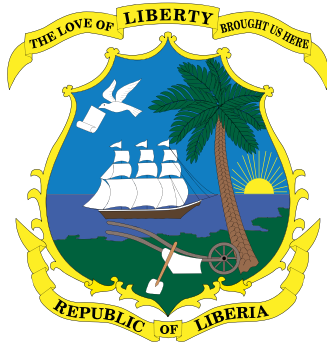


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INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESSES (IMNCI)

CHART BOOKLET

Monrovia, June 2026



INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESSES

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Sick Young Infant from Birth to 2 months

CHECK FOR VERY SEVERE DISEASE OR VERY SEVERE BACTERIAL INFECTION, LOW BODY TEMPERATURE AND LOCAL BACTERIAL INFECTION

ASK	LOOK, LISTEN, FEEL:	INFANT MUST BE CALM	Classify ALL YOUNG INFANT	SIGNS	CLASSIFY	TREATEMENT
- Has the infant had convulsions? - Is the infant having difficulty in feeding? - Has the infant had fever or hot skin	- See if the young infant is lethargic or unconscious or convulsing now? - Count the breaths in one minute. - Repeat the count if ≥ 60. - Look for severe chest in drawing. - Look and listen for grunting. - Look for pus draining from the ear - Look at the umbilicus. - Is it red or draining pus? - Does the redness extend to the skin? - Look at the infant's movements: If the infant is sleeping, ask the mother to wake him/her. - Does the infant move on his/her own? If the infant is not moving, gently stimulate him or her. - Does the infant move only when stimulated, but then stops? - Does the infant not move even if stimulated? - Measure axillary temperature. - Look for skin pustules. Are there many or severe pustules?			Presence of any one of the following signs - Convulsions OR - Not able to feed at all or not feeding well OR - Fast breathing (≥ 70 breaths per minute) OR - Severe chest in drawing OR - Grunting OR - No movements even if stimulated or no movement at all OR - Numerous skin pustules (more than 5 pustules) OR - Red umbilicus extending to the skin or draining pus OR - Fever ($\geq 37.5^{\circ}\text{C}$) OR - Severe hypothermia ($< 35.5^{\circ}\text{C}$) - Pus draining from the ear	POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE	➤ Give first dose of pre-referral intramuscular antibiotics ➤ Give intramuscular phenobarbitone if ongoing convulsions ➤ Prevent low blood sugar ➤ Start to re-warm the newborn if hypothermia ➤ Advise mother how to keep the newborn warm on the way during the transfer ➤ Refer the newborn to hospital **
				Fast breathing (60-69 breaths per minute) in infants	PNEUMONIA	➤ Give oral amoxicillin for 7 days. ➤ Advise the mother to give home care. ➤ Follow up in 3 days.
				- Red Umbilicus - Skin pustules (less than 5)	LOCAL BACTERIAL INFECTION	➤ Give an appropriate oral antibiotic ➤ Teach the mother to treat local infections at home ➤ Advise mother on give home care for the newborn ➤ Advise mother when to return immediately ➤ Follow up in 3 days
				None of the signs of very severe disease or local bacterial infection	INFECTION UNLIKELY	➤ Treat the newborn for any other identified problem ➤ Advise mother on home care for the newborn ➤ Advise mother when to return immediately.

LOOK FOR NEONATAL JAUNDICE

<i>If Jaundice, ASK:</i> • When did the yellow discoloration start? • Age of the young infant >3 weeks	LOOK and FEEL • Look for jaundice (Yellow eyes or skin) • Look at the newborn palms and soles. Are they yellow?	CLASSIFY 	• Jaundice appearing within less than 24 hours of life OR • Jaundice of palms and soles at any age. • OR • Jaundice in a baby >3 weeks old	SEVERE JAUNDICE	➤ <i>Treat to prevent low blood sugar</i> ➤ <i>Refer URGENTLY at the hospital in Kangaroo position to keep the baby warm</i>
			• Yellowness appearing after 24 hours of life AND • Yellowness not extending to Palms and Soles	JAUNDICE	➤ Teach mother on how to provide home care for the newborn ➤ Tell mother to return if infant not breastfeeding adequately or not wetting 3 or more diapers a day ➤ Tell mother to return immediately if palms and soles become yellow ➤ Follow up in 2 days.
			• NO JAUNDICE	NO JAUNDICE	➤ Teach mother on how to provide home care for the newborn

MANAGEMENT OF THE NEWBORN DELIVERED IN FACILITY

ESSENTIAL NEWBORN CARE ACTIONS

Step 1

- Dry baby's body with dry and warm towel.
- Wipe eye, as you dry stimulate breathing.
- Wrap with another dry towel and cover the head while the baby is on mother's abdomen



Step 2

Assess Breathing, while drying, and manage accordingly - See BIRTH ASPHYXIA chart.

Step 3

Clamp/tie the cord two fingers from abdomen and another clamp/tie two finger from the 1st one. Cut the cord between the 1st and 2nd clamp/tie.



Step 4

Place the baby in skin-to-skin contact with the mother. Keep all babies without complication, in skin to skin contact for one hour.

Step 5

Initiate breastfeeding immediately within 1 hour of life

Step 6:

Apply Tetracycline eye ointment once on both eyes.



Step 7

Apply Chlorohexidine on the cord.



Step 8

Give Vitamin K, 1 mg IM on anterior mid lateral thigh. (If GA < 34 weeks or Weight < 1,500gm, 0.5 mg).

Step 9

Measure baby temperature, Weigh baby & classify - See BIRTH WT & GA Chart.

NOTES

- If baby needs resuscitation cut the cord immediately. Otherwise, wait for 1- 3 minutes.
- Place newborn identification band on the wrist or ankle.
- Don't forget to record what is done to the newborn.
- Give BCG, OPV 0 and **HepB-BD** (If possible) before discharge.
- Delay bathing of the baby for 24 hours after birth.
- Advise mother to apply Chlorohexidine on the cord daily for 7 days and NEVER apply to the eyes
- If mother has respiratory infections (like flu) advise her to wear face mask and to wash her hands while caring the newborn
- Provide postnatal visits at 6 - 24 hours, 3 days, 7 days and immunization visit at 6 weeks.

CHECK THE NEWBORN FOR BIRTH ASPHYXIA

***IF YOU ARE ATTENDING DELIVERY or BABY BROUGHT TO YOU IMMEDIATELY AFTER BIRTH**

- **Assess and check for Birth Asphyxia while drying and wrapping with dry cloth**
- **If there is Birth Asphyxia, complete resuscitation within the 1st minute "Golden Minute of life"**

ASK	LOOK, LISTEN, FEEL:	ASSESS	CLASSIFY	TREATMENT
• Was there prolonged or obstructed labor? • Was the baby born in meconium-stained fluid? • Is there history of the baby not crying or weak cry immediately after birth? • Does the baby have any danger sign (ex: seizures, not sucking, unconscious etc...)?	▪ Look the breathing ○ Is baby not breathing? ○ Is baby gasping ○ Is baby breathing poorly (<30 breaths/minute)? ○ Is baby breathing normally (crying or ≥30 breaths/minute)?	○ Not breathing or gasping at birth	RESUSCITATION NEEDED	• Follow RESUSCITATION OF BIRTH ASPHYXIA • Reassess for improvement @ 5 MINS
		○ Is the baby not breathing after 5min? or ○ Is the baby gasping after 5min? or ○ Is the baby breathing poorly (<30 breath per minute) after 5min? or ○ No crying / weak cry after birth? Or ○ Any danger sign	BIRTH ASPHYXIA	• Provide Essential Newborn Care • Refer newborn as soon as possible • If baby remains weak or is having irregular breathing after 5mins resuscitation; refer urgently to hospital while continuing to resuscitate on the way • If baby shows no response (no spontaneous breathing) after 20 minutes, stop resuscitation
		○ Is baby breathing well and active after 5 mins?	BIRTH ASPHYXIA LESS LIKELY	➤ Monitor baby and mother continuously for 6 hours. If any danger signs reclassify as BIRTH ASPHYXIA and refer. ➤ Follow up after 12 hrs, 24 hrs (in the facility), 3 days, 7 days and 6 weeks
		• Breathing normally (crying or ≥30 breaths/ minute)	NO BIRTH ASPHYXIA	➤ Give ENC ➤ Give HepB-BD, BCG and OPV 0 ➤ Advise mother when to return immediately ➤ Follow after 6 hrs (in the facility), 3 days and 7 days and 6 weeks

