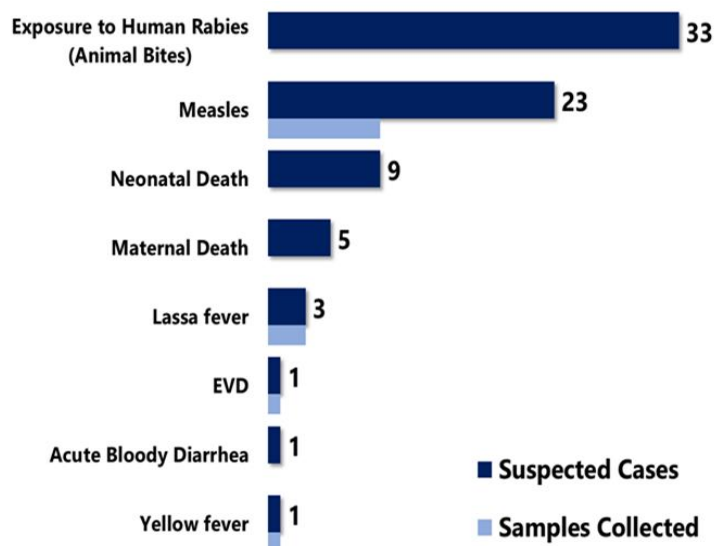


Country Population: 4,433,398 Volume 11, Issue 1, Dec 31 – Jan 6, 2019 Data Source: CSOs from 15 Counties and Lab

## Highlights

Figure 1. Public Health Events Reported in Epi week 1



## Keynotes and Events of Public Health Significance

- A total of **76** suspected cases of immediately reportable diseases and events including **16** deaths were reported
- Completeness and timeliness of health facility reports were **98%** and **97%**
- **Ongoing measles** outbreak in Bong, Grand Gedeh and Margibi

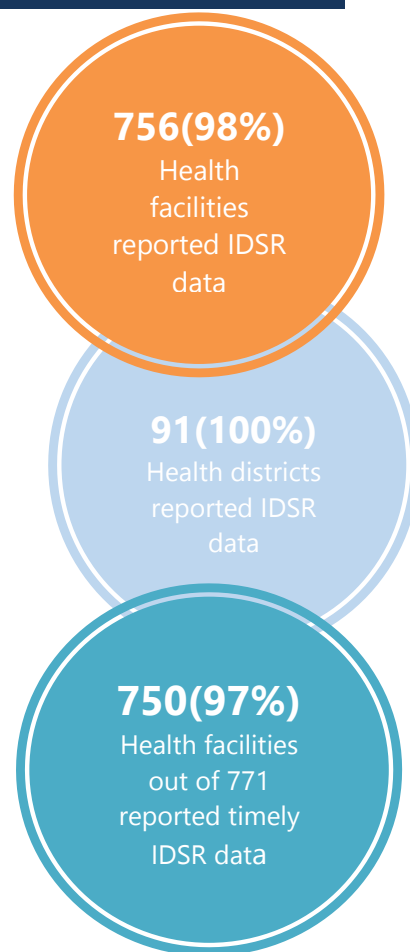
## Reporting Coverage

Table 1. Weekly IDSR Reporting Coverage, Liberia, Epi week 1, 2019

County	Number of Expected Report from Health Facility	Number of Reports Received	Number Received on Time	Completeness (%)	Timeliness (%)
Bomi	26	26	26	100	100
Bong	55	49	49	89	89
Gbarpolu	16	16	16	100	100
Grand Bassa	33	33	33	100	100
Grand Cape Mount	34	34	34	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	19	18	18	95	95
Lofa	59	59	59	100	100
Margibi	50	49	49	98	98
Maryland	25	25	25	100	100
Montserrado	283	276	270	98	95
Nimba	74	74	74	100	100
Rivercess	19	19	19	100	100
River Gee	19	19	19	100	100
Sinoe	35	35	35	100	100
<b>Liberia</b>	<b>771</b>	<b>756</b>	<b>750</b>	<b>98</b>	<b>97</b>

Legend: ≥80 <80

- All fifteen counties submitted weekly IDSR report on time to national level
- The national target for weekly IDSR reporting is 80



