATED: 3-Oct-19

GOVERNMENT OF LIBERIA
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

IDENTIFICATION																				
PLACE NAME _____																				
NAME OF HOUSEHOLD HEAD _____																				
CLUSTER NUMBER				<table border="1" style="width: 100%; height: 20px;"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>																
HOUSEHOLD NUMBER				<table border="1" style="width: 100%; height: 20px;"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>																
NAME AND LINE NUMBER OF MAN _____																				
INTERVIEWER VISITS																				
	1	2	3	FINAL VISIT																
DATE	_____	_____	_____	<table border="1" style="width: 100%;"> <tr><td colspan="2">DAY</td><td></td><td></td></tr> <tr><td colspan="2">MONTH</td><td></td><td></td></tr> <tr><td>YEAR</td><td>2</td><td>0</td><td></td></tr> <tr><td>INT. NO.</td><td></td><td></td><td></td></tr> </table>	DAY				MONTH				YEAR	2	0		INT. NO.			
DAY																				
MONTH																				
YEAR	2	0																		
INT. NO.																				
INTERVIEWER'S NAME	_____	_____	_____	<table border="1" style="width: 100%;"> <tr><td></td><td></td><td></td><td></td></tr> </table>																
RESULT*	_____	_____	_____	<table border="1" style="width: 100%;"> <tr><td></td><td></td><td></td><td></td></tr> </table>																
NEXT VISIT: DATE TIME	_____	_____		<table border="1" style="width: 100%;"> <tr><td>TOTAL NUMBER OF VISITS</td><td></td></tr> </table>	TOTAL NUMBER OF VISITS															
TOTAL NUMBER OF VISITS																				
*RESULT CODES: 1 COMPLETED 4 REFUSED 7 OTHER _____ 2 NOT AT HOME 5 PARTLY COMPLETED SPECIFY _____ 3 POSTPONED 6 INCAPACITATED																				
SUPERVISOR NAME _____ <table border="1" style="width: 100%; height: 20px;"> <tr><td></td><td></td><td></td><td></td></tr> </table> NUMBER																				

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Liberia Institute of Statistics and Geo-Information Services. We are conducting a survey about health and other topics all over Liberia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES
TO BE INTERVIEWED .. 1

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED .. 2 → END



SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> MINUTES <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	
102	How long have you been living continuously in (NAME OF CURRENT COUNTY)?	YEARS <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> ALWAYS 95 VISITOR 96	→ 105
	IF LESS THAN ONE YEAR, RECORD '00' YEARS.		
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY 1 TOWN 2 RURAL AREA 3	
104	Before you moved here, which county did you live in?	BOMI 01 BONG 02 GBARPOLU 03 GRAND BASSA 04 GRAND CAPE MOUNT 05 GRAND GEDEH 06 GRAND KRU 07 LOFA 08 MARGIBI 09 MARYLAND 10 MONTSERRADO 11 NIMBA 12 RIVER CESS 13 RIVER GEE 14 SINOE 15 OUTSIDE OF LIBERIA 96	
105	In what month and year were you born?	MONTH <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> DON'T KNOW MONTH 98 YEAR <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> DON'T KNOW YEAR 9998	
106	How old were you at your last birthday?	AGE IN COMPLETED YEARS <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	
	COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.		

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	Have you ever attended school?	YES 1 NO 2	→ 111
108	What is the highest level of school you attended: elementary, junior high, senior high, or higher?	ELEMENTARY (GRADES 1-6) 1 JUNIOR HIGH (GRADES 7-9) 2 SENIOR HIGH (GRADES 10-12) 3 HIGHER 4	
109	What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	
110	CHECK 108: ELEMENTARY, JUNIOR HIGH, OR <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table> HIGHER <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table>		→ 113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL 1 ABLE TO READ ONLY PART OF THE SENTENCE 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE 4 (SPECIFY LANGUAGE) _____ BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table> CIRCLED CODE '1' OR '5' CIRCLED <table border="1" style="display: inline-table; width: 20px; height: 20px; vertical-align: middle;"></table>		→ 114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES 1 NO 2	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
119	Have you ever used the internet?	YES 1 NO 2	→ 122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES 1 NO 2	→ 122
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4	
122	What is your religion?	CHRISTIAN 1 MUSLIM 2 TRADITIONAL RELIGION 3 NO RELIGION 4 OTHER 6 (SPECIFY)	
123	What dialect do you speak (besides English)?	BASSA 01 GBANDI 02 BELLE 03 DEY 04 GIO 05 GOLA 06 GREBO 07 KISSI 08 KPELLE 09 KRAHN 10 KRU 11 LORMA 12 MANDINGO 13 MANO 14 MENDE 15 SAPRO 16 VAI 17 NONE / ONLY ENGLISH 18 OTHER 96	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES 1 NO 2 DON'T KNOW 8	☐ → 206								
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES 1 NO 2	☐ → 204								
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES 1 NO 2	☐ → 206								
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES 1 NO 2 DON'T KNOW 8	☐ → 208								
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) GIRLS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ☐ HAS HAD ONLY ONE CHILD ☐ HAS NOT HAD ANY CHILDREN ☐	 → 211 → 301	
210	Did all of the children you have fathered have the same biological mother?	YES 1 NO 2	
211	CHECK 208: HAS HAD MORE THAN ONE CHILD ☐ HAS HAD ONLY ONE CHILD ☐ a) How old were you when your first child was born? b) How old were you when your child was born?	AGE IN YEARS	
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ☐ NO LIVING CHILDREN ☐	 → 301	
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ ONLY ONE LIVING CHILD ☐ a) How old is your youngest child? b) How old is your child?	AGE IN YEARS	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ (YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER ☐	 → 301	
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ ONLY ONE LIVING CHILD ☐ a) What is the name of your youngest child? b) What is the name of your child?	(NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any prenatal check-ups?	YES 1 NO 2 DON'T KNOW 8	☐ → 218
217	Were you ever present during any of those prenatal check-ups?	PRESENT 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY 1 OTHER 2	
219	When a child has running stomach, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL 1 ABOUT THE SAME 2 LESS THAN USUAL 3 NOTHING TO DRINK 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization, Tube Tie, Turning the Womb. PROBE: Women can have an operation to avoid having any more children.	YES 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
04	Injectables, Depo. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES 1 NO 2
05	Implants, Jadelle. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES 1 NO 2
07	Condom, Raincoat. PROBE: Men can put a rubber sheath on their penis before woman business.	YES 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before man business.	YES 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within five days after they have unprotected man business, women can take special pills to prevent pregnancy.	YES 1 NO 2
10	CycleBeads/ Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not do man business.	YES 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not do man business on the days of the month they think they can get pregnant.	YES 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
302	In the last few months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Received a voice or text message about family planning on a mobile phone?	YES NO			
		a) RADIO	1 2		
		b) TELEVISION	1 2		
		c) NEWSPAPER OR MAGAZINE	1 2		
		d) MOBILE PHONE	1 2		
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES	1		
		NO	2		
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she does man business?	YES	1		
		NO	2		
		DON'T KNOW	8		→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS	1		
		DURING HER PERIOD	2		
		RIGHT AFTER HER PERIOD HAS ENDED	3		
		HALFWAY BETWEEN TWO PERIODS	4		
		OTHER _____ (SPECIFY)	6		
		DON'T KNOW	8		
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES	1		
		NO	2		
		DON'T KNOW	8		
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's concern and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	DIS- AGREE AGREE DK			
		a) CONTRACEPTION WOMAN'S CONCERN	1 2 8		
		b) WOMEN MAY BECOME PROMISCUOUS	1 2 8		

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP	
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED	1	→ 404	
		YES, LIVING WITH A WOMAN	2		
		NO, NOT IN UNION	3		
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED	1	→ 413	
		YES, LIVED WITH A WOMAN	2		
		NO	3		
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED	1	→ 410	
		DIVORCED	2		
		SEPARATED	3		
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM	1		
		STAYING ELSEWHERE	2		
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE)	1	→ 407	
		NO (ONLY ONE WIFE)	2		
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS			
407	CHECK 405: ONE WIFE/ PARTNER ↓ a) Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER ↓ b) Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ _____ _____ _____ LINE NUMBER AGE		408 How old was (NAME) on her last birthday?	
408	ASK 408 FOR EACH PERSON.				

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
409	CHECK 407: ONE WIFE/ PARTNER ☐	MORE THAN ONE WIFE/ PARTNER ☐	→ 411
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE 1 ONLY ONCE 2	
411	CHECK 405 AND 410: BOTH ARE ☐ CODE '2' ↓ a) In what month and year did you start living with your (wife/partner)? OTHER ☐ ↓ b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE	
413	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you did woman business for the very first time?	NEVER HAD SEXUAL INTERCOURSE 00 AGE IN YEARS	→ 501
415	I would like to ask you about your recent sexual activity. When was the last time you did woman business? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	→ 417 → 427

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
416	When was the last time you did woman business with this person?		DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3
417	The last time you did woman business with this person, was a condom used?	YES 1 NO 2 (SKIP TO 419) ←	YES 1 NO 2 (SKIP TO 419) ←	YES 1 NO 2 (SKIP TO 419) ←
418	Was a condom used every time you did woman business with this person in the last 12 months?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
419	What was your relationship to this person with whom you did woman business? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE 1 LIVE-IN PARTNER 2 GIRLFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)	WIFE 1 LIVE-IN PARTNER 2 GIRLFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)	WIFE 1 LIVE-IN PARTNER 2 GIRLFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)
420	How long ago did you first do woman business with this person?	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4
421	How many times during the last 12 months did you do woman business with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
422	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
423	Apart from this person, have you done woman business with any other person in the last 12 months?	YES 1 (GO BACK TO 416 IN NEXT COLUMN) ← NO 2 (SKIP TO 425) ←	YES 1 (GO BACK TO 416 IN NEXT COLUMN) ← NO 2 (SKIP TO 425) ←	
424	In total, with how many different people have you done woman business in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS .. DON'T KNOW 98