Classify for BIRTH ASPHYXIA

ASSESS THE NEWBORN FOR BIRTH WEIGHT AND GESTATIONAL AGE

		ASSESS	CLASSIFY	TREATMENT
Assess, Look: - Ask the gestational age - Ask for birth weight or - Weigh the baby (within 7 days of life)	Classify	- Weight < 1,500gm OR - Gestational age < 32 weeks	VERY LOW BIRTH WEIGHT AND/OR VERY PRETERM	- Continue breastfeeding (if not sucking feed expressed breast milk by cup and spoon) - Start Kangaroo Mother Care (KMC) - Give Vitamin K 0.5mg IM on anterior mid lateral thigh, if not already given - Refer URGENTLY with mother to hospital with KMC position
		- Weight 1,500 - 2,500 gm. OR - Gestational age 32-37 weeks	LOW BIRTH WEIGHT AND/OR PRETERM	- KMC if <2,000gm - Counsel on optimal breastfeeding - Counsel mother on prevention of infection - Give Vitamin K 1mg IM (if GA < 34 wks, 0.5 mg IM) on anterior mid lateral thigh if not already given - If baby ≥ 2,000 gms, reassess in 6 –24 hrs, - Follow-up visits 3 days, 7 days, 14 days, 28days and 6 weeks - Give 1st dose of vaccine - Advise mother when to return immediately
		- Weight ≥ 2,500 gm. OR - Gestational age ≥ 37 weeks	NORMAL BIRTH WEIGHT AND/OR TERM	➤ Counsel on optimal breastfeeding ➤ Counsel mother/family on prevention of infection ➤ Reassess in 6 –24 hrs, and follow-up in 3 days, 7 days, 14 days, 28 days and 6 weeks ➤ Give 1st dose of vaccine ➤ Give Vitamin K 1mg IM on anterior mid-thigh if not already given ➤ Advise mother when to return immediately

ASSESS FOR DIARRHEA

ASK	LOOK		• SIGNS	CLASSIFY AS:	TREATMENT
- For how long? - Is there blood in the stool?	- Look at the young infant's general condition. - Is the infant restless and irritable? - Infant's movements: - Does the infant move only when stimulated and then stops? - Does the infant not move even when stimulated? - Look for sunken eyes. - Pinch the skin of the abdomen. Does it go back: - Very slowly (longer than 2 seconds)? - Slowly?	Classify	- Two of the following signs: - Movement only when stimulated, or - No movement even when stimulated - Sunken eyes - Skin pinch goes back very slowly	SEVERE DEHYDRATION	- If infant has another severe classification: - Refer URGENTLY to hospital with mother/caregiver giving frequent sips of ORS on the way - Advise mother to continue breastfeeding more frequently - Advise mother/caregiver how to keep the young infant warm on the way to hospital - If infant does not have any other severe classification; give fluid for severe dehydration (Plan C).
			- Two of the following signs: - Restless or irritable - Sunken eyes - Skin pinch goes back slowly	SOME DEHYDRATION	- If infant has another severe classification: - Refer URGENTLY to hospital with mother/caregiver giving frequent sips of ORS on the way - Advise mother to continue breastfeeding more frequently - Advise mother/caregiver how to keep the young infant warm on the way to hospital - If infant does not have any other severe classification. - Give fluid for some dehydration and Zinc (Plan B) - Advise mother/caregiver when to return immediately - Follow-up in 2 days
			Not enough signs to classify as some or severe dehydration	NO DEHYDRATION	- Advise Mother/Caregiver when to return immediately - Follow-up in 5 days if not improving - Give fluids to treat diarrhoea at home and Zinc (Plan A)
			➤ Diarrhea lasting 14 days or more	SEVERE PERSISTENT DIARRHEA	- Give first dose of IM Ampicillin & Gentamycin - Treat to prevent low blood sugar - Advise how to keep infant warm on the way to the hospital - Refer to hospital
			Blood in stool	DYSENTERY	- Give first dose of IM Ampicillin & Gentamycin - Treat to prevent low blood sugar - Advise how to keep infant warm on the way to the hospital - Refer to hospital

ASSESS FOR FEEDING PROBLEM AND LOW WEIGHT FOR AGE

ASK: - Does the infant have difficulty in feeding? - Is the infant breastfeeding? If yes, how many times in 24 hours? - Does the infant usually receive any other foods or drinks? If yes, how often? If yes, what do you use to feed the infant? - How do you feed the infant? (bottle, cup, spoon, nasal gastric tube)	LOOK, LISTEN, FEEL: - Weight <2 kg in young infants <7 days - Determine weight for age. - Observe the mother's nipples for abnormalities (short, inverted nipples)
IN THE YOUNG INFANT has difficulty feeding, or , is breastfed less than 8 times in 24 hours, or is taking any other food or drinks, or is low weight for age AND has no indications to refer urgently to hospital:	
ASSESS BREASTFEEDING	
Has the young infant breastfed in the previous hour?	- If the young infant has not breastfed in the previous hour, ask the mother to put her young infant to the breast. Observe the breastfeed for 4 minutes - If the young infant has breastfed during the last hour, ask the mother if she can wait and tell you when the young infant is willing to breastfeed - Is the infant well attached?
Yes ___ NO ___	To check attachment, look for: - Chin touching breast - The mouth wide open - Lower lip turned outwards - More areolae seen above young infant's top lip than below bottom lip (All of these signs should be present if the attachment is good). No attachment at all Poor attachment Good attachment - Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)? No suckling Poor suckling Effective suckling - Clear a blocked nose if it interferes with breastfeeding - Look for mouth ulcers or white patches in the mouth (thrush)

Classify
FEEDING

ASSESS	CLASSIFY	IDENTIFY TREATMENT
- Unable to feed - No breast attachment - No suckling at all	POSSIBILITY OF SEVERE BACTERIAL INFECTION OR SEVERE DISEASE	- Give first dose intramuscular antibiotics - Treat to prevent low blood sugar - Make sure the young infant is well covered with a dry cloth to avoid hypothermia on the way to the hospital - Refer URGENTLY to hospital
- Poor attachment, or - Poor suckling, or - Less than 8 breastfeed in 24 hours or - Receives other food or drinks, or - Low weight for age (between -2 and -3 ZS), or - Thrush (white ulcerations or patches in the mouth)	FEEDING PROBLEM AND/OR LOW WEIGHT FOR AGE	- Advise the mother to breastfeed frequently, as often and for as long as the young infant wants, day and night - If not well attached or not suckling effectively, explain the correct positioning and attachment - If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding. - If receiving other foods or drinks, counsel mother about breastfeeding more, reducing other foods or drinks, and using a cup. - If not breastfeeding at all: - Counsel the mother and encourage her to breastfeed if the mother is HIV negative - Teach the mother to prepare breast- milk substitute and use a cup if the mother is HIV positive - If thrush, teach the mother to treat thrush at home - Teach the mother about home care for young infant - Follow up any feeding problem or thrush after 2 days. - Refer the young infant in nutritional services for any feeding problem and low weight for age
No low weight for age and no other signs of inadequate feeding	NO FEEDING PROBLEM AND NO LOW WEIGHT FOR AGE	- Praise the mother for the good feeding of the young infant - Encourage the mother for more breastfeeding and hygiene improvement

CHECK THE YOUNG INFANT FOR POSSIBLE HIV INFECTION

(A young infant under ART must not be assessed by this table)

ASK OR LOOK IN THE MOTHER'S road to health card and antenatal card: ASK: - Has the mother had an HIV test? If yes: - Serological test POSITIVE or NEGATIVE? - Has the infant had an HIV test? If yes: - Virological test POSITIVE or NEGATIVE? - Serological test POSITIVE or NEGATIVE? If no: - Mother or infant HIV test not done	CLASSIFY
➤ If the mother is HIV positive and the infant does NOT have a positive virological test, ASK: - Is the infant breastfeeding now? - Was the young infant breastfeeding at the time of the test or before it? - Is the mother on treatment and the infant on antiretroviral prophylaxis?	