## Vaccine Preventable Diseases

### Measles

- Twenty-three (23) suspected cases were reported from Sinoe (11), Grand Gedeh (4), Grand Kru (2), Montserrado (2), Grand Bassa (2), Bong (1) and River Gee (1) Counties
- Nine specimens were collected and sent to the National Public Health Reference Laboratory
- The three confirmed cases were reported from;
  - Kpai District, Bong
  - Trehn District, Grand kru
  - Puto District, Grand Gedeh
- Ongoing outbreaks in the following districts and counties;
  - Sanoyea and Jorquleh Districts, Bong
  - Konobo District, Grand Gedeh
  - Kakata District, Margibi
- Vaccination status among suspected cases are as follow: vaccinated 13 (60%), unknown 3 (13%) and not vaccinated 6 (27%)
- Age distribution among suspected cases are as follow: 1 – 4 years: 2 (9%) and ≥5 years: 20 (90.9%)
- Cumulatively, since Epi-week one, 23 suspected cases including zero deaths have been reported. Of these suspected cases, 9 has been tested by the laboratory. Epi-classification are as follows: lab confirmed 3(13%), clinically confirmed 14(60.8%) and discarded (negative) 6(26%)

### Public Health Action

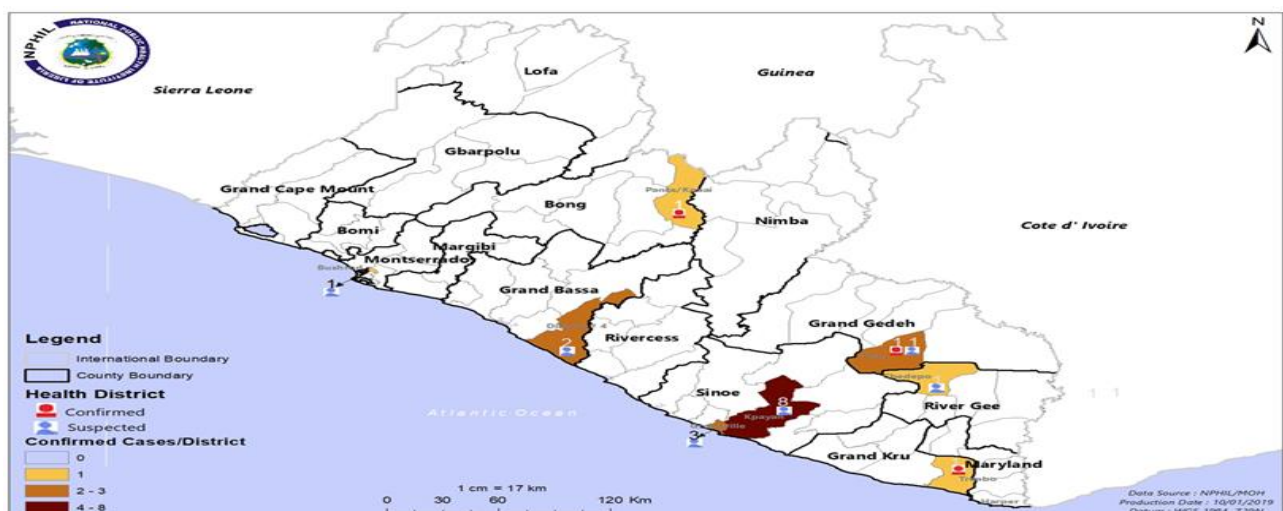
#### Bong County

- One new case was reported during active case search
- Case was clinically managed and sent home
- Health education and community engagement are ongoing

#### Grand Gedeh

- Four cases were reported during active case search
- All the cases were treated and responding to treatment

### Confirmed Measles cases reported by Health District, Liberia, Epi-week 1, 2019





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## Acute Flaccid Paralysis (Suspected Polio)

- Zero case was reported this week
- Cumulatively, since Epi week one, zero case has been reported and 2 cases pending laboratory confirmation (two cases from 2018)

## Neonatal Tetanus

- Zero cases were reported this week
- Cumulatively, since Epi-week one, zero clinically diagnosed cases has been reported

## **Viral Hemorrhagic Diseases**

### Ebola Virus Disease (EVD)

- One alert was reported from Nimba County
- Cumulatively, since Epi-week one, one EVD alerts has been reported

### Lassa fever

- Three (3) suspected cases were reported from Nimba (2) and Grand Kru (1) Counties
- Cumulatively, since Epi week one, 3 suspected cases have been reported including 2 deaths
  - Of these, three have been tested by the laboratory. Epi-classification are as follows: lab confirmed (0) and not a case (3)

### Yellow fever

- One (1) suspected case was reported from Grand Kru (1) County
  - Specimen was collected, and result showed negative
- Cumulatively, since Epi-week one, 1 suspected case has been reported

### Monkeypox

- Zero cases were reported this week
- Cumulatively, since Epi-week one, zero suspected cases has been reported

### Meningitis

- Zero suspected case was reported this week
- Cumulatively, since Epi-week one, zero suspected case has been reported

## **Events of Public Health Importance**

### Maternal Mortality

- Five (5) deaths were reported from Bong (2), Montserrado (1), Margibi (1) and Nimba (1) Counties
- Reported causes of deaths were:
  - Postpartum hemorrhage (3)
  - Obstructed labor (2)
- Four deaths were reported to have occurred in the health facility and one in the community