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
425	CHECK 419 (ALL COLUMNS): AT LEAST ONE PARTNER ☐ IS A SEX WORKER	NO PARTNERS ☐ ARE SEX WORKERS	→ 427
426	CHECK 419 AND 417 (ALL COLUMNS): CONDOM USED WITH ☐ EVERY SEX WORKER	OTHER ☐	→ 430 → 431
427	In the last 12 months, did you pay anyone in exchange for doing woman business?	YES 1 NO 2	→ 429
428	Have you ever paid anyone in exchange for doing woman business?	YES 1 NO 2	→ 431
429	The last time you paid someone for doing woman business, was a condom used?	YES 1 NO 2	→ 431
430	Was a condom used during woman business every time you paid someone in exchange for doing woman business in the last 12 months?	YES 1 NO 2 DON'T KNOW 8	
431	In the past 12 months have you given any gifts or other goods in order to do woman business or to become sexually involved with anyone?	YES 1 NO 2	→ 433
432	Have you ever given any gifts or other goods in order to do woman business or to become sexually involved with anyone?	YES 1 NO 2	
433	In total, with how many different people have you done woman business in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME DON'T KNOW 98	
434	CHECK 417: MOST RECENT PARTNER (FIRST COLUMN) CONDOM ☐ USED	NOT ASKED ☐ NO CONDOM ☐ USED	→ 438 → 438
437	The last time you did woman business did you or your partner use any method other than a condom to avoid or prevent a pregnancy?	YES 1 NO 2 DON'T KNOW 8	→ 439 → 440
438	The last time you did woman business did you or your partner use any method to avoid or prevent a pregnancy?	YES 1 NO 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION A MALE STERILIZATION B IUD C INJECTABLES D IMPLANTS E PILL F CONDOM G FEMALE CONDOM H EMERGENCY CONTRACEPTION I CYCLEBEADS/STANDARD DAYS METHOD J LACTATIONAL AMENORRHEA METHOD K RHYTHM METHOD L WITHDRAWAL M OTHER MODERN METHOD X OTHER TRADITIONAL METHOD Y	→ 501
440	Do you know of a place where you can obtain a method of family planning?	YES 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		514								
502	CHECK 439: MAN NOT STERILIZED ☐ MAN STERILIZED ☐		514								
503	CHECK 407: ONE WIFE/PARTNER ☐ MORE THAN ONE WIFE/PARTNER ☐		509								
504	Is your (wife/partner) currently pregnant?	YES 1 NO 2 DON'T KNOW 8	507								
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/DON'T KNOW 8	514								
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> SOON/NOW 993 OTHER 996 (SPECIFY) DON'T KNOW 998									514
507	CHECK 208: HAS FATHERED CHILDREN ☐ HAS NOT FATHERED CHILDREN ☐ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS COUPLE CAN'T GET PREGNANT 3 WIFE/PARTNER STERILIZED 4 UNDECIDED/DON'T KNOW 8	514								
508	CHECK 208: HAS FATHERED CHILDREN ☐ HAS NOT FATHERED CHILDREN ☐ a) How long would you like to wait from now before the birth of another child? b) How long would you like to wait from now before the birth of a child?	MONTHS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> SOON/NOW 993 SAYS COUPLE CAN'T GET PREGNANT 994 OTHER 996 (SPECIFY) DON'T KNOW 998									514
509	Are any of your (wives/partners) currently pregnant?	YES 1 NO 2 DON'T KNOW 8	512								

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
510	Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/DON'T KNOW 8	→ 514								
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> YEARS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> SOON/NOW 993 OTHER 996 (SPECIFY) _____ DON'T KNOW 998									→ 514
512	CHECK 208: HAS FATHERED CHILDREN ☐ ↓ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ ↓ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS COUPLE CAN'T GET PREGNANT 3 (WIFE/WIVES/PARTNER(S)) STERILIZED 4 UNDECIDED/DON'T KNOW 8	→ 514								
513	CHECK 208: HAS FATHERED CHILDREN ☐ ↓ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ ↓ b) How long would you like to wait from now before the birth of a child?	MONTHS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> YEARS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> SOON/NOW 993 SAYS COUPLE CAN'T GET PREGNANT 994 OTHER 996 (SPECIFY) _____ DON'T KNOW 998									
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ ↓ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ↓ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE 00 NUMBER <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> OTHER 96 (SPECIFY) _____			→ 601 → 601						
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER .. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> OTHER 96 (SPECIFY) _____									

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES 1 NO 2	→ 607
604	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ _____	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐ OTHER ☐		→ 610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/PARTNER JOINTLY .. 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/PARTNER JOINTLY .. 3 SOMEONE ELSE 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/PARTNER JOINTLY .. 3 SOMEONE ELSE 4 OTHER 6	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 615																								
613	Do you have a title deed for any house you own?	YES 1 NO 2 DON'T KNOW 8	→ 615																								
614	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8																									
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 618																								
616	Do you have a title deed for any land you own?	YES 1 NO 2 DON'T KNOW 8	→ 618																								
617	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8																									
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	<table> <tr> <td></td><td>YES</td><td>NO</td><td>DK</td></tr> <tr> <td>a) GOES OUT</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) NEGLECTS CHILDREN ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) ARGUES</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>d) REFUSES SEX</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>e) BURNS FOOD</td><td>1</td><td>2</td><td>8</td></tr> </table>		YES	NO	DK	a) GOES OUT	1	2	8	b) NEGLECTS CHILDREN ..	1	2	8	c) ARGUES	1	2	8	d) REFUSES SEX	1	2	8	e) BURNS FOOD	1	2	8	
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c) ARGUES	1	2	8																								
d) REFUSES SEX	1	2	8																								
e) BURNS FOOD	1	2	8																								

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
701	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES 1 NO 2	→ 727																
702	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES 1 NO 2 DON'T KNOW 8																	
703	Can people get HIV from mosquito bites?	YES 1 NO 2 DON'T KNOW 8																	
704	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8																	
705	Can people get HIV by sharing food with a person who has HIV?	YES 1 NO 2 DON'T KNOW 8																	
706	Can people get HIV because of witchcraft or other supernatural means?	YES 1 NO 2 DON'T KNOW 8																	
707	Is it possible for a healthy-looking person to have HIV?	YES 1 NO 2 DON'T KNOW 8																	
708	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	<table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>a) DURING PREGNANCY ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) DURING DELIVERY</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) BREASTFEEDING</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	a) DURING PREGNANCY ..	1	2	8	b) DURING DELIVERY	1	2	8	c) BREASTFEEDING	1	2	8	
	YES	NO	DK																
a) DURING PREGNANCY ..	1	2	8																
b) DURING DELIVERY	1	2	8																
c) BREASTFEEDING	1	2	8																
709	CHECK 708: AT LEAST ☐ ONE 'YES' ↓ OTHER ☐ →		→ 711																
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES 1 NO 2 DON'T KNOW 8																	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
712	I don't want to know the results, but have you ever been tested for HIV?	YES 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL 11 GOVERNMENT HEALTH CENTER 12 GOVERNMENT HEALTH CLINIC 13 STAND-ALONE VTC CENTER 14 NATIONAL AIDS CONTROL PROGRAM 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR 21 STAND-ALONE VTC CENTER 22 PHARMACY 23 PLANNED PARENTHOOD ASSN. LIB 24 MOBILE CLINIC 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE HOME 31 SHOP 32 OTHER _____ 96 (SPECIFY)	→ 718
716	Do you know of a place where people can go to get an HIV test?	YES 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C STAND-ALONE VTC CENTER D NATIONAL AIDS CONTROL PROGRAM E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR G STAND-ALONE VTC CENTER H PHARMACY I PLANNED PARENTHOOD ASSN. LIB. J MOBILE CLINIC K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER _____ X (SPECIFY)	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
718	Have you heard of test kits people can use to test themselves for HIV?	YES 1 NO 2	→ 720
719	Have you ever tested yourself for HIV using a self-test kit?	YES 1 NO 2	
720	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
721	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
722	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
723	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
724	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
725	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE 1 DISAGREE 2 DON'T KNOW/NOT SURE/DEPENDS 8	
726	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES 1 NO 2 SAYS HE HAS HIV 3 DON'T KNOW/NOT SURE/DEPENDS 8	
727	CHECK 701: HEARD ABOUT ☐ HIV OR AIDS ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT ☐ HIV OR AIDS ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES 1 NO 2	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
728	CHECK 414: HAS HAD SEXUAL INTERCOURSE ☐ NEVER HAD SEXUAL INTERCOURSE ☐		→ 736
729	CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ NO ☐		→ 731
730	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES 1 NO 2 DON'T KNOW 8	
731	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES 1 NO 2 DON'T KNOW 8	
732	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES 1 NO 2 DON'T KNOW 8	
733	CHECK 730, 731 AND 732: HAS HAD AN INFECTION (ANY 'YES') ☐ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐		→ 736
734	The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 736
735	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C STAND-ALONE VTC CENTER D NATIONAL AIDS CONTROL PROGRAM E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR G STAND-ALONE VTC CENTER H PHARMACY I PLANNED PARENTHOOD ASSN. LIB. J MOBILE CLINIC K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE SHOP M OTHER _____ X (SPECIFY)	
736	If a wife knows her husband has a disease that she can get from doing man business, is she justified in asking that they use a condom when they do man business?	YES 1 NO 2 DON'T KNOW 8	
737	Is a wife justified in refusing to do man business with her husband when she knows he has sex with other women?	YES 1 NO 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
808	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 811 → 810
809	In the past, have you smoked tobacco every day?	YES 1 NO 2	→ 812
810	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 813
811	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Kreteks? c) Pipes full of tobacco? d) Cigars, cheroots, or cigarillos? e) Number of water pipe/shisha sessions? f) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACTURED CIGARETTES b) KRETEKS c) PIPES FULL OF TOBACCO d) CIGARS, CHEROOTS, OR CIGARILLOS e) NUMBER OF WATER PIPE SESSIONS f) OTHERS	→ 813
812	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Kreteks? c) Pipes full of tobacco? d) Cigars, cheroots, or cigarillos? e) Number of water pipe/shisha sessions? f) Any others? _____ (SPECIFY)	NUMBER WEEKLY a) MANUFACTURED CIGARETTES b) KRETEKS c) PIPES FULL OF TOBACCO d) CIGARS, CHEROOTS, OR CIGARILLOS e) NUMBER OF WATER PIPE SESSIONS f) OTHERS	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 815 → 815AA
814	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH b) SNUFF, BY NOSE c) CHEWING TOBACCO d) ANY OTHERS	→ 815AA
815	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH b) SNUFF, BY NOSE c) CHEWING TOBACCO d) ANY OTHERS	
815AA	Have you ever heard of an illness called tuberculosis or TB?	YES 1 NO 2	→ 816
815AB	What are the things that can happen to you when you have tuberculosis? Anything else? RECORD ALL MENTIONED.	COUGHING FOR 2 OR MORE WEEKS A COUGHING UP BLOOD B CHEST PAIN/ PAINFUL BREATHING OR COUGHING C WEIGHT LOSS D FATIGUE E FEVER F NIGHT SWEATS G OTHER X (SPECIFY) DON'T KNOW Z	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
815AC	How does tuberculosis spread from one person to another? Any other way? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING A THROUGH SHARING UTENSILS B THROUGH TOUCHING A PERSON WITH TB .. C THROUGH FOOD .. D THROUGH SEXUAL CONTACT E THROUGH MOSQUITO BITES F OTHER _____ X (SPECIFY) DON'T KNOW Z																									
815AD	Can tuberculosis be cured?	YES 1 NO 2 DON'T KNOW 8																									
815AE	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET 1 NO 2 DON'T KNOW/ NOT SURE/ DEPENDS 8																									
816	Are you covered by any health insurance?	YES 1 NO 2	→ 818																								
817	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE A HEALTH INSURANCE THROUGH EMPLOYER B SOCIAL SECURITY C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE D OTHER _____ X (SPECIFY)																									
818	Do you currently possess a form of identity document for yourself, such as a birth certificate, voter card, or national ID?	YES 1 NO 2	→ 819B																								
819	A. Do you currently possess a: <table border="1"> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>a) Birth certificate</td> <td>YES 1 NO 2</td> <td>→ 1 2</td> </tr> <tr> <td>b) Voter card</td> <td>YES 1 NO 2</td> <td>→ 1 2</td> </tr> <tr> <td>c) National ID</td> <td>YES 1 NO 2</td> <td>→ 1 2</td> </tr> </tbody> </table>		YES	NO	a) Birth certificate	YES 1 NO 2	→ 1 2	b) Voter card	YES 1 NO 2	→ 1 2	c) National ID	YES 1 NO 2	→ 1 2	B. Have you ever tried to obtain a [document from 819A]? <table border="1"> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>a) Birth certificate</td> <td>YES 1 NO 2</td> <td>→ 1 2</td> </tr> <tr> <td>b) Voter card</td> <td>YES 1 NO 2</td> <td>→ 1 2</td> </tr> <tr> <td>c) National ID</td> <td>YES 1 NO 2</td> <td>→ 1 2</td> </tr> </tbody> </table>		YES	NO	a) Birth certificate	YES 1 NO 2	→ 1 2	b) Voter card	YES 1 NO 2	→ 1 2	c) National ID	YES 1 NO 2	→ 1 2	
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c) National ID	YES 1 NO 2	→ 1 2																									