ASSESS	CLASSIFY	IDENTIFY TREATMENT
Infant has a positive virological/PCR test	CONFIRMED HIV INFECTION	- Give cotrimoxazole prophylaxis from age 4–6 weeks. - Refer or give antiretroviral treatment and HIV care. - Refer or start the mother on antiretrovirals if not on treatment. - Advise the mother on home care. - Follow-up as per national guidelines.
- Infant has a positive serological test OR - Mother is HIV positive & infant who is breastfeeding or stopped less than 6 weeks ago has a negative virological test OR - Mother is HIV positive And young infant not yet tested	HIV EXPOSED: POSSIBLE HIV INFECTION	- Give cotrimoxazole prophylaxis from age 4–6 weeks. - Start or continue antiretroviral prophylaxis according to risk assessment. - Conduct a virological test for the infant. - Refer or start the mother on antiretroviral if not on treatment. - Advise the mother on home care. - Follow up regularly as per national guidelines.
HIV test not done for Mother or infant	HIV INFECTION STATUS UNKNOWN	- Initiate HIV testing and counseling. - Conduct HIV test for the mother and if positive, a virological test for the infant. - Conduct virological test for the infant if the mother is not available.
Negative HIV test for the Mother or negative virological test for the infant	HIV INFECTION UNLIKELY	- Treat, counsel and follow up any infections. - Advise the mother about feeding and about her own health.

Assess Other Problems

CHECK FOR EYE INFECTION

ASK

- Does the newborn have the eye draining pus?

LOOK

- Inspect the eyes of the newborn,
 - Are they draining pus?
 - Are they swollen?

Classify

• Eyes swollen or draining pus	GONOCOCCAL EYE INFECTION LIKELY	➤ <i>Refer the newborn</i> ➤ <i>Refer the newborn to hospital in Kangaroo.</i>
• Eyes draining pus	CONJUNCTIVITIS	➤ Apply first dose of local antibiotic (eye ointment) in eyes ➤ Teach mother to treat eye infection at home ➤ Advise mother when to return immediately ➤ Follow up in 5 days
• No swollen nor draining pus eyes	NO EYE INFECTION	➤ Treat the newborn for any other problem ➤ Advise mother on home care for the newborn ➤ Advise mother when to return immediately

THEN CHECK THE NEWBORN'S IMMUNIZATION STATUS

IMMUNIZATION SCHEDULE:

AGE	VACCINES			
Birth	BCG	OPV 0	Hep B	
6 Weeks	OPV1	PENTA 1	ROTA 1	PCV 1

ASSESS FOR OTHER PROBLEMS THAT THE NEWBORN MAY HAVE AND ASSESS THE MOTHER'S HEALTH STATUS

TREAT THE SICK YOUNG INFANT AND COUNSEL THE MOTHER

- ❖ GIVE PRE-REFERRAL FIRST DOSES OF INTRAMUSCULAR AMPICILLIN AND GENTAMICIN
- ❖ TREAT CONVULSIONS OF A YOUNG INFANT WITH PHENOBARBITAL

GIVE PRE-REFERRAL FIRST DOSE INTRAMUSCULAR AMPICILLIN AND GENTAMICIN

- For possible serious bacterial infection or very severe disease*
- Give intramuscular Gentamicin: 5 mg/kg body weight per day.
- Give intramuscular Ampicillin: 50 mg/kg body weight per dose (100 mg per kg/per day divided into 2 doses)

WEIGHT	GENTAMICIN Dose: Weight 1-2kg: 3 mg per kg per day in a single dose 3-5kg: 5 mg per kg per day in a single dose		AMPICILLIN Dose: 1-2kg: 100 mg per Kg/per day divided into 2 doses 3-5kg: 150mg per Kg/per day divided into 3 doses
	Add 2 ml of distilled water to one 2ml vial containing 40mg= 4 ml to 40 mg: 10mg/ml	Add 6 ml of distilled water to one 2 ml vial containing 80 mg=8ml 10 mg/ml	Add 2 ml distilled water to one 500 mg vial
1 kg	0.25 ml*		0.2ml per dose
2 kg	0.50 ml*		0.4 ml per dose
3 kg	1.5 ml*		0.6 ml per dose
4 kg	2 ml*		0.8 ml per dose
5 kg	2.5 ml*		1 ml per dose

- **DO NOT USE 40 mg/ml GENTEMYCIN not diluted.**
- *Referral is the best option for a young infant classified as having POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE.
- If, after counseling and problem-solving, referral is refused or not feasible and if on further classification the infant has CRITICAL ILLNESS
- Continue to give intramuscular Gentamicin once daily AND intramuscular Ampicillin twice daily until referral is feasible or for at least 5 day if referral is still not feasible

TREAT CONVULSIONS OF A YOUNG INFANT WITH PHENOBARBITAL

Stop convulsions with phenobarbital

- Clear airways
- Turn the young infant to the side
- Do not put anything in its mouth
- If lips and tongue are bluish, open the mouth to ensure airways are clear
- If need be, aspirate secretions from the throat with a tube introduced through the nostril into the Penguin
- Give Intramuscular phenobarbital to a young infant

AGE OR WEIGHT	NONDILUTED PHENOBARBITAL TO BE GIVEN IN INTRAMUSCULAR Dose: 20mg/kg) 100 mg/1 ml
< 3 kg	60 mg (0.6ml)
3 up to < 5kg	60 mg to 100 mg (0.6-1ml)

- If fever, lower the temperature. (proceed with undressing)
- If reference is not possible: continue to give 10mg / kg after 20-30 minutes. If convulsions continue, give another 10mg / kg after 20-30 minutes (Do not exceed 40 mg / kg / day).

TREAT THE SICK YOUNG INFANT AND COUNSEL THE MOTHER

TREAT THE YOUNG INFANT TO PREVENT LOW BLOOD SUGAR

- If the young infant is able to breastfeed :
 - Ask the mother to breastfeed the young infant
- If the young infant is not able to breastfeed but is able to swallow:
 - Give expressed breast milk or a breast-milk substitute.
- If neither of these is available, give sugar water
(To make sugar water, dissolve 4 level teaspoon of sugar (20 grams) in a 200-ml cup of clean water.)
- Give 30 - 50 ml of milk or sugar water before departure.
- If the young infant is not able to swallow:
 - Give 50 ml of milk or sugar water by nasogastric tube.
- If IV line is available, give 10% dextrose (Dose :2-3 ml/kg)

TEACH THE MOTHER HOW TO KEEP THE YOUNG INFANT WARM ON THE WAY TO THE HOSPITAL

- Hold the infant in skin-to-skin contact.
- OR
- Keep the young infant clothed or covered as much as possible all the time, especially in cold weather.
 - Add extra clothing, including hat, gloves and socks.
 - Wrap the infant in a soft, dry cloth, and cover with a blanket.

TEACH THE MOTHER HOW TO KEEP THE YOUNG INFANT WARM AT HOME

- **WARM THE YOUNG INFANT WITH SKIN-TO-SKIN CONTACT**
 - Skin to skin contact as often as possible, day and night.
 - Re-warm the young infant with skin to skin
 - Other family members can help the mother doing skin to skin contact
 - When the young infant is not in skin-to-skin position, keep it dressed or covered as often as possible at all the time. dress the young infant with a shirt, hat, nappy, and socks and covered
 - Keep the young infant in the same bed with the mother.
 - Change clothes whenever they are wet
 - Keep the room warm

AVOID BATHING THE YOUNG INFANT UNTIL THE NEXT 24 HOURS

RE-ASSESS AND CLASSIFY THE SICK YOUNG INFANT WITH POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE IF REFERRAL IS REFUSED OR NOT FEASIBLE

TREAT THE SICK YOUNG INFANT AND COUNSEL THE MOTHER

IF REFERRAL IS REFUSED OR NOT FEASIBLE, TREAT THE SICK YOUNG INFANT.

→ Give intramuscular gentamicin and ampicillin.

- For **CRITICAL ILLNESS**: Give gentamicin at 5–7.5 mg/kg body weight per day once daily and ampicillin 50 mg/kg body weight twice daily until referral is possible or for 7 days.
- For **CLINICAL SEVERE INFECTION**: Give gentamicin at 5–7.5 mg/kg body weight per day once daily for 7 days.

	GENTAMICIN (Strength, 40 mg/mL)	GENTAMICIN (Strength, 20 mg/mL)	AMPICILLIN To a vial of 250 mg, add 1.3 mL sterile water (Strength, 250 mg/1.5 mL)
WEIGHT (kg)	Volume per dose (mL)	Volume per dose (mL)	Volume per dose (mL)
1.5–2.4	0.2	0.4	0.8
2.5–3.9	0.4	0.8	1.2
4.0–5.9	0.6	1.2	1.5

→ Give oral amoxicillin.