- Cumulatively, since Epi-week one, 5 maternal deaths has been reported

**Table 3. Cumulative Maternal Deaths Reported by Counties, Liberia, Epi-week 1, 2019**

County	Estimated Annual Live birth 4.3% (EPI 2017)	Current week	Cumulative	% of Cumulative Maternal deaths	Annualized Maternal Mortality Ratio/100,000
Bong	17289	2	2	40	602
River Gee	3707	1	1	20	478
Grand Gedeh	6494	1	1	20	217
Bomi	4361	1	1	20	90
Nimba	23953	0	0	0	0
Maryland	7048	0	0	0	0
Grand Kru	3002	0	0	0	0
Lofa	14354	0	0	0	0
Montserrado	57974	0	0	0	0
Grand Bassa	11494	0	0	0	0
Gbarpolu	4323	0	0	0	0
Rivercess	3463	0	0	0	0
Margibi	10883	0	0	0	0
Sinoe	5308	0	0	0	0
Grand Cape Mount	6588	0	0	0	0
<b>Liberia (National)</b>	<b>180241</b>	<b>5</b>	<b>5</b>	<b>100</b>	<b>144</b>

## Neonatal Mortality

- Nine (9) deaths were reported from Montserrado (4), Lofa (2), Grand Bassa (1), Grand Gedeh (1) and Maryland (1) Counties
- Reported causes of deaths were
  - Sepsis (3)
  - Asphyxia (3)
  - Prematurity (3)
- All deaths were reported to have occurred in the health facilities
- Cumulatively, since Epi-week one, 9 neonatal deaths have been reported

**Table 4. Cumulative Neonatal Deaths Reported by Counties, Liberia, Epi-week 1, 2019**

County	Annual Live birth 4.3% (EPI 2018)	Current Week	Cumulative	% of Cumulative Neonatal deaths	Annualized Neonatal Mortality Rate/1000
Rivercess	3463	0	0	6	0.0
Grand Kru	3002	0	0	0	0.0
Montserrado	57974	4	4	44	3.6
River Gee	3707	0	0	0	0.0
Margibi	10883	0	0	0	0.0
Grand Gedeh	6494	1	1	4	8.0
Bong	17289	0	0	0	0.0
Gbarpolu	4323	0	0	0	0.0
Lofa	14354	2	2	22	7.2
Maryland	7048	1	1	11	7.4



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Sinoe	5308	0	0	0	0.0
Nimba	23953	0	0	0	0.0
Grand Bassa	11494	1	1	11	4.5
Grand Cape Mount	6588	0	0	0	0.0
Bomi	4361	0	0	0	0.0
<b>Liberia (National)</b>	<b>180241</b>	<b>9</b>	<b>9</b>	<b>100</b>	<b>2.6</b>

## Other Reportable Disease

### Exposure to Human Rabies (Animal Bites)

- Thirty-three (33) cases were reported from Montserrado (20), Nimba (5), Rivercess (3), Grand Bassa (2), Grand Gedeh (1), Margibi (1) and Maryland (1) Counties
- Cumulatively, since Epi-week one, 33 suspected cases of animal bites have been reported in human

### Acute Bloody Diarrhea (Suspected Shigellosis)

- One (1) suspected case was reported from Lofa County
  - No specimen was collected due to lack of test tubes
- Cumulatively, since Epi-week one, 1 acute bloody diarrhea case was reported with no stool specimen collected

### Severe Acute Watery Diarrhea (Cholera)

- Zero case was reported this week
- Cumulatively, since Epi-week one, zero suspected case have been reported

## Points of Entry

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Yellow Book Issued	Yellow Book/Card Replaced	Travelers Vaccinated	IDSR Alerts	Alerts Verified
<b>Airport</b>	James S. Paynes	35	19	16	0	0	0	0	0
	Robert International Airport	2513	1193	1320	34	34	0	0	0
<b>Seaport</b>	Freeport of Monrovia	124	62	62	0	0	0	0	0
	Buchanan Port	86	43	43	0	0	0	0	0
<b>Ground Crossing</b>	Bo Water Side	466	162	304	0	0	0	0	0
	Ganta	138	53	85	0	0	0	0	0
	Yekepa	89	39	50	0	0	0	0	0
	Loguatu	193	110	83	0	0	0	0	0
	Nursing Division	73	57	16	73	39	34	0	0
<b>Total Traveler for the Week</b>		<b>3717</b>	<b>1638</b>	<b>1979</b>	<b>107</b>	<b>73</b>	<b>34</b>	<b>0</b>	<b>0</b>

**Note: Yellow book issue for both arrival and departure; Vaccination coverage for both arrival and departure**

## AFRO Public Health Event

The National Public Health Institute of Liberia continues to monitor acute public health emergencies and outbreaks occurring in the African Region in order to ensure to preparedness and preventive measures are implemented .