SECTION 14. EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	During the Ebola time in Liberia, which counties did you live in? Anywhere else? RECORD ALL MENTIONED.	BOMI A BONG B GBARPOLU C GRAND BASSA D GRAND CAPE MOUNT E GRAND GEDEH F GRAND KRU G LOFA H MARGIBI I MARYLAND J MONTSERRADO K NIMBA L RIVER CESS M RIVER GEE N SINOE O OUTSIDE OF LIBERIA Z	
901A	CHECK 901: <u>ONLY</u> "Z - OUTSIDE OF LIBERIA" CIRCLED? NO ☐ <u>ONLY</u> Z CIRCLED ☐		→ 923
902	Did you get sick with any illness during the Ebola time in Liberia?	YES 1 NO 2	→ 908
903	In what month and year did you first get sick with the illness during Ebola time in Liberia?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	
904	In what county were you when you first got sick with the illness?	BOMI 1 BONG 2 GBARPOLU 3 GRAND BASSA 4 GRAND CAPE MOUNT 5 GRAND GEDEH 6 GRAND KRU 7 LOFA 8 MARGIBI 9 MARYLAND 10 MONTSERRADO 11 NIMBA 12 RIVER CESS 13 RIVER GEE 14 SINOE 15	
905	When you were sick with the illness, did you have symptoms like fever, vomiting, diarrhea, severe headache, muscle pain, stomach pain, or unexplained bleeding?	YES 1 NO 2	→ 908
906	Did you seek advice or treatment for those symptoms from any source?	YES 1 NO 2	→ 908

EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
907	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL A GOVERNMENT HEALTH CENTER B GOVERNMENT HEALTH CLINIC C MOBILE CLINIC D RELATIVE/FRIEND/NEIGHBOR WHO IS A HEALTHCARE WORKER E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CENTER/ CLINIC G PHARMACY H PRIVATE DOCTOR I MOBILE CLINIC J RELATIVE/FRIEND/NEIGHBOR WHO IS A HEALTHCARE WORKER K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE EBOLA TREATMENT UNIT M SHOP N TRADITIONAL PRACTITIONER O RELATIVE/FRIEND/NEIGHBOR WHO IS NOT A HEALTHCARE WORKER P BLACK BAGGER/ DRUG PEDDLER Q OTHER _____ X (SPECIFY)	
908	Were you admitted to an Ebola treatment unit or ETU during the Ebola time in Liberia?	YES 1 NO 2	→ 911
909	In what month and year were you admitted to an Ebola treatment unit or ETU?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	
910	In what county was the Ebola treatment unit or ETU?	BOMI 1 BONG 2 GBARPOLU 3 GRAND BASSA 4 GRAND CAPE MOUNT 5 GRAND GEDEH 6 GRAND KRU 7 LOFA 8 MARGIBI 9 MARYLAND 10 MONTSERRADO 11 NIMBA 12 RIVER CESS 13 RIVER GEE 14 SINOE 15	

EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP										
911	Did any members of your household or other persons you were close to like relatives or friends get sick with any illness during the Ebola time in Liberia?	YES 1 NO 2	→ 915										
912	Were you in close contact with any of these people who got sick? By close contact I mean you took care of them when they were sick or shared, for example, the same bed, cooking utensils, or toilet facilities.	YES 1 NO 2											
913	Were any of these people who got sick admitted to an Ebola treatment unit or ETU?	YES 1 NO 2 DON'T KNOW 8											
914	Were you ever on a contact list, that is, did someone ever come to your house to take your temperature two times every day?	YES 1 NO 2 DON'T KNOW 8											
915	Did any members of your household, other relatives, or close friends die during the Ebola time in Liberia?	YES 1 NO 2 DON'T KNOW 8	→ 918										
916	a) How many members of your household died? b) How many other relatives died? c) How many close friends died? IF NONE, RECORD '00'.	a) HOUSEHOLD MEMBERS DEAD .. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> b) OTHER RELATIVES DEAD b) CLOSE FRIENDS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>											
917	Did you attend any of the burials for these deaths?	YES 1 NO 2											
918	Did you ever receive the Ebola vaccine by PREVAIL?	YES 1 NO 2	→ 920										
919	In what month and year were you vaccinated for Ebola by PREVAIL?	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> DON'T KNOW MONTH 98 YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr></table> DON'T KNOW YEAR 9998											
920	During the Ebola time in Liberia, did you work in an Ebola treatment unit or ETU?	YES 1 NO 2											
921	During the Ebola time in Liberia, did you work in a health facility that was not an Ebola treatment unit or ETU ?	YES 1 NO 2	→ 922										

EBOLA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
921A	Have you <u>ever</u> worked in a health facility?	YES 1 NO 2									
922	During the Ebola time in Liberia, did you care for someone at home who had Ebola?	YES 1 NO 2									
922A	Have you ever gone to the bush to hunt or catch animals?	YES 1 NO 2	→ 923								
922B	What kinds of animals have you hunted or caught in the bush? Any other kind of animal? RECORD ALL MENTIONED.	BUSH HOG A BAT B BIRDS C DEER D GROUNDHOG E MONKEY F PORCUPINE G OTHER X									
922C	What did you do with the animal(s) once you caught (it/them)? Anything else? RECORD ALL MENTIONED.	BUTCHER/SKIN/CLEAN THE ANIMAL A COOK THE ANIMAL B EAT THE ANIMAL C SELL THE ANIMAL D OTHER X									
923	RECORD THE TIME.	HOURS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