- For **CLINICAL SEVERE INFECTION**
- For **SEVERE PNEUMONIA** (fast breathing alone in infants less than 7 days of age)

	AMOXICILLIN 75 to 100 mg/kg/day divided into 2 doses Give twice daily for 7 days		
WEIGHT (kg)	Dispersible tablet (250 mg) per dose	Dispersible tablet (125 mg) per dose	Syrup (125 mg in 5 mL) per dose
1.5–2.4	1/2 tablet	1 tablet	5 mL
2.5–3.9	1/2 tablet	1 tablet	5 mL
4.0–5.9	1 tablet	2 tablets	10 mL

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

→ CRITICAL ILLNESS WHEN REFERRAL WAS REFUSED OR NOT FEASIBLE

At each contact for injection of antibiotics:

- Explain again to the caregiver that the infant is very sick and should urgently be referred for hospital care.
- Reassess the young infant as described on p. 13.
- Treat any new problem.
- If referral is still not feasible, continue giving once-daily intramuscular gentamicin and twice-daily intramuscular ampicillin until referral is feasible or for 7 days.

→ CLINICAL SEVERE INFECTION WHEN REFERRAL WAS REFUSED OR NOT FEASIBLE*

If a 2-day gentamicin regimen is used:

At each contact for injection:

- Reassess the young infant as described on p. 13.
- After 1 day: If the young infant is improving, complete the 2 days of treatment with intramuscular gentamicin. Ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished.
- Ask the mother to bring the young infant back on day 4 of treatment (3 days after the initial visit)

If a 7-day gentamicin regimen is used:

At each contact for injection:

- Reassess the young infant as described on p. 13.
- If the young infant is improving, complete the 7 days of treatment with intramuscular gentamicin. Ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished.
- Refer the young infant urgently to hospital if:
 - The infant shows any sign of CRITICAL ILLNESS or
 - Any new sign of CLINICAL SEVERE INFECTION appears while on treatment or
 - There is no improvement on day 4 after 3 full days of treatment or
 - Any sign of CLINICAL SEVERE INFECTION is still present at the contact for the 7th intramuscular injection of gentamicin.

*Depending on whether the national policy is for 2 or 7 days of intramuscular gentamicin

TREAT THE NEWBORN AND COUNSEL THE MOTHER

Teach the mother how to treat Local Infections at home

- Explain to the mother what the treatment is and why it should be given
- Watch the mother as she gives the first treatment in the health centre.
- Tell the mother to give the treatment twice a day. She must return to health center if the infection becomes severe.

To treat skin pustules

The mother must:

- Wash hands with soap before and after care
- Gently wash off pus and crusts with soap and water
- Dry the area with clean, soft cloth
- Treat the newborn with Cloxacillin

➤ To treat thrush (ulcerations or white patches in mouth)

The mother must:

- Wash hands with soap before and after care
- Wash mouth with clean, soft cloth wrapped around the finger and wet with salt water (1 litre of boiled water + 1 teaspoon of salt)
- Treat the newborn with nystatin

Treat eye infection and teach the mother how to do it at home

- Clean both eyes 3 times a day.
 - Wash hands with clean water and soap before and after care
 - Wet clean cloth and wipe away pus
 - Open the eyes of the young infant.
 - Apply tetracycline eye ointment (1%) on the inside of the lower lid for both eyes 3 times a day
- Give the tetracycline ointment to the mother for home care
- Treatment should be continued until the redness of the eyes disappears
- Do not use other eye ointments or drops, or put anything else in the eyes

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

GIVE AN APPROPRIATE ORAL ANTIBIOTIC/MEDICINE AT HOME

TEACH THE MOTHER TO GIVE ORAL MEDICINES AT HOME

Follow the instructions below to teach the mother about each oral medicine to be given at home, and the instructions listed with the dosage table for each medicine.

- Determine the appropriate medicines and dosage for the infant's age or weight
- Tell the mother why the medicine is being given to the infant.
- Demonstrate how to measure a dose.
- Watch the mother practice measuring a dose by herself.
- Ask the mother to give the first dose to her infant.
- Explain carefully how to give the medicine, then label and package the medicine.
- If more than one medicine will be given, collect, count and package each medicine separately.
- Explain that all the tablets or syrups must be used in order to finish the course of treatment, even if the infant gets better.
- Check the mother's understanding before she leaves the clinic.

GIVE ORAL CLOXACILLIN

- o To treat local bacterial infection: **FIRST-LINE ANTIBIOTIC**

WEIGHT	CLOXACILLIN 25mg/kg/dose: Give <u>Three times a day for 5 days</u>
	SYRUP of 125 mg in 5 ml
1 up to 3 kg	2.5 ml per dose
4 up to 5 kg	5ml per dose

GIVE COTRIMOXAZOLE PROPHYLAXIS FOR HIV EXPOSED/INFECTED YOUNG INFANT

COTRIMOXAZOLE
(trimethoprim + sulfamethoxazole)

Weight 3.0 – 5.9 kg

Give once a day starting at 6 weeks of age

Syrup (40/200 mg/5mL)	Pediatric tablet (strength 20/100)	Pediatric tablet (strength 40/200)
2.5 mL	1 tablet	Half tablet

GIVE ORAL AMOXICILLIN

- o For pneumonia: Give twice daily for 7 days.
- o For local bacterial infection: Give twice daily for 5 days.

AMOXICILLIN – Give twice daily

WEIGHT (kg)	Dispersible tablet (125 mg) per dose	Dispersible tablet (250 mg) per dose	Syrup (125 mg in 5 mL) per dose (mL)
1.5–2.4	1	½	5
2.5–3.9	1	½	5
4.0–5.9	2	1	10

GIVE NEVIRAPINE PROPHYLAXIS FOR HIV EXPOSED YOUNG INFANT

- o NVP syrup is given to all babies born to HIV infected mothers, as soon as possible after birth.
- o Give NVP syrup to the baby 24-hourly for 6 weeks.

Dosing of NVP Syrup for Infant Prophylaxis

Birth weight	NVP Syrup (10 mg/mL)
≤2500 g	1 mL daily
>2500 g	1.5 mL daily

TO TREAT DIARRHEA - SEE TREAT THE SICK CHILD CHART

- o GIVE EXTRA FLUIDS AND CONTINUE FEEDING
- o PLAN A: TREAT DIARRHOEA AT HOME
- o PLAN B: TREAT SOME DEHYDRATION WITH ORAL REHYDRATION SALTS (ORS)
- o PLAN C: TREAT SEVERE DEHYDRATION QUICKLY

START RESUSCITATION IMMEDIATELY FOR A NEWBORN

RESUSCITATION OF BIRTH ASPHYXIA

Primary respiratory problem in most cases of perinatal asphyxia is lack of initiation of ventilation or lack of effective ventilation, so the most important intervention is to assist the neonate to take breaths more effectively. **For neonates who are not breathing at birth, a self-inflating bag-mask can effectively provide positive pressure ventilation with room air.** Supplemental oxygen may be required in some cases.

Conduct a rapid assessment of all newborns within a few seconds while drying* the baby; rapidly assess:

- ☐ **A**pppearance (color, cyanosis)
- ☐ **P**ulse rate
- ☐ **G**rimace
- ☐ **A**ctivity and muscle tone
- ☐ **R**espiration: is the baby breathing?
- ☐ Birth trauma; congenital abnormalities (congenital heart disease)

***Dry the baby thoroughly at birth. Drying helps keep the baby warm and stimulates breathing.**

Note the baby's general appearance (look at physical activity, muscle tone, posture and level of consciousness), skin (color, texture, nails; any rashes), lung functions, heart sounds and pulses in the groin (femoral), abdomen.

IMMEDIATELY help baby to breathe if **ANY** of the following is observed:

- Not breathing at all
- Not crying
- Breathing shallowly or with only agonal breaths
- Gasping
- Heart rate less than 100 bpm
- Central cyanosis

Follow the ABC for newborn resuscitation within the first 60 seconds of birth (The Golden Minute).

Airway

Clear the airway by positioning the neck slightly extended. Placing a small roll of cloth under the shoulders may help. Stimulate breathing by rubbing the back 2-3 times, but do not slap.