During this week, 55 events are being monitored through WHO Health Emergencies Program in the African Region. Key events highlighted during the week include the following:

- Yellow fever in Nigeria
- Cholera in Burundi
- Cholera in Cameroon
- Ebola Virus Disease in Democratic Republic Central

Source: WHO Week 1 Bulletin on Outbreaks and Other Emergencies

## Public Health Measures

### National level:

- Providing technical remote support to Counties to:
  - Heighten surveillance in affected and surrounding communities

### County level:

- The patient's presumptive positive case was managed at hospital and discharge home
- Active case search is ongoing in affected communities for Measles, Yellow fever and Monkey pox
- All cases are clinically managed
- Mini vaccination campaign was conducted in three counties (Bong, Margibi and Nimba)
- Follow up with CHAs and CHVs in the community to heighten surveillance activities including health education



# Liberia IDSR Epidemiology Bulletin

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## Notes

- *Completeness* refers to the proportion of expected weekly IDSR reports received (target:  $\geq 80\%$ )
- *Timeliness* refers to the proportion of expected weekly IDSR reports received by the next level on time (target:  $\geq 80\%$ ).  
Time requirement for weekly IDSR reports:
  - Health facility - required on or before 5:00pm every Saturday to the district level
  - Health district - required on or before 5:00pm every Sunday to the county level
  - County - required on or before 5:00pm every Monday to the national level
- *Non-polio AFP rate* is the proportion of non-polio AFP cases per 100,000 among the estimated population under 15 years of age in 2017 (annual target:  $\geq 2/100,000$ )
- *Non-measles febrile rash illness rate* refers to the proportion of discarded measles cases per 100,000 population
- *Annualized maternal mortality rate* refers to the maternal mortality rate of a given period less than one year and it is the number of maternal deaths per 100,000 live births
- *Annualized neonatal mortality rate* refers to the neonatal mortality ratio of a given period less than one year and it is the number of neonatal deaths per 1,000 live births
- *Epi-linked* refers to any suspected case that has not had a specimen taken for serologic confirmation but is linked to a laboratory confirmed case
- *Confirmed case* refers to a case whose specimen has tested positive or reactive upon laboratory testing, or has been classified as confirmed by either epidemiologic linkage with a confirmed case, or clinical compatibility with the disease or condition
- *Case Fatality Rate (CFR)* is the proportion of deaths among confirmed cases



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## Immediately reportable diseases, conditions, and events by County during Epi week 1 and cumulative reports, Liberia, 2019

Counties	No. of Health Districts reported		Acute Flaccid Paralysis (Polio)		Acute Bloody Diarrhoea (Shigellosis)		Severe Acute Watery Diarrhoea (Cholera)		Human Exposure to Animal bites (Suspected Rabies)		Lassa fever		Measles		Meningitis		Maternal Mortality	Neonatal Mortality	Neonatal Tetanus		VHF (including EVD)		Yellow Fever		Other Diseases/ Events	
	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	D	D	A	D	A	D	A	D	A	D
Bomi	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bong	9	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Gbarpolu	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Bassa	8	8	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
Grand Cape Mount	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Gedeh	6	6	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0
Grand Kru	5	5	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
Lofa	6	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Margibi	4	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Maryland	6	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Montserrado	7	7	0	0	0	0	0	0	20	0	0	0	2	0	0	0	1	4	0	0	0	0	0	0	0	0
Nimba	6	6	0	0	0	0	0	0	5	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0
Rivercess	6	6	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
River Gee	4	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Sinoe	10	10	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Weekly</b>	<b>91</b>	<b>91</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative Reported</b>			<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative Laboratory Confirmed</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

D = Dead  
A = Alive

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## National Public Health Institute of Liberia (NPHIL)

### PURPOSE

In collaboration with the Ministry of Health, NPHIL strengthens existing infection prevention and control efforts, laboratories, surveillance, infectious disease control, public health capacity building, response to outbreaks, and monitoring of diseases with epidemic potential.

### OUR MISSION

To prevent and control public health threats by promoting healthy outcomes and serving as a source of knowledge and expertise.

### GOALS

Contribute to the development and sustainability of the public health workforce

Develop, enhance, and expand the surveillance and response platform

Develop and strengthen the laboratory system and public health diagnostics

Develop, enhance, and expand process and structures to protect environmental and occupation health

Expand, conduct, and coordinate public health and medical research to inform Liberian public health policies

Ensure sustainable financing and operations of the NPHIL

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