2019-20 LIBERIA DEMOGRAPHIC AND HEALTH SURVEY
BIOMARKER QUESTIONNAIRE

LAST UPDATED: 15-Oct-19

GOVERNMENT OF LIBERIA
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

IDENTIFICATION												
PLACE NAME _____												
NAME OF HOUSEHOLD HEAD _____												
CLUSTER NUMBER				<table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
HOUSEHOLD NUMBER				<table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
HOUSEHOLD SELECTED FOR MAN'S SURVEY AND BIOMARKERS? (1=YES, 2=NO)												
BIOMARKER VISITS												
	1	2	3	FINAL VISIT								
DATE	_____	_____	_____	DAY <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
BIOMARKER'S NAME	_____	_____	_____	MONTH <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
				YEAR <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;">2</td><td style="width: 25px; height: 25px;">0</td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>	2	0						
2	0											
NEXT VISIT: DATE TIME	_____ _____	_____ _____		TOTAL NUMBER OF VISITS <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
NOTES: _____ _____ _____ _____ _____				TOTAL ELIGIBLE WOMEN <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table> TOTAL ELIGIBLE MEN <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table> TOTAL ELIGIBLE CHILDREN <table border="1" style="width: 100%; text-align: center;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>								
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101	INTERVIEWER TO COMPLETE Q. 102 USING TABLET REPORT AND Q. 103 USING BIRTH HISTORY USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER FROM HOUSEHOLD QUESTIONNAIRE.	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
103	INTERVIEWER OR SUPERVISOR TO COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY.	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
103A	MEASURER AND ASSISTANT START FROM HERE			
104	CHECK 103: CHILD BORN IN 2014-2020?	YES 1 NO 2 (SKIP TO 114) ←	YES 1 NO 2 (SKIP TO 114) ←	YES 1 NO 2 (SKIP TO 114) ←
105	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
106	CHECK 103 TO DETERMINE HOW CHILD NEEDS TO BE MEASURED. ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
107	CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER

		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER FROM HOUSEHOLD QUESTIONNAIRE.	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS 1 (SKIP TO 114) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 114) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 114) ← OLDER 2
110	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2014 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 _____ (SIGN) ← REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114) ←	GRANTED 1 _____ (SIGN) ← REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114) ←	GRANTED 1 _____ (SIGN) ← REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114) ←
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL REFUSED 995 OTHER 996	G/DL REFUSED 995 OTHER 996	G/DL REFUSED 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.			

101	INTERVIEWER TO COMPLETE Q. 102 USING TABLET REPORT AND Q. 103 USING BIRTH HISTORY USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 4	CHILD 5	CHILD 6
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113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL REFUSED 995 OTHER 996	G/DL REFUSED 995 OTHER 996	G/DL REFUSED 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 201.			

201	INTERVIEWER TO COMPLETE Q. 202-204A USING TABLET REPORT USE THE APPROPRIATE OPTION FROM THE INTERVIEWER'S MENU TO LIST ALL WOMEN AGE 15-49 ELIGIBLE FOR BIOMARKER TESTING. IN EACH COLUMN, WRITE THE COMPLETE NAME, AGE AND LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. ALSO CIRCLE THE APPROPRIATE CODE FOR QUESTION 203. IF THE WOMAN'S AGE IS 15-17, COMPLETE QUESTION 204 USING THE MARITAL STATUS INFORMATION PRINTED IN THE TABLET'S REPORT. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE	NAME _____ AGE LINE	NAME _____ AGE LINE
203	FROM TABLET'S REPORT: CIRCLE CODE FOR AGE GROUP.	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 204A ←	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 204A ←	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 204A ←
204	FROM TABLET'S REPORT: CIRCLE CODE FOR MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2
		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____
204B	BIOMARKER START FROM HERE: BEFORE PROCEEDING WITH THE CONSENT STATEMENTS, ASK THE RESPONDENT HER AGE AND MARITAL STATUS TO CONFIRM THE INFORMATION IN Q203/Q204. IF THERE ARE ANY DISCREPANCIES THAT AFFECT THE INFORMED CONSENT PATTERN (MINOR VS. ADULT); GO BACK TO Q203/Q204 AND MAKE CORRECTIONS. PLEASE INFORM THE INTERVIEWER OF NEEDED ADJUSTMENTS IN THE HOUSEHOLD SCHEDULE (QH07/QH08), IF NECESSARY.			
205	WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996
206	HEIGHT IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
207	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____
208	CHECK 203: AGE	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←
209	CHECK 204: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) ← OTHER 2

ADULT RESPONDENT CONSENT FOR ANEMIA TEST					
ADULT RESPONDENT CONSENT	210	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
	211	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER 3 (SKIP TO 212) ←	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER 3 (SKIP TO 212) ←	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER 3 (SKIP TO 212) ←
	211A	ASK: Are you pregnant?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8

ADULT RESPONDENT CONSENT FOR DBS COLLECTION					
ADULT RESPONDENT CONSENT	212	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?		
	213	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 216) NOT PRESENT/OTHER 3 (SKIP TO 216) ←	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) (IF REFUSED, SKIP TO 216) NOT PRESENT/OTHER 3 (SKIP TO 216) ←	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) (IF REFUSED, SKIP TO 216) NOT PRESENT/OTHER 3 (SKIP TO 216) ←

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING					
ADULT RESPONDENT CONSENT	214	ASK CONSENT FOR ADDITIONAL TESTING.	We ask you to allow the National Reference Laboratory to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
	215	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN)

ADULT RESPONDENT CONSENT FOR RDT TESTING					
ADULT RESPONDENT CONSENT	216	ASK CONSENT FOR HIV RDT TEST.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Liberia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in about 15 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	217	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____

218	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST

P A R E N T R E S P A D U L T C O N S E N T	219	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT. As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to take the anemia test?
	220	CIRCLE THE CODE AND SIGN YOUR NAME. GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) CIRCLE THE CODE AND SIGN YOUR NAME. GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) CIRCLE THE CODE AND SIGN YOUR NAME. GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223)

MINOR RESPONDENT CONSENT FOR ANEMIA TEST

M I N O R R E S P O N D E N T C O N S E N T	221	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT. As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?
	222	CIRCLE THE CODE AND SIGN YOUR NAME. GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) CIRCLE THE CODE AND SIGN YOUR NAME. GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) CIRCLE THE CODE AND SIGN YOUR NAME. GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223)
	222A	ASK: Are you pregnant? YES 1 NO 2 DON'T KNOW 8

PARENTAL/RESPONDENT ADULT CONSENT FOR DBS COLLECTION			
PARENT/RESPONDENT	223	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that can lead to AIDS. The HIV test is being done to see how many people have HIV. For the HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know (NAME OF MINOR)'s test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the HIV testing?
	224	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231) GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231) GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)
ADULT CONSENT	225	ASK CONSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?
	226	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231) GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231) GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING				
MINOR RESPONDENT CONSENT	229	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	We ask you to allow the National Reference Laboratory to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?	
	230	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN)	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN)

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TESTING			
P A R E N T R E S P O N S I B L E A D U L T C O N S E N T	231	ASK CONSENT FOR RDT TEST FROM PARENT/ADULT.	If you want (NAME OF MINOR) to know her HIV status right now, we can do a rapid diagnostic test and tell her the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Liberia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in about 15 minutes. If the test is positive, I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for rapid HIV testing?
	232	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 ← (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235) ← GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 ← (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235) ← GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 ← (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235) ←

MINOR RESPONDENT CONSENT FOR RDT TEST			
M I N O R R E S P O N D E N T C O N S E N T	233	ASK CONSENT FOR RDT TEST FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Liberia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in about 15 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?
	234	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 MINOR RESPONDENT REFUSED 2 ← (SIGN) NOT PRESENT/OTHER 3 GRANTED 1 MINOR RESPONDENT REFUSED 2 ← (SIGN) NOT PRESENT/OTHER 3 GRANTED 1 MINOR RESPONDENT REFUSED 2 ← (SIGN) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____

235	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
235A	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
236	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 228 AND 230. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NAT" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 228 AND 230. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NAT" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 228 AND 230. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NAT" ON THE FILTER PAPER.
237	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____

239	RECORD THE RESULT OF THE "DETERMINE HIV RDT" HERE.	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←
240	RECORD THE RESULT OF THE "SD BIOLINE HIV RDT" HERE.	POSITIVE 1 (SKIP TO 242) ← NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 (SKIP TO 242) ← NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 (SKIP TO 242) ← NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←
241	RECORD THE RESULT OF THE "UNIGOLD HIV RDT"	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←

		WOMAN 1	WOMAN 2	WOMAN 3
204A	NAME FROM 202.	NAME _____	NAME _____	NAME _____
242	IF 239 AND 240 ARE POSITIVE OR 239 AND 241 ARE POSITIVE, <u>RESPONDENT IS HIV POSITIVE:</u> INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 245			
243	IF 239 IS NEGATIVE OR 240 AND 241 ARE NEGATIVE, <u>RESPONDENT IS HIV NEGATIVE:</u> INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING.			
245	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 249) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 249) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 249) ←
246	RECORD NUMBER OF INVALID RESULTS USING "DETERMINE HIV RDT"	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
247	RECORD NUMBER OF INVALID RESULTS USING "SD BIOLINE HIV RDT"	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
248	RECORD NUMBER OF INVALID RESULTS USING "UNIGOLD HIV RDT" HERE.	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
249	GO TO 401 IN THE NEXT SECTION OF THIS QUESTIONNAIRE AND CONTINUE WITH THE SAME WOMAN.			