Only carry out suction if newborn has mouth or nose blocked by meconium that can interfere with positive pressure ventilation; if so, suction from mouth (first) then nose. Suction equipment can be used to clear excessive mucus or secretions from airway (oral or nasal passages) of neonates to facilitate breathing. Suction may cause bradycardia. Be careful not to traumatize the oropharynx. Suction can be done using either electrical suction machines, foot-operated suction machines, or manual suction devices. Suctioning for too long, or too deep or vigorous can cause injury; do not suck right down the throat. **DO NOT** suction more than 2 times for a duration of exceeding 20 seconds.

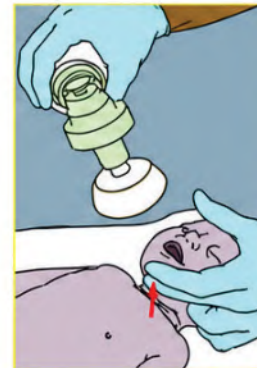
If the baby is still not breathing well after cleaning airway and brief stimulation, IMMEDIATELY VENTILATE using bag-mask. DO NOT prolong suctioning or stimulation.

Breathing

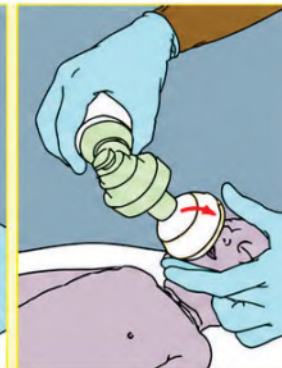
Provide positive pressure ventilation (PPV) by ventilating with a resuscitation bag-mask:

- 1) Position the neck slightly extended in neutral position.
- 2) Hold the mask on the face with the thumb and index finger on top of the mask. Use the middle finger to hold the chin up toward the mask.
- 3) Fit mask to face; make a tight seal between mask and face
 - Check that mask size is correct – mask should cover the chin, mouth, and nose, but not the eyes.
 - If you hear air escaping from the mask, form a better seal; most common leak is between nose and cheeks
- 4) Squeeze bag to provide oxygen.

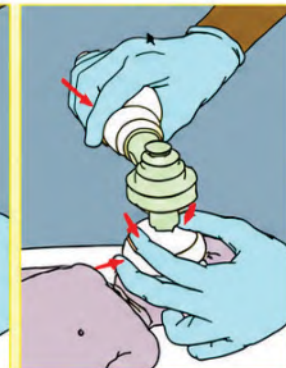
Step 2



Step 3

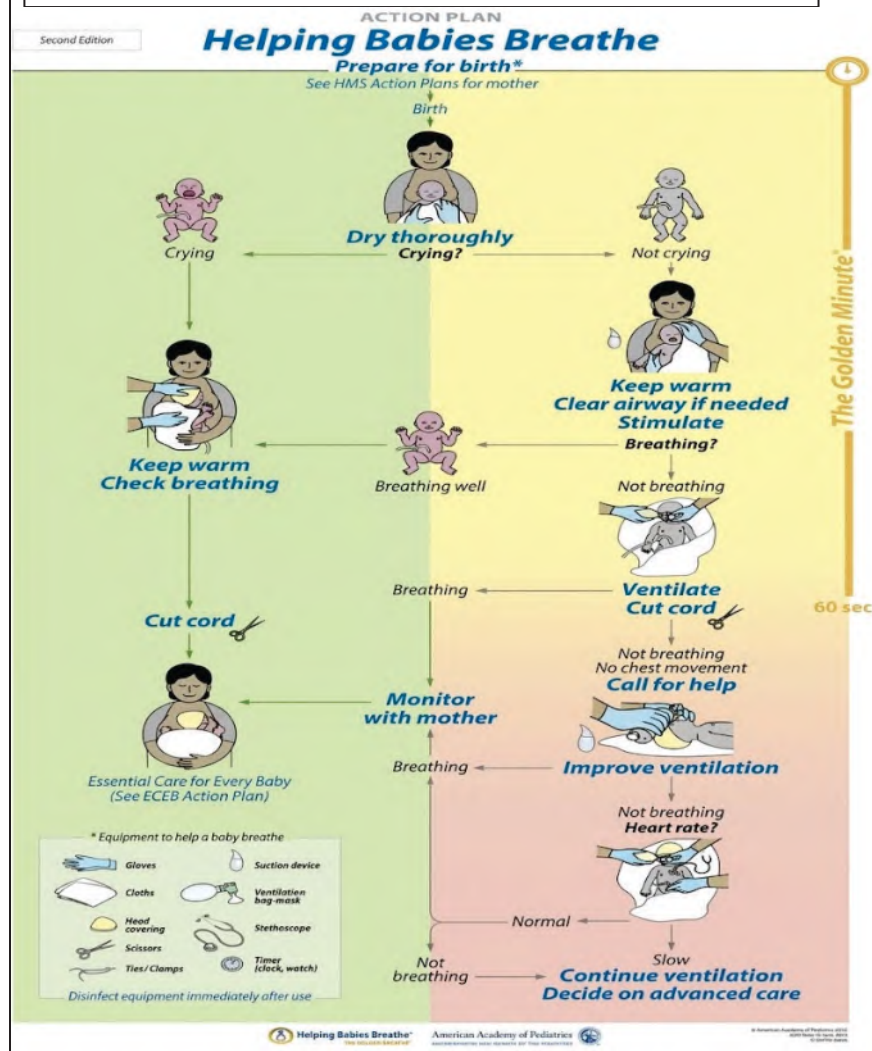


Step 4



- 5) Watch for smooth flow of air from the bag into the baby, **not** jerky breaths.
- 6) Observe for normal chest movement.
- 7) **Give 40-60 breaths per minute.**
- 8) The first 5 breaths should involve longer time for inflation.
- 9) Count aloud: **"breathe-2-3"**; squeeze the bag as you say 'breathe' and release while you say '2...3'. If chest is moving with each ventilation breath, continue ventilation for 60 seconds or until baby begins to breathe.
 - Be sure not to squeeze too hard to cause pneumothorax.

- ❖ The action sequence applied for a baby who does not cry at birth should be mastered by all learners.
- ❖ Within The Golden Minutes the baby should be crying, breathing well



Circulation

Check the heart rate with a stethoscope (or feel an umbilical pulse if stethoscope unavailable) and continue to ventilate.



The primary cause of cardiopulmonary arrest in newborns is due to failure of ventilation/respiration, thus resuscitation focuses on restoring adequate ventilation. If respiratory arrest just occurred, often times rescue breaths alone are sufficient to restore normal circulation, and focus in neonatal resuscitation should be on ensuring effective ventilation with chest rise and improvement in heart rate.

If baby's heart rate is less than 60 bpm, start chest compressions with thumb on the sternum, or 2 fingers is used in addition to rescue breaths. **Perform 3 chest compressions to 1 breath (compression—compression—compression—breath).**

If neonate is not responding, check the seal on the bag-mask, reposition and ensure open airway, increase pressure of rescue breaths, and connect the resuscitation bag-mask to oxygen. If there is no return of spontaneous breathing and circulation after 20 minutes of effective resuscitation, it is appropriate to counsel the family and stop CPR.

Give oxygen if:

- Pulse SpO₂ < 90% with a good pulse wave. (Pulse oximetry may be unreliable if the child's peripheral perfusion is poor)
- Give oxygen to all young infants with: Convulsions, Apnea or breathing <30 breaths per minute, Fast breathing, severe chest indrawing, nasal flaring or grunting
- Use nasal prongs
 - It is the preferred method for delivering oxygen to pre-term and low-birth-weight infants, with a flow rate of 0.5-1 L/min, which can be increased to 2 L/min in severe respiratory distress
 - Place them just inside the nostrils and secure with a piece of tape on the cheeks near the nose, and take care that the nostrils are kept clear of mucus, which could block the flow of oxygen
 - Use 1mm prongs for small babies and 2mm prongs for term babies. If you have only adult-size prongs, and the outlet tubes are too far apart to fit into the child's nostrils, cut the outlet tubes off and direct the jet of oxygen into the nostrils

COUNSEL THE MOTHER

FEEDING RECOMMENDATIONS

Feeding recommendations FOR ALL CHILDREN during sickness and health, including HIV EXPOSED children on antiretroviral prophylaxis

Feeding recommendations for young infants receiving no breast milk when an HIV-positive mother has chosen not to breastfeed

Newborn, birth to 1 week



- Immediately after birth, put your baby in skin-to-skin contact with you.
- Allow your baby to take the breast within the first hour
- Give your baby colostrum, the first yellowish, thick milk. It protects the baby from many illnesses.
- Breastfeed day and night, as often as your baby wants, at least 8 times in 24 hours. Frequent feeding produces more milk.
- If your baby is small (low birth weight), feed him or her at least every 2 to 3 hours. Wake the baby for feeding after 3 hours, if she or he does not wake.
- DO NOT give other foods or fluids. Breast milk is all your baby needs. This is especially important for infants of HIV-positive mothers. Mixed feeding increases the risk of mother-to-child transmission of HIV over that with breastfeeding.

1 week to 6 months



- Breastfeed as often as your child wants.
- Look for signs of hunger, such as beginning to fuss, sucking fingers or moving lips.
- Breastfeed day and night whenever your baby wants, at least 8 times in 24 hours. Frequent feeding produces more milk.
- Do not give other foods or fluids. Breast milk is all your baby needs.

Up to 6 months



- FORMULA FEED exclusively. Do not give any breast milk. Other foods or fluids are not necessary.
- Prepare correct strength and amount just before use. Use milk within 2 hours. Discard any left-over milk.
- Cup feeding is safer than bottle feeding. Clean the cup and utensils with hot soapy water. Give the following amounts of formula 7–8 times per day:

Age (months)	Approximate amount and number of times per day
0–1	60 ml × 8
1–2	90 ml × 7

COUNSEL THE MOTHER

TEACH THE MOTHER HOW TO CORRECT POSITIONING THE YOUNG INFANT AND ENSURE A GOOD ATTACHMENT FOR BREAST

- Show the mother how to hold her YOUNG INFANT
 - The infant's head and body must be straight
 - The infant must face the breast, and its nose opposite to the nipple
 - The infant's body must be close to mother's one
 - The mother must support infant's whole body, not just neck and shoulders.
- Show the mother how to help the young infant to attach to the breast, She should:
 - Touch the infant's lips with her nipple
 - Wait until the infant's mouth is opening wide
 - Move the infant's quickly onto the breast, ensuring the infant's lower lip well below the nipple
- ❖ Look for signs of good attachment and effective suckling. If the attachment or suckling is not good, restart again.

TEACH THE MOTHER HOW TO EXPRESS BREASTMILK

Ask the mother to:

- Wash her hands thoroughly.
- Make herself comfortable.
- Hold a wide-necked container under her nipple and areola.
- Place her thumb on top of the breast and the first finger on the underside of the breast so they are opposite each other (at least 4 cm from the tip of the nipple).
- Compress and release the breast tissue between her finger and thumb a few times
- If the milk does not appear, she should re-position her thumb and finger closer to the nipple and compress and release the breast as before.
- Compress and release all the way round the breast, keeping her fingers the same distance from the nipple. She should be careful not to squeeze the nipple, to rub the skin or move her thumb or finger on the skin
- Express one breast until the milk just drips and then express the other breast until the milk just drips.
- Alternate 5 or 6 times between breasts for at least 20–30 minutes.
- Stop expressing when the milk no longer flows but drips from the start.

COUNSEL THE CARETAKER OR HIV-POSITIVE MOTHER WHO IS NOT BREASTFEEDING.

- The mother should have received full counseling before making the decision not to breastfeed
- Ensure that the mother or caretaker has an adequate supply of appropriate breast milk substitute
- Ensure that the mother or caretaker knows how to prepare the milk correctly and hygienically and has the facilities and resources to do so
- Demonstrate how to feed with a cup and spoon rather than a bottle
- Make sure that the mother or caretaker understands that prepared feed must be finished within 1 hour of preparation
- Make sure that the mother or caretaker understands that mixing breastfeeding and replacement feeding may increase the risk of HIV infection and should not be done.

TEACH THE MOTHER HOW TO FEED FROM A CUP

- Put a cloth on the infant's front to protect his or her clothes, as some milk may spill
- Hold the infant semi-upright on the lap.
- Put a measured amount of milk in the cup
- Hold the cup so that it rests lightly on the infant's lower lip
- Tip the cup so that the milk just reaches the infant's lips
- Allow the infant to take the milk himself. DO NOT pour the milk into the infant's mouth.

COUNSEL THE MOTHER

TEACH THE MOTHER HOW TO KEEP THE LOW-WEIGHT INFANT WARM AT HOME

- Keep the young infant in the same bed as the mother
- Keep the room warm (at least 25°C) with a home heating device and make sure there is no draught of cold air.
- Avoid bathing the low-weight infant. When washing or bathing the infant, do it in a very warm room with warm water, dry immediately and thoroughly after bathing, and clothe the young infant immediately.
- Change clothes (e.g. nappies) whenever they are wet
- Provide skin-to-skin contact as much as possible, day and night. For skin-to-skin contact:
 - Dress the infant in a warm shirt open at the front, a nappy, hat and socks.
 - Place the infant in skin-to-skin contact between the mother's breasts. Keep the infant's head turned to one side
 - Cover the infant with the mother's clothes (and an additional warm blanket in cold weather).
- When the infant is not in skin-to-skin contact, keep him or her clothed or covered as much as possible at all times.
- Dress the young infant with extra clothing, including hat and socks, loosely wrap in a soft dry cloth, and cover with a blanket.
- Check frequently if the hands and feet are warm. If they are cold, re-warm the infant by skin-to-skin contact.
- Breastfeed (or give expressed breast milk by cup) the infant frequently.

KNOW WHEN TO RETURN:

Follow-up visits	
If the infant has:	Return for first follow-up in:
○ JAUNDICE ○ DIARRHOEA ○ FEEDING PROBLEM ○ THRUSH	2 days
○ LOCAL BACTERIAL INFECTION ○ PNEUMONIA ○ SEVERE PNEUMONIA when referral is refused or not feasible	3 days
○ LOW WEIGHT FOR AGE in an infant not receiving breast milk	7 days
○ LOW WEIGHT FOR AGE in breastfed infant	14 days
○ CONFIRMED HIV INFECTION or EXPOSED TO HIV: POSSIBLE HIV INFECTION	Follow national guideline

ADVISE THE MOTHER ON GIVING HOME CARE TO THE SICK YOUNG INFANT.

1. **EXCLUSIVELY BREASTFEED THE YOUNG INFANT** (for breastfeeding mothers).
 - Give only breast milk to the young infant.
 - Breastfeed frequently, as often and for as long as the infant wants, day and night, when sick and healthy.
2. **MAKE SURE THAT THE YOUNG INFANT IS KEPT WARM AT ALL TIMES.** –In cool weather, cover the infant's head and feet, and add extra clothing.
3. **KNOW WHEN TO RETURN: FOLLOW-UP VISITS and WHEN TO RETURN IMMEDIATELY**

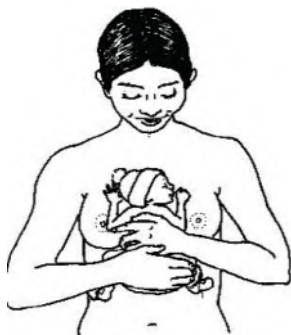
WHEN TO RETURN IMMEDIATELY

Advise the mother to return immediately if the young infant has any of these signs:

- Difficulty in feeding
- Reduced activity
- Becomes more sicker
- Becomes lethargic
- Fever
- Feels unusually cold
- Fast breathing
- Difficult breathing
- Red or draining pus umbilicus
- Palms or soles appear yellow

COUNSEL THE MOTHER

WARM THE YOUNG INFANT BY SKIN-TO-SKIN CONTACT AND KEEP IT WARM



COUNSEL THE MOTHER

ADVISE THE MOTHER ON THE BENEFITS OF BIRTH SPACING

Start by checking what the mother knows or does not know about birth spacing and whether or not she is currently using family planning method.