301	INTERVIEWER TO COMPLETE Q. 302-304A USING TABLET REPORT USE THE APPROPRIATE OPTION FROM THE INTERVIEWER'S MENU TO LIST ALL MEN AGE 15-59 ELIGIBLE FOR BIOMARKER TESTING. IN EACH COLUMN, WRITE THE COMPLETE NAME, AGE AND LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. ALSO CIRCLE THE APPROPRIATE CODE FOR QUESTION 303. IF THE MAN'S AGE IS 15-17, COMPLETE QUESTION 304 USING THE MARITAL STATUS INFORMATION PRINTED IN THE TABLET'S REPORT. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		MAN 1	MAN 2	MAN 3
302	FROM TABLET'S REPORT: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
303	FROM TABLET'S REPORT: CIRCLE CODE FOR AGE GROUP.	15-17 YEARS 1 18-59 YEARS 2 SKIP TO 304A ←	15-17 YEARS 1 18-59 YEARS 2 SKIP TO 304A ←	15-17 YEARS 1 18-59 YEARS 2 SKIP TO 304A ←
304	FROM TABLET'S REPORT: CIRCLE CODE FOR MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2
		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____
304B	BIOMARKER START FROM HERE: BEFORE PROCEEDING WITH THE CONSENT STATEMENTS, ASK THE RESPONDENT HIS AGE AND MARITAL STATUS TO CONFIRM THE INFORMATION IN Q303/Q304. IF THERE ARE ANY DISCREPANCIES THAT AFFECT THE INFORMED CONSENT PATTERN (MINOR VS. ADULT); GO BACK TO Q303/Q304 AND MAKE CORRECTIONS. PLEASE INFORM THE INTERVIEWER OF NEEDED ADJUSTMENTS IN THE HOUSEHOLD SCHEDULE (QH07/QH08), IF NECESSARY.			
308	CHECK 303: AGE	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 310) ←	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 310) ←	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 310) ←
309	CHECK 304: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2

		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

ADULT RESPONDENT CONSENT	310	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?		
	311	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 314) NOT PRESENT/OTHER 3 (SKIP TO 314)	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) (IF REFUSED, SKIP TO 314) NOT PRESENT/OTHER 3 (SKIP TO 314)	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) (IF REFUSED, SKIP TO 314) NOT PRESENT/OTHER 3 (SKIP TO 314)

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

ADULT RESPONDENT CONSENT	312	ASK CONSENT FOR ADDITIONAL TESTING.	We ask you to allow the National Reference Laboratory to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
	313	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN)

ADULT RESPONDENT CONSENT FOR RDT TESTING

ADULT RESPONDENT CONSENT	314	ASK CONSENT FOR HIV RDT TEST.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Liberia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in about 15 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	315	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)

		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____
316	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____
PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION				
P A R E N T R E S P A D U L T C O N S E N T	317	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that can lead to AIDS. The HIV test is being done to see how many people have HIV. For the HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know (NAME OF MINOR)'s test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the HIV testing?	
	318	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [][][][] (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [][][][] (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)
MINOR RESPONDENT CONSENT FOR DBS COLLECTION				
M I N O R R E S P O N D E N T C O N S E N T	319	ASK CONSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?	
	320	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)

		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING					
P A R E N T R E S P A D U L T C O N S E N T	321	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	We ask you to allow the National Reference Laboratory to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify (NAME OF MINOR). You do not have to agree. If you do not want the blood sample stored for additional testing, (NAME OF MINOR) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
	322	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING					
M I N O R R E S P O N D E N T C O N S E N T	323	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	We ask you to allow the National Reference Laboratory to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
	324	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN)	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN)	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN)

		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TESTING					
P A R E N T R E S P O N S I B L E A D U L T C O N S E N T	325	ASK CONSENT FOR RDT TEST FROM PARENT/ADULT.	If you want (NAME OF MINOR) to know her HIV status right now, we can do a rapid diagnostic test and tell him the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Liberia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in about 15 minutes. If the test is positive, I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for rapid HIV testing?		
	326	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)
MINOR RESPONDENT CONSENT FOR RDT TEST					
M I N O R R E S P O N D E N T C O N S E N T	327	ASK CONSENT FOR RDT TEST FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Liberia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in about 15 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	328	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3

		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____
329	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
329A	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
330	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 313; IF MINOR RESPONDENT, CHECK 322 AND 324. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NAT" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 313; IF MINOR RESPONDENT, CHECK 322 AND 324. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NAT" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 313; IF MINOR RESPONDENT, CHECK 322 AND 324. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NAT" ON THE FILTER PAPER.
332	RECORD THE RESULT OF THE "DETERMINE HIV RDT" HERE.	POSITIVE 1 NEGATIVE 2 (SKIP TO 336) NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)	POSITIVE 1 NEGATIVE 2 (SKIP TO 336) NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)	POSITIVE 1 NEGATIVE 2 (SKIP TO 336) NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)
333	RECORD THE RESULT OF THE "SD BIOLINE HIV RDT" HERE.	POSITIVE 1 (SKIP TO 335) NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)	POSITIVE 1 (SKIP TO 335) NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)	POSITIVE 1 (SKIP TO 335) NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)
334	RECORD THE RESULT OF THE "UNIGOLD HIV RDT"	POSITIVE 1 NEGATIVE 2 (SKIP TO 336) NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)	POSITIVE 1 NEGATIVE 2 (SKIP TO 336) NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)	POSITIVE 1 NEGATIVE 2 (SKIP TO 336) NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 337)

		MAN 1	MAN 2	MAN 3
304A	NAME FROM 302.	NAME _____	NAME _____	NAME _____
335	IF 332 AND 333 ARE POSITIVE OR 332 AND 334 ARE POSITIVE, <u>RESPONDENT IS HIV POSITIVE:</u> INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 337			
336	IF 332 IS NEGATIVE OR 333 AND 334 ARE NEGATIVE, <u>RESPONDENT IS HIV NEGATIVE:</u> INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING.			
337	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 341) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 341) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 341) ←
338	RECORD NUMBER OF INVALID RESULTS USING "DETERMINE HIV RDT"	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
339	RECORD NUMBER OF INVALID RESULTS USING "SD BIOLINE HIV RDT"	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
340	RECORD NUMBER OF INVALID RESULTS USING "UNIGOLD HIV RDT" HERE.	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
341	GO TO 501 IN THE NEXT SECTION OF THIS QUESTIONNAIRE AND CONTINUE WITH THE SAME MAN.			

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

Appendix E • 571

2019-20 LIBERIA DEMOGRAPHIC AND HEALTH SURVEY
CONSENT TO FOLLOW-UP STUDY

GOVERNMENT OF LIBERIA
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

IDENTIFICATION									
PLACE NAME _____									
NAME OF HOUSEHOLD HEAD _____									
CLUSTER NUMBER	<table border="1" style="width: 100px; height: 40px; margin: auto;"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>								
HOUSEHOLD NUMBER									
ADDRESS IN DETAIL _____									

CONSENT TO FOLLOW-UP STUDY FOR WOMEN AGE 15-49

	WOMAN 1	WOMAN 2	WOMAN 3
401	COPY INFORMATION FROM Q.202: NAME _____ AGE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> LINE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> NUMBER	COPY INFORMATION FROM Q.202: NAME _____ AGE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> LINE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> NUMBER	COPY INFORMATION FROM Q.202: NAME _____ AGE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> LINE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> NUMBER
402	COPY INFORMATION FROM Q.203: 15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 404) ←	COPY INFORMATION FROM Q.203: 15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 404) ←	COPY INFORMATION FROM Q.203: 15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 404) ←
403	COPY INFORMATION FROM Q.204: CODE 4 (NEVER IN UNION) 1 (SKIP TO 406) ← OTHER 2	COPY INFORMATION FROM Q.204: CODE 4 (NEVER IN UNION) 1 (SKIP TO 406) ← OTHER 2	COPY INFORMATION FROM Q.204: CODE 4 (NEVER IN UNION) 1 (SKIP TO 406) ← OTHER 2

ADULT RESPONDENT CONSENT FOR FOLLOW UP STUDY

404	In the next few days, another team from the Ministry of Health would like to visit you to conduct additional blood testing for different health conditions. Knowing how many Liberians have health conditions helps the Ministry of Health plan programs to help keep our people healthy. If you agree, they will collect a small amount of blood from your arm. The information from the blood tests will help the Ministry of Health plan vaccination and treatment programs. You do not have to permit the visit but we hope you will agree since your participation will help the Ministry know which communities need help to prevent certain kinds of illnesses and what kind of help they need. Do you have any questions? Do you agree to another visit by a Ministry of Health team?		
405	GRANTED 1 RESPONDENT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) <table border="1" style="display: inline-table; width: 60px; height: 20px; vertical-align: middle;"></table> (IF GRANTED, SKIP TO 411) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412) ←	GRANTED 1 RESPONDENT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) <table border="1" style="display: inline-table; width: 60px; height: 20px; vertical-align: middle;"></table> (IF GRANTED, SKIP TO 411) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412) ←	GRANTED 1 RESPONDENT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) <table border="1" style="display: inline-table; width: 60px; height: 20px; vertical-align: middle;"></table> (IF GRANTED, SKIP TO 411) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412) ←

CONSENT TO FOLLOW-UP STUDY FOR WOMEN AGE 15-49

	WOMAN 1	WOMAN 2	WOMAN 3
401	COPY INFORMATION FROM Q.202: NAME _____ AGE LINE NUMBER 	COPY INFORMATION FROM Q.202: NAME _____ AGE LINE NUMBER 	COPY INFORMATION FROM Q.202: NAME _____ AGE LINE NUMBER
406	NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT _____	NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT _____	NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT _____
PARENTAL/RESPONSIBLE ADULT CONSENT FOR FOLLOW UP STUDY			
407	In the next few days, another team from the Ministry of Health would like to visit (NAME OF MINOR) to conduct additional blood testing for different health conditions. Knowing how many Liberians have health conditions helps the Ministry of Health plan programs to help keep our people healthy. If you agree, they will collect a small amount of blood from (NAME OF MINOR)'s arm. The information from the blood tests will help the Ministry of Health plan vaccination and treatment programs. You do not have to permit the visit but we hope you will agree since the participation of (NAME OF MINOR) will help the Ministry know which communities need help to prevent certain kinds of illnesses and what kind of help they need. Do you have any questions? Do you agree for (NAME OF MINOR) to get another visit by a Ministry of Health team?		
408	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412)
MINOR RESPONDENT CONSENT FOR FOLLOW UP STUDY			
409	In the next few days, another team from the Ministry of Health would like to visit you to conduct additional blood testing for different health conditions. Knowing how many Liberians have health conditions helps the Ministry of Health plan programs to help keep our people healthy. If you agree, they will collect a small amount of blood from your arm. The information from the blood tests will help the Ministry of Health plan vaccination and treatment programs. You do not have to permit the visit but we hope you will agree since your participation will help the Ministry know which communities need help to prevent certain kinds of illnesses and what kind of help they need. Do you have any questions? Do you agree to another visit by a Ministry of Health team?		
410	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412)	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412)	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 412) NOT PRESENT/OTHER 3 (SKIP TO 412)
411	PLACE THE WHOLE BARCODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	PLACE THE WHOLE BARCODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	PLACE THE WHOLE BARCODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996
412	GO BACK TO 204A IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 301.		

CONSENT TO FOLLOW-UP STUDY FOR MEN AGE 15-59

	MAN 1	MAN 2	MAN 3
501	COPY INFORMATION FROM 302: NAME _____ AGE LINE NUMBER	COPY INFORMATION FROM 302: NAME _____ AGE LINE NUMBER	COPY INFORMATION FROM 302: NAME _____ AGE LINE NUMBER
502	COPY INFORMATION FROM 303: 15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 504) ←	COPY INFORMATION FROM 303: 15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 504) ←	COPY INFORMATION FROM 303: 15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 504) ←
503	COPY INFORMATION FROM 304: CODE 4 (NEVER IN UNION) 1 (SKIP TO 506) ← OTHER 2	COPY INFORMATION FROM 304: CODE 4 (NEVER IN UNION) 1 (SKIP TO 506) ← OTHER 2	COPY INFORMATION FROM 304: CODE 4 (NEVER IN UNION) 1 (SKIP TO 506) ← OTHER 2
ADULT RESPONDENT CONSENT FOR FOLLOW UP STUDY			
504	In the next few days, another team from the Ministry of Health would like to visit you to conduct additional blood testing for different health conditions. Knowing how many Liberians have health conditions helps the Ministry of Health plan programs to help keep our people healthy. If you agree, they will collect a small amount of blood from your arm. The information from the blood tests will help the Ministry of Health plan vaccination and treatment programs. You do not have to permit the visit but we hope you will agree since your participation will help the Ministry know which communities need help to prevent certain kinds of illnesses and what kind of help they need. Do you have any questions? Do you agree to another visit by a Ministry of Health team?		
505	GRANTED 1 RESPONDENT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF GRANTED, SKIP TO 511) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←	GRANTED 1 RESPONDENT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF GRANTED, SKIP TO 511) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←	GRANTED 1 RESPONDENT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF GRANTED, SKIP TO 511) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←

CONSENT TO FOLLOW-UP STUDY FOR MEN AGE 15-59

	MAN 1	MAN 2	MAN 3
501	COPY INFORMATION FROM 302: NAME _____ AGE LINE NUMBER	COPY INFORMATION FROM 302: NAME _____ AGE LINE NUMBER	COPY INFORMATION FROM 302: NAME _____ AGE LINE NUMBER
506	NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT _____	NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT _____	NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT _____
PARENTAL/RESPONSIBLE ADULT CONSENT FOR FOLLOW UP STUDY			
507	In the next few days, another team from the Ministry of Health would like to visit (NAME OF MINOR) to conduct additional blood testing for different health conditions. Knowing how many Liberians have health conditions helps the Ministry of Health plan programs to help keep our people healthy. If you agree, they will collect a small amount of blood from (NAME OF MINOR)'s arm. The information from the blood tests will help the Ministry of Health plan vaccination and treatment programs. You do not have to permit the visit but we hope you will agree since the participation of (NAME OF MINOR) will help the Ministry know which communities need help to prevent certain kinds of illnesses and what kind of help they need.		
508	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←
MINOR RESPONDENT CONSENT FOR FOLLOW UP STUDY			
509	In the next few days, another team from the Ministry of Health would like to visit you to conduct additional blood testing for different health conditions. Knowing how many Liberians have health conditions helps the Ministry of Health plan programs to help keep our people healthy. If you agree, they will collect a small amount of blood from your arm. The information from the blood tests will help the Ministry of Health plan vaccination and treatment programs. You do not have to permit the visit but we hope you will agree since your participation will help the Ministry know which communities need help to prevent certain kinds of illnesses and what kind of help they need. Do you have any questions? Do you agree to another visit by a Ministry of Health team?		
510	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 512) NOT PRESENT/OTHER 3 (SKIP TO 512) ←
511	PLACE THE WHOLE BARCODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	PLACE THE WHOLE BARCODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	PLACE THE WHOLE BARCODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996
512	GO BACK TO 301 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END QUESTIONNAIRE.		
SUPERVISOR NAME _____ SUPERVISOR NUMBER			

EBOLA ANTIBODY AND HEPATITIS B AND C TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
602	CHECK 402: AGE	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 603A) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 603A) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 603A) ←
603	CHECK 403: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 620) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 620) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 620) ← OTHER 2
603A	CHECK CONSENT FOR FOLLOW UP: IS BARCODE PRESENT?	NO → SKIP TO 640 YES ↓	NO → SKIP TO 640 YES ↓	NO → SKIP TO 640 YES ↓
604	READ INTRODUCTION AND PURPOSE TO RESPONDENT	The National Public Health Institute of Liberia (NPHIL), the Ministry of Health, the World Health Organization, the United States Centers for Disease Control and other Liberia Demographic Health Survey partners are conducting a national survey about health issues. This includes testing for diseases like hepatitis and whether people's bodies carry the memory of illnesses they had in the past. The memory of some illnesses in your blood can protect you from getting that illness again. I would like to discuss this part of the survey with you. If I use some words that you do not understand, please ask me to explain. The hepatitis B & C diseases are a result of an infection with the hepatitis B & C virus. These diseases may cause liver damage and other serious health problems. We are inviting you to allow us to examine your blood in order to know how many people have the hepatitis B & C virus. This information is very important to help the Ministry of Health to plan for programs to prevent and treat this disease. The results of the tests for hepatitis will be shared with you by phone in about three months. If the test shows that you have the hepatitis B or C virus, we will give you a referral to County Health Team or other health facility for counseling and advice about treatment. The Ministry of Health is also interested in testing people for the memory of the Ebola virus disease. No one in Liberia has Ebola right now. We are inviting you to allow us to examine your blood for signs of remembering the Ebola virus because there is still a lot about Ebola virus disease that we do not know. What we do know is that people who were sick with Ebola carry a memory of Ebola in their blood. This memory protects them from getting Ebola again. We are looking to learn more about the differences in people whose bodies do and do not remember Ebola virus. We do not know if people can become infected with Ebola virus but not feel sick or how many Liberians are protected from Ebola today. We are inviting you to allow us to examine your blood for the memory of the Ebola virus. This information will help our Ministry of Health know where to offer vaccination programs and where to work closely with communities if Ebola ever returns.		

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
605	READ PROCEDURE TO RESPONDENT	If you agree to participate in this part of the survey, we would like to collect 1 teaspoon (4 ml) of blood in total from a vein in your arm. We will test this blood later in the laboratory in order to know if your body remembers the Ebola virus and if you have hepatitis B or C. Blood collection will take about 15 minutes. The equipment we will use to take the blood from your arm is clean and completely safe. We have not used it on anyone else and we will safely dispose of it when we have finished.		
606	READ RISKS TO RESPONDENT	The risk to you from this testing is small. The testing part of the survey is not harmful although you may experience a very small pain for a short time during blood sample collection. There are very minimal risks associated with having your blood drawn. You may get some bruising where the blood is taken from your arm. If you have any bleeding, swelling or other problem later, you should tell our study staff or your health worker.		
607	READ BENEFITS TO RESPONDENT	The information we collect during our survey may not help you directly but it could benefit many other people in the future because it will help the Ministry of Health plan for programs to treat hepatitis and provide better services for Ebola survivors.		
608	READ CONFIDENTIALITY TO RESPONDENT	What we talk about will be kept private. The results of these test will be kept confidential. To keep your privacy, we will keep the records under a number and will not record your name. We will keep the records in locked files. Only staff from this survey will be allowed to look at them. Your name or other facts that might point to you will not appear when we report the findings of this survey.		
609	READ FUTURE TESTING STATEMENT TO RESPONDENT	We would like to ask your permission to store your leftover blood for future tests. These tests may be for other health issues, which are important to the health of Liberians. This sample will be stored for an indefinite amount of time but your name will not be on the sample. Your leftover blood will not be sold or used for commercial reasons. If you do not agree to future tests to your blood samples, we will destroy your blood samples after survey-related testing has been completed.		
610	READ COST/PAYMENT STATEMENT TO RESPONDENT	Being part of this survey is up to you. If you decide not to participate in our survey, it will not affect any of your participation in other parts of the survey. It will not cost you or your family anything. You will not receive any money for your participation.		
611	READ RIGHT TO REFUSE OR WITHDRAW TO RESPONDENT	You are free to participate in this survey or not. You can quit at any time if you wish. If you decide you do not want to take part, it will not affect any care or treatment you or your family members receive. If at any time you decide that you do not want to stay in the survey, you can leave and it will not affect any health care you or your family members receive.		
612	READ PERSONS TO CONTACT TO RESPONDENT	This project has been approved by the UL PIRE Ethical Review Board. You will be offered a copy of this form to keep. If at any time you have questions about this survey you may contact the National Public Health Institute of Liberia or the UL PIRE IRB. You may also contact the National Public Health Institute of Liberia or the UL-PIRE IRB if you feel you have been harmed, or if you have questions about your rights as a survey participant. The contact person at the National Public Health Institute of Liberia is Mr. Bode Shobayo (Cell #: 0776787871).		