If the mother is not taking any family planning method

- Counsel her on the benefits of family planning in general for herself, for her children, for her family and for society as a whole,
- Underline the scientifically proven benefits of at least three years for newborns, children under one year and children under five and on herself,
- Explain to her the risks associated with a short birth spacing of less than three years on his health and that of his children, on the family and on society as a whole,
- Give her precise indications on where and how to access most easily to family planning services,
- Answer all questions of clarification and understanding that she would have raised during this talk, otherwise refer her where she could have the answers to these questions

If the mother is already taking a family planning method of her choice

- Give her advice on the benefits of long spacing of at least three years on her health, that of her children, her family and society as a whole,
- Emphasize on the importance and the need for her to continue using the family planning method of her choice to space births at least two years apart,
- Encourage the mother to express any concerns or comments she would like to make about birth spacing to provide appropriate answers to the questions raised, if need be.

FOLLOW-UP CARE FOR THE SICK NEWBORN

- LOOK FOR ANY SIGN OF “**POSSIBLE SEVERE BACTERIAL INFECTION OR SEVERE DISEASE**” DURING THE FOLLOW-UP VISIT FOR ANY NEWBORN

ASSESS EVERY YOUNG INFANT FOR POSSIBLE SERIOUS BACTERIAL INFECTION OR SEVERE DISEASE, PNEUMONIA OR LOCAL BACTERIAL INFECTION DURING FOLLOW-UP VISITS.

PNEUMONIA

❖ **After 3 days:**

- Reassess the young infant for **POSSIBLE SERIOUS BACTERIAL INFECTION** or **PNEUMONIA** or **LOCAL BACTERIAL INFECTION** as described.

Treatment

- Refer urgently to hospital if:
 - The infant **becomes worse** or
 - Any new sign of **POSSIBLE SERIOUS BACTERIAL INFECTION** or **VERY SEVERE DISEASE** appears while on treatment.
- If the young infant is improving, ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished.
- Ask the mother to bring the young infant back in 4 more days.

❖ **LOCAL BACTERIAL INFECTION**

After 3 days:

- Look at the umbilicus. Is it red or draining pus? Look for skin pustules. Are they numerous or severe (more than 5)?

Treatment:

- If redness remains the same or is worse, refer the newborn to hospital.
- If redness are improved, tell the mother to continue giving cloxacillin for 3 days again and continue treating the local infection at home
- If skin pustules are same or worse, refer to hospital. If improved, tell the mother to continue giving antibiotic for 3 days again 5 and continue treating the local infection at home

➤ **MODERATE HYPOTHERMIA**

After 2 days:

Assess temperature of the newborn

Treatment:

- If it is < 36.4°C or > 37.5°C, refer the newborn to hospital
- If it is between 36.5°C and 37.5°C, counsel the mother on how to continue keeping the newborn warm at home.

FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

➤ JAUNDICE

After 2 days:

LOOK for jaundice. Are the palms or soles yellow?

- If the **palms or soles are yellow**, refer the infant urgently to hospital. If the palms or soles are not yellow but jaundice **has not decreased**, advise the mother about home care and ask her to return for follow-up again the next day.
- If the jaundice has **started to decrease**, reassure the mother, and ask her to continue home care. Ask her to return for follow-up when the infant is 3 weeks of age.
- After 3 weeks of age: If jaundice continues beyond 3 weeks of age, refer the young infant to hospital for further assessment.

➤ DIARRHEA

After 2 days:

ASK: Has the diarrhea stopped?

- If the diarrhea has **not stopped**, assess, classify and treat the young infant for diarrhea.
- If the diarrhea
- has **stopped**, tell the mother to continue exclusive breastfeeding.

➤ CONFIRMED HIV INFECTION OR HIV EXPOSED

- A young infant classified as having CONFIRMED HIV INFECTION or HIV EXPOSED should return for follow-up visits regularly as per national guidelines.
- Follow the instructions for follow-up care of children aged 2 months to 5 years.

FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

➤ FEEDING PROBLEM

After 2 days:

- **Reassess feeding.** see « Check for Feeding Problem »
- **Ask about any feeding problems identified on the initial visit**
- Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, counsel her to return again for a new follow up visit
- **If the weight of the infant is low for age**, counsel the mother to return 14 days after the initial visit to measure the infant's weight.
- **Exception:** If you do not think that feeding will improve, or if the infant has lost weight, refer to HOSPITAL

➤ LOW WEIGHT

After 7 days:

- **Weigh the infant and determine if its weight is still low for its age**
- **Reassess feeding.** See "Feeding Problem above."
- **If the weight of the infant is no longer low for its age**, praise the mother and encourage her to continue.
- **If the weight of the infant is still low for its age, but the infant is feeding well**, praise the mother. Ask her to return for weighing her infant within a month or when she returns for immunization.
- **If the weight of the infant is still low for its age and still has a feeding problem**, counsel the mother about the feeding problem. Ask her to return again in 7 days (or when she returns for immunization, if this is within 2 weeks). Continue the follow up of the infant every few weeks until the infant is feeding well and gaining weight regularly or its weight is no longer low for its age.
- **Exception:** If you do not think that there will be improvement, or if the infant has lost weight, refer the infant.

➤ THRUSH

After 2 days:

- **Look for ulcers or white patches in the mouth (thrush).**
- **Reassess feeding.** See "Assess Feeding Problem or Low Weight"

Treatment:

- **If thrush has worsened, or the newborn has problems with attachment or suckling, refer to the next level**

If thrush is the same or has decreased, and if the newborn is feeding well, continue treatment with Nystatin for a total of 5 days.

➤ EYE INFECTION

After 5 days:

Look at the eyes of the newborn: Are they swollen and/or draining pus?

Treatment:

- **If eyes are swollen and draining pus**, refer the newborn to hospital.
- **If purulence has improved**, tell the mother to continue applying tetracycline eye ointment cloxacillin for 3 days again.

ASSESS, CLASSIFY AND TREAT SICK CHILD AGED 2 MONTHS UP TO 5 YEARS

ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

- Determine if this is an initial or follow-up visit for this problem.
- If follow-up visit, use the follow-up instructions on TREAT THE CHILD chart
- If initial visit, assess the child as follows:

CHECK FOR GENERAL DANGER SIGNS

CHECK FOR GENERAL DANGER SIGNS		SIGNS	CLASSIFY	IDENTIFY TREATMENT
ASK: • Is the child able to drink or breastfeed? • Does the child vomit everything? • Has the child had convulsions? LOOK: • See if the child is lethargic or unconscious • Check if the child is convulsing now		Any general danger sign	VERY SEVERE DISEASE	➤ Give injection diazepam if convulsing now ➤ Quickly complete the assessment ➤ Give first dose of IM injection Ampicillin and Gentamicin ➤ Give any pre-referral treatment immediately ➤ Treat to prevent low blood sugar ➤ Keep the child warm ➤ Counsel & Refer URGENTLY to hospital

A child with any general danger sign needs URGENT action, complete rapidly the assessment.

If the child is convulsing:

- clear his/her airway
- Check random blood glucose if low, correct hypoglycaemia
- If not, give him/her diazepam.
- Then immediately after, assess, classify and give necessary treatment before transferring him/her urgently.

THEN ASK QUESTIONS ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

If yes, ASK: • For how long?	LOOK AND LISTEN: • Count the breaths in one minute • Look for chest in-drawing • Listen for wheeze • Look and listen if the child has a stridor • Look for bluish coloration of lips/nails • Measure SPO2: <95% OR ≥ 95%
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Classify COUGH and/or DIFFICULT BREATHING

THE CHILD MUST BE CALM

If the child is aged:	Fast breathing is:
2 up 12 months:	50 breaths per minute or more
12 months up to 5 years:	40 breaths per minute or more

ASSESS	CLASSIFY	TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign, OR • Chest in drawing, OR • Stridor in calm child • Wheeze • SPO2 < 95% • Bluish coloration of lips/Nails	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	➤ Give first dose of appropriate antibiotic ➤ Give a bronchodilator if Wheeze ➤ Treat to prevent low blood sugar ➤ Refer URGENTLY at the hospital*
• Fast breathing	PNEUMONIA	➤ Give appropriate antibiotic for five days ➤ Encourage adequate fluid intake and age-appropriate feeding ➤ If coughing for more than 2 weeks or if having recurrent wheezing, refer for assessment for TB or asthma ➤ Advise mother/caretaker when to return immediately ➤ Follow-up in 2 days.
• No signs of pneumonia or very severe disease	NO PNEUMONIA: COUGH OR COLD	➤ Encourage adequate fluid intake and age-appropriate feeding ➤ Give multivitamin, zinc, and Vitamin C ➤ Give Paracetamol if fever. ➤ Encourage age to date vaccination. ➤ If coughing for more than 2 weeks or if having recurrent wheezing, refer for assessment for TB or asthma ➤ Advise mother/caretaker when to return immediately ➤ Follow-up in 5 days if not improving

Does the child have diarrhoea?