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

ADULT RESPONDENT					
E V D C O N S E N T	613	READ TESTING FOR MEMORY OF EBOLA CONSENT TO RESPONDENT.	Would you allow me to take a sample of your blood from your arm for testing for the memory of Ebola? You can say yes or no. It is up to you to decide.		
	614	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3
H E P A T I T I S C O N S E N T	615	READ HEPATITIS B AND C TESTING CONSENT TO RESPONDENT	Would you allow me to take a sample of your blood from your arm for testing for Hepatitis B and C? You can say yes or no. It is up to you to decide.		
	616	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3
A D D T E S T I N G C O N S E N T	617	CHECK Q. 614 AND Q.616	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 640)	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 640)	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 640)
	618	READ FUTURE TESTING CONSENT TO RESPONDENT	Do you agree for us to store your leftover blood for future testing? You can say yes or no. It is up to you to decide.		
	619	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) (SKIP TO 636A) NOT PRESENT/OTHER 3 (SKIP TO 640)	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) (SKIP TO 636A) NOT PRESENT/OTHER 3 (SKIP TO 640)	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) (SKIP TO 636A) NOT PRESENT/OTHER 3 (SKIP TO 640)

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
620	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT			
E V D C O N S E N T	621	READ THE FULL TEXT TO THE PARENT/RESPONSIBLE ADULT	READ Q604 - Q612.
	622	READ TESTING FOR MEMORY OF EBOLA CONSENT TO RESPONDENT.	Would you allow me to take a sample of blood from (NAME OF MINOR)'s arm for testing for the memory of Ebola? You can say yes or no. It is up to you to decide.
	623	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INVIEWER SIGNATURE) IF REFUSED SKIP TO 627 NOT PRESENT/OTHER 3 (SKIP TO 627)

MINOR RESPONDENT CONSENT			
E V D C O N S E N T	624	READ THE FULL TEXT TO THE MINOR	READ Q604 - Q612.
	625	READ TESTING FOR MEMORY OF EBOLA CONSENT TO RESPONDENT.	Would you allow me to take a sample of your blood from your arm for testing for the memory of Ebola? You can say yes or no. It is up to you to decide.
	626	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INVIEWER SIGNATURE) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT					
H E P A T I T I S C O N S E N T	627	READ HEPATITIS B AND C TESTING CONSENT TO RESPONDENT	Would you allow me to take a sample of blood from (NAME OF MINOR)'s arm for testing for Hepatitis B and C? You can say yes or no. It is up to you to decide.		
	628	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 631 NOT PRESENT/OTHER 3 (SKIP TO 631) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 631 NOT PRESENT/OTHER 3 (SKIP TO 631) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 631 NOT PRESENT/OTHER 3 (SKIP TO 631) ←

MINOR RESPONDENT CONSENT					
H E P A T I T I S C O N S E N T	628A	CHECK Q.626	CODE 1 OR 2 CIRCLED ... 1 (SKIP TO 629) ← NEITHER 1 OR 2 CIRCLED . 2	CODE 1 OR 2 CIRCLED ... 1 (SKIP TO 629) ← NEITHER 1 OR 2 CIRCLED . 2	CODE 1 OR 2 CIRCLED ... 1 (SKIP TO 629) ← NEITHER 1 OR 2 CIRCLED . 2
	628B	READ THE FULL TEXT TO THE MINOR	READ Q604 - Q612.		
	629	READ HEPATITIS B AND C TESTING CONSENT TO RESPONDENT	Would you allow me to take a sample of your blood from your arm for testing for Hepatitis B and C? You can say yes or no. It is up to you to decide.		
	630	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3 (SKIP TO 640) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3 (SKIP TO 640) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3 (SKIP TO 640) ←
631	CHECK Q. 626 AND Q.630	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 640) ←	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 640) ←	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 640) ←	

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT

A D D I T I O N A L C O N S E N T	632	READ FUTURE TESTING CONSENT TO RESPONDENT	Do you agree for us to store (NAME OF MINOR)'s leftover blood for future testing? You can say yes or no. It is up to you to decide.		
	633	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 636A NOT PRESENT/OTHER 3 (SKIP TO 636A)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 636A NOT PRESENT/OTHER 3 (SKIP TO 636A)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 636A NOT PRESENT/OTHER 3 (SKIP TO 636A)

MINOR RESPONDENT CONSENT

	634	READ FUTURE TESTING CONSENT TO RESPONDENT	Do you agree for us to store your leftover blood for future testing? You can say yes or no. It is up to you to decide.		
	635	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
601	CHECK 401: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
636A	DID RESPONDENT CONSENT TO BLOOD COLLECTION?	YES ☐ NO ☐ SKIP TO 640	YES ☐ NO ☐ SKIP TO 640	YES ☐ NO ☐ SKIP TO 640
636B	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S). <u>ENSURE CORRECT STICKERS ARE AFFIXED TO EACH VIAL</u> FOR ADULT REPENDENTS: - IF "GRANTED" SELECTED IN EITHER 614 OR 616, AFFIX BARCODE - IF "GRANTED" SELECTED IN 614, AFFIX RED STICKER (E) - IF "GRANTED" SELECTED IN 616, AFFIX BLUE STICKER (H) - IF "GRANTED" SELECTED IN 619, AFFIX YELLOW STICKER FOR MINOR REPENDENTS: - IF "GRANTED" SELECTED IN EITHER 626 OR 630, AFFIX BARCODE - IF "GRANTED" SELECTED IN 626, AFFIX RED STICKER (E) - IF "GRANTED" SELECTED IN 630, AFFIX BLUE STICKER (H) - IF "GRANTED" SELECTED IN 635, AFFIX YELLOW STICKER <u>AFFIX THIRD BARCODE ON HEPATITIS B & C INFORMATION SHEET</u>			
637	WAS BLOOD SAMPLE TAKEN FROM RESPONDENT?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
640	GO BACK TO 601 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 701.			

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
702	CHECK 502: AGE	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 703A) ←	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 703A) ←	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 703A) ←
703	CHECK 503: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 720) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 720) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 720) ← OTHER 2
703A	CHECK CONSENT FOR FOLLOW UP. IS BARCODE PRESENT?	NO → SKIP TO 740 YES ↓	NO → SKIP TO 740 YES ↓	NO → SKIP TO 740 YES ↓
704	READ INTRODUCTION AND PURPOSE TO RESPONDENT	The National Public Health Institute of Liberia (NPHIL), the Ministry of Health, the World Health Organization, the United States Centers for Disease Control and other Liberia Demographic Health Survey partners are conducting a national survey about health issues. This includes testing for diseases like hepatitis and whether people's bodies carry the memory of illnesses they had in the past. The memory of some illnesses in your blood can protect you from getting that illness again. I would like to discuss this part of the survey with you. If I use some words that you do not understand, please ask me to explain. The hepatitis B & C diseases are a result of an infection with the hepatitis B & C virus. These diseases may cause liver damage and other serious health problems. We are inviting you to allow us to examine your blood in order to know how many people have the hepatitis B & C virus. This information is very important to help the Ministry of Health to plan for programs to prevent and treat this disease. The results of the tests for hepatitis will be shared with you by phone in about three months. If the test shows that you have the hepatitis B or C virus, we will give you a referral to County Health Team or other health facility for counseling and advice about treatment. The Ministry of Health is also interested in testing people for the memory of the Ebola virus disease. No one in Liberia has Ebola right now. We are inviting you to allow us to examine your blood for signs of remembering the Ebola virus because there is still a lot about Ebola virus disease that we do not know. What we do know is that people who were sick with Ebola carry a memory of Ebola in their blood. This memory protects them from getting Ebola again. We are looking to learn more about the differences in people whose bodies do and do not remember Ebola virus. We do not know if people can become infected with Ebola virus but not feel sick or how many Liberians are protected from Ebola today. We are inviting you to allow us to examine your blood for the memory of the Ebola virus. This information will help our Ministry of Health know where to offer vaccination programs and where to work closely with communities if Ebola ever returns.		

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
705	READ PROCEDURE TO RESPONDENT	If you agree to participate in this part of the survey, we would like to collect 1 teaspoon (4 ml) of blood in total from a vein in your arm. We will test this blood later in the laboratory in order to know if your body remembers the Ebola virus and if you have hepatitis B or C. Blood collection will take about 15 minutes. The equipment we will use to take the blood from your arm is clean and completely safe. We have not used it on anyone else and we will safely dispose of it when we have finished.		
706	READ RISKS TO RESPONDENT	The risk to you from this testing is small. The testing part of the survey is not harmful although you may experience a very small pain for a short time during blood sample collection. There are very minimal risks associated with having your blood drawn. You may get some bruising where the blood is taken from your arm. If you have any bleeding, swelling or other problem later, you should tell our study staff or your health worker.		
707	READ BENEFITS TO RESPONDENT	The information we collect during our survey may not help you directly but it could benefit many other people in the future because it will help the Ministry of Health plan for programs to treat hepatitis and provide better services for Ebola survivors.		
708	READ CONFIDENTIALITY TO RESPONDENT	What we talk about will be kept private. The results of these test will be kept confidential. To keep your privacy, we will keep the records under a number and will not record your name. We will keep the records in locked files. Only staff from this survey will be allowed to look at them. Your name or other facts that might point to you will not appear when we report the findings of this survey.		
709	READ FUTURE TESTING STATEMENT TO RESPONDENT	We would like to ask your permission to store your leftover blood for future tests. These tests may be for other health issues, which are important to the health of Liberians. This sample will be stored for an indefinite amount of time but your name will not be on the sample. Your leftover blood will not be sold or used for commercial reasons. If you do not agree to future tests to your blood samples, we will destroy your blood samples after survey-related testing has been completed.		
710	READ COST/PAYMENT STATEMENT TO RESPONDENT	Being part of this survey is up to you. If you decide not to participate in our survey, it will not affect any of your participation in other parts of the survey. It will not cost you or your family anything. You will not receive any money for your participation.		
711	READ RIGHT TO REFUSE OR WITHDRAW TO RESPONDENT	You are free to participate in this survey or not. You can quit at any time if you wish. If you decide you do not want to take part, it will not affect any care or treatment you or your family members receive. If at any time you decide that you do not want to stay in the survey, you can leave and it will not affect any health care you or your family members receive.		
712	READ PERSONS TO CONTACT TO RESPONDENT	This project has been approved by the UL PIRE Ethical Review Board. You will be offered a copy of this form to keep. If at any time you have questions about this survey you may contact the National Public Health Institute of Liberia or the UL PIRE IRB. You may also contact the National Public Health Institute of Liberia or the UL-PIRE IRB if you feel you have been harmed, or if you have questions about your rights as a survey participant. The contact person at the National Public Health Institute of Liberia is Mr. Bode Shobayo (Cell #: 0776787871).		

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

ADULT RESPONDENT					
E V D C O N S E N T	713	READ TESTING FOR MEMORY OF EBOLA CONSENT TO RESPONDENT.	Would you allow me to take a sample of your blood from your arm for testing for the memory of Ebola? You can say yes or no. It is up to you to decide.		
	714	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3
H E P A T I T I S C O N S E N T	715	READ HEPATITIS B AND C TESTING CONSENT TO RESPONDENT	Would you allow me to take a sample of your blood from your arm for testing for Hepatitis B and C? You can say yes or no. It is up to you to decide.		
	716	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3
A D D I T I O N A L C O N S E N T	717	CHECK Q. 714 AND Q.716	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 740)	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 740)	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 740)
	718	READ FUTURE TESTING CONSENT TO RESPONDENT	Do you agree for us to store your leftover blood for future testing? You can say yes or no. It is up to you to decide.		
T E S T I N G C O N S E N T	719	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) (SKIP TO 736A) NOT PRESENT/OTHER 3 (SKIP TO 740)	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) (SKIP TO 736A) NOT PRESENT/OTHER 3 (SKIP TO 740)	GRANTED 1 RESPONDENT REFUSED ... 2 (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) (INTERVIEWER SIGNATURE) (SKIP TO 736A) NOT PRESENT/OTHER 3 (SKIP TO 740)

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
720	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT					
E V D C O N S E N T	721	READ THE FULL TEXT TO THE PARENT/RESPONSIBLE ADULT	READ Q704 - Q712.		
	722	READ TESTING FOR MEMORY OF EBOLA CONSENT TO RESPONDENT.	Would you allow me to take a sample of blood from (NAME OF MINOR)'s arm for testing for the memory of Ebola? You can say yes or no. It is up to you to decide.		
	723	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 727 NOT PRESENT/OTHER 3 (SKIP TO 727) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 727 NOT PRESENT/OTHER 3 (SKIP TO 727) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 727 NOT PRESENT/OTHER 3 (SKIP TO 727) ←

MINOR RESPONDENT CONSENT					
E V D C O N S E N T	724	READ THE FULL TEXT TO THE MINOR	READ Q704 - Q712.		
	725	READ TESTING FOR MEMORY OF EBOLA CONSENT TO RESPONDENT.	Would you allow me to take a sample of your blood from your arm for testing for the memory of Ebola? You can say yes or no. It is up to you to decide.		
	726	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT

H E P A T I T I S C O N S E N T	727	READ HEPATITIS B AND C TESTING CONSENT TO RESPONDENT	Would you allow me to take a sample of blood from (NAME OF MINOR)'s arm for testing for Hepatitis B and C? You can say yes or no. It is up to you to decide.		
	728	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 731 NOT PRESENT/OTHER 3 (SKIP TO 731) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 731 NOT PRESENT/OTHER 3 (SKIP TO 731) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 731 NOT PRESENT/OTHER 3 (SKIP TO 731) ←

MINOR RESPONDENT CONSENT

728A	CHECK Q.626	CODE 1 OR 2 CIRCLED ... 1 (SKIP TO 729) ← NEITHER 1 OR 2 CIRCLED . 2	CODE 1 OR 2 CIRCLED ... 1 (SKIP TO 729) ← NEITHER 1 OR 2 CIRCLED . 2	CODE 1 OR 2 CIRCLED ... 1 (SKIP TO 729) ← NEITHER 1 OR 2 CIRCLED . 2
728B	READ THE FULL TEXT TO THE MINOR	READ Q704 - Q712.		
729	READ HEPATITIS B AND C TESTING CONSENT TO RESPONDENT	Would you allow me to take a sample of your blood from your arm for testing for Hepatitis B and C? You can say yes or no. It is up to you to decide.		
730	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3 (SKIP TO 740) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3 (SKIP TO 740) ←	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3 (SKIP TO 740) ←
731	CHECK Q. 726 AND Q.730	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 740) ←	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 740) ←	ONE OR MORE 'GRANTED' 1 NEITHER GRANTED 2 (SKIP TO 740) ←

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT

A D D I T I O N A L C O N S E N T	732	READ FUTURE TESTING CONSENT TO RESPONDENT	Do you agree for us to store (NAME OF MINOR)'s leftover blood for future testing? You can say yes or no. It is up to you to decide.		
	733	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 736A NOT PRESENT/OTHER 3 (SKIP TO 736A)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 736A NOT PRESENT/OTHER 3 (SKIP TO 736A)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) IF REFUSED SKIP TO 736A NOT PRESENT/OTHER 3 (SKIP TO 736A)

MINOR RESPONDENT CONSENT

734	READ FUTURE TESTING CONSENT TO RESPONDENT	Do you agree for us to store your leftover blood for future testing? You can say yes or no. It is up to you to decide.		
735	CIRCLE THE CODE AND ASK THE RESPONDENT TO SIGN BELOW.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (REQUEST RESPONDENT SIGNATURE/THUMBPRINT) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) _____ (INTERVIEWER SIGNATURE) NOT PRESENT/OTHER 3

		MAN 1	MAN 2	MAN 3
701	CHECK 501: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
736A	DID RESPONDENT CONSENT TO BLOOD COLLECTION	YES ☐ NO ☐ SKIP TO 740	YES ☐ NO ☐ SKIP TO 740	YES ☐ NO ☐ SKIP TO 740
736B	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S). <u>ENSURE CORRECT STICKERS ARE AFFIXED TO EACH VIAL</u> FOR ADULT REPENDENTS: - IF "GRANTED" SELECTED IN EITHER 714 OR 716, AFFIX BARCODE - IF "GRANTED" SELECTED IN 714, AFFIX RED STICKER (E) - IF "GRANTED" SELECTED IN 716, AFFIX BLUE STICKER (H) - IF "GRANTED" SELECTED IN 719, AFFIX YELLOW STICKER FOR MINOR REPENDENTS: - IF "GRANTED" SELECTED IN EITHER 726 OR 730, AFFIX BARCODE - IF "GRANTED" SELECTED IN 726, AFFIX RED STICKER (E) - IF "GRANTED" SELECTED IN 730, AFFIX BLUE STICKER (H) - IF "GRANTED" SELECTED IN 735, AFFIX YELLOW STICKER <u>AFFIX THIRD BARCODE ON HEPATITIS B & C INFORMATION SHEET</u>			
737	WAS BLOOD SAMPLE TAKEN FROM RESPONDENT?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
740	GO BACK TO 701 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END QUESTIONNAIRE.			

FIELDWORKER'S OBSERVATIONS
TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

REVISIT

GOVERNMENT OF LIBERIA
LIBERIA INSTITUTE OF STATISTICS AND GEO-INFORMATION SERVICES

IDENTIFICATION												
PLACE NAME _____												
NAME OF HOUSEHOLD HEAD _____												
CLUSTER NUMBER				<table border="1" style="width: 100px; height: 20px; margin: 0 auto;"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>								
HOUSEHOLD NUMBER				<table border="1" style="width: 100px; height: 20px; margin: 0 auto;"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>								
BIOMARKER VISITS												
	1	2	3	FINAL VISIT								
DATE	_____	_____	_____	DAY								
BIOMARKER'S NAME	_____	_____	_____	MONTH								
				YEAR								
				<table border="1" style="display: inline-table; margin-right: 5px;"> <tr><td>2</td></tr> <tr><td>0</td></tr> </table> <table border="1" style="display: inline-table;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	2	0						
2												
0												
NEXT VISIT: DATE TIME	_____	_____		TOTAL NUMBER OF VISITS								
NOTES: _____ _____ _____ _____ _____				TOTAL ELIGIBLE CHILDREN								
SUPERVISOR <table border="1" style="width: 80px; height: 20px;"> <tr><td></td><td></td><td></td><td></td></tr> </table> NAME NUMBER												

WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5				
101	SUPERVISOR TO COMPLETE Q. 102-105 USING TABLET REPORT USE THE SUPERVISORS MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR REVISIT. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER .	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
103	FROM TABLET REPORT COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR)	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
104	CHECK 103: CHILD BORN IN 2014-2020?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
105	FROM TABLET REPORT INDICATE HOW CHILD WAS MEASURED FIRST TIME: LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
MEASURER AND ASSISTANT START FROM HERE				
106	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
107	CHECK 103 TO DETERMINE HOW CHILD NEEDS TO BE MEASURED. ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
108	CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
109	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER

101	SUPERVISOR TO COMPLETE Q. 102-105 USING TABLET REPORT USE THE SUPERVISORS MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR REVISIT. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER .	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
103	FROM TABLET REPORT COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR)	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
104	CHECK 103: CHILD BORN IN 2014-2020?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
105	FROM TABLET REPORT INDICATE HOW CHILD WAS MEASURED FIRST TIME: LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
MEASURER AND ASSISTANT START FROM HERE				
106	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
107	CHECK 103 TO DETERMINE HOW CHILD NEEDS TO BE MEASURED. ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
108	CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
109	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER
FIELDWORKER'S OBSERVATIONS TO BE FILLED IN AFTER COMPLETING BIOMARKERS				

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com		
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com		
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store		
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com		
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and How to Read DHS Tables.	www.youtube.com/DHSProgram		
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data		
Spatial Data Repository – Download geographically linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com		
Learning Hub – Access online courses for independent learning and workshop participation, communities of practice, and other training resources.	Learning.DHSprogram.com		
GitHub – Open access to Stata and SPSS code for DHS indicators for public use.	Github.com/DHSprogram		
Social Media – Follow The DHS Program and join the conversation. Stay up to date through:	 Twitter www.twitter.com/DHSprogram		
 Facebook www.facebook.com/DHSprogram		 LinkedIn www.linkedin.com/company/dhs-program	
 YouTube www.youtube.com/DHSprogram		 Blog Blog.DHSprogram.com	