IF YES,
ASK:

- For how long?
- Is there blood in the stool?

LOOK, LISTEN, FEEL:

- Look at the child's general conditions: is the child?
 - Lethargic or unconscious?
 - Restless and/or irritable?
- Look if the child's eyes are sunken
- Offer the child fluid. Is the child:
 - Not able to drink or drinking poorly?
 - Drinking eagerly, thirstily?
- Pinch the skin of the abdomen

Does it go back:

 - Very slowly (≥ 2 seconds)?
 - Slowly? (< 2 seconds)

For DEHYDRATION

Classify DIARRHEA

And if diarrhoea persists for 14 days or more

And if blood in stool

Two of the following signs:

- Lethargic or unconscious
- Sunken eyes
- Not able to drink or drinking poorly
- Skin pinch goes back very slowly

SEVERE DEHYDRATION

- If child has no other severe classification: Give fluid for severe dehydration. (Plan C), OR
- If child also has another severe classification or if reclassified as severe dehydration after two hour of IV Fluid:
 - Refer **URGENTLY** to hospital; explain the mother to give frequent sips of ORS on the way.
 - Explain the mother to continue breast feeding
- If child is 2 years or older and if there is an outbreak of cholera in your region, give appropriate antibiotic for cholera

Two of the following signs:

- Restless, irritable
- Sunken eyes
- Drinks eagerly, thirstily
- Skin pinch goes back slowly

SOME DEHYDRATION

- Give fluid and food for some dehydration (Plan B).
- Give Zinc Sulphate
- If the child has to be referred for severe classification: Refer **URGENTLY** to hospital; explain the mother to give frequent sips of ORS on the way.
- Advise the mother to continue breast feeding
- Advise mother when to return immediately.
- Follow-up in 2 days

Not enough signs to classify as some or severe dehydration.

NO DEHYDRATION

- Encourage breastfeeding if still breastfeeding
- Give fluid and food to treat diarrhoea at home (Plan A)
- Give Zinc Sulphate
- Explain mother when to return immediately
- Follow-up in 5 days

- Dehydration present.

SEVERE PERSISTENT DIARRHEA

- Treat the hydration before referral unless the child has another severe classification
- Give Zinc Sulphate
- Give Vitamin A
- Refer to hospital

- No dehydration.

PERSISTENT DIARRHEA

- Advise the mother on feeding a child who has PERSISTENT DIARRHEA.
- Give Zinc Sulphate
- Give Vitamin A
- Explain mother when to return immediately
- Follow-up in 5 days.

- Blood in the stool.

BLOODY DIARRHEA/ DYSENTERY

- Treat with oral antibiotic for 5 days.
- Give Zinc Sulphate
- Explain mother when to return immediately
- Follow-up in 2 days.

Does the child have fever?

(History of or feels hot or temperature 37.5°C* or above)

If YES, ASK: - For how long? - If more than 7 days, has fever been present every day? Signs of severe malaria - Does the child pass scanty or dark urine (coca cola)? - Has the child had spontaneous bleeding? Minor digestive symptoms - Moderate diarrhoea - Minor vomiting - Has the child had measles within the last 3 months? Other Problems - Sore throat - Painful Urination - Ear pain/discharge	LOOK AND FEEL: - Stiff neck - Look for the results/Do BS+ and/or RDT+ - Look for signs of severe malaria if BS+ and/or RDT+ - Dark urine - Abnormal bleeding - Jaundice - Other signs of severe malaria** - Look for signs of MEASLES: - Generalized rash AND - One of the following signs: cough, runny nose, or red eyes	Classify for MALARIA	- Any general danger sign OR - Other severe classification OR - Stiff neck AND - BS+ and/or RDT+	SEVERE MALARIA	- Give first dose of IM Artesunate for severe malaria (first dose). - Give first dose of appropriate antibiotic. - Treat the child to prevent low blood sugar. - Administer one dose of paracetamol or ibuprofen in health centre if high fever (38°C or more) - Refer URGENTLY to hospital
			- Any general danger sign OR - Stiff neck AND - BS- and/or RDT-	VERY SEVERE FEBRILE DISEASE	- Give first dose of appropriate antibiotic. - Treat the child to prevent low blood sugar. - Give one dose of paracetamol or ibuprofen in health center if high fever (38 °C or more) - Refer URGENTLY to hospital
			- Fever (History or feels hot or temperature 37.5°C or above). - Minor digestive symptoms) AND - BS+ and/or RDT+	UNCOMPLICATED MALARIA WITH MINOR DIGESTIVE SYMPTOMS	- Give IM Artesunate - Administer one dose of paracetamol or ibuprofen in health centre if temperature is 38 °C or more) - If digestive symptoms stop, continue with the first intention antimalarial drug for 3 days - Refer the child if his/her status does not improve within 24 hours following the administration of the first dose.
			- Fever (History or feels hot or temperature 37.5°C or above). AND - BS+ and/or RDT+	UNCOMPLICATED MALARIA	- Give the first intention antimalarial drug - Administer one dose of paracetamol or ibuprofen in health centre if temperature is 38 °C or more). - Explain mother when to return immediately. - Follow-up in 3 days if fever persists. - If fever has been present all days for 7 days, refer for investigations
			- Fever (History or feels hot or temperature 37.5°C or above). AND - BS- and/or RDT- - Has Other Problems	MALARIA UNLIKELY	- Administer one dose of paracetamol or ibuprofen in health centre if temperature is 38 °C or more). - Give appropriate treatments for any other identified cause of fever - Explain mother when to return immediately. - Follow-up in 2 days if fever persists. - If fever has been present all days for 7 days, refer for further investigation
If the child has measles or has had it within the last 3 months: - Look for mouth ulcers, are they deep or extensive? - Look for pus draining from the eye - Look for clouding of the cornea	If current MEASLES or within the last three months, classify		- Any general danger sign, OR - clouding of the cornea OR - Deep or extensive mouth ulcers	SEVERE AND COMPLICATED MEASLES**	- Give Vitamin A (if no oedema). - Give first dose of appropriate antibiotic. - If clouding of the cornea or pus draining from the eyes, treat with tetracycline eye ointment - Administer one dose of paracetamol or ibuprofen in health center if temperature is 38 °C or more). - Treat the child to prevent low blood sugar. - Refer URGENTLY to hospital
			- Pus draining from the eye OR - Mouth ulcers	MEASLES WITH COMPLICATIONS** AT EYES AND/OR IN THE MOUTH	- Give Vitamin A (if no oedema). - Give first dose of appropriate antibiotic. - If pus draining from the eye, treat with tetracycline eye ointment. - If mouth ulcers, treat with oral nystatin - Explain mother when to return immediately. - Put under observation - Follow-up in 2 days
			Current MEASLES or within the last three months	MEASLES	- Give Vitamin A (if no oedema). - Explain mother when to return immediately. - Continue Age appropriate feeding and other supportive care

** Other signs of severe malaria can be observed when looking for general danger signs (convulsions, altered consciousness, prostration, lethargy, unable to drink) or when assessing other symptoms (severe anaemia, respiratory distress)

*** Other severe complications of measles (pneumonia, stridor, diarrhoea, ear infection, malnutrition) are listed in other tables.

**** Moderate diarrhoea (Diarrhoea with obvious sign of dehydration)

***** Minor vomiting (Vomiting that prevents oral medication from being taken)

Then, Check for Anemia

Look for Palmar Pallor:

- Severe palmar Pallor?
- Some Palmar Pallor?
- No palmar Pallor?

Classify
as:

ASSESS	CLASSIFY	IDENTIFY TREATMENT
Severe palmar Pallor	SEVERE ANEMIA	➤ Treat the child to prevent low blood sugar ➤ Refer URGENTLY to a hospital
Some palmar Pallor	ANEMIA	➤ Give oral iron/Folic Acid ➤ Assess for Malaria ➤ Give Mebendazole if child is 1 year or older & has not had a dose in the previous 6months ➤ Advise sleeping under an ITN ➤ If the child is not up to 6 months, assess the breastfeeding practices and support the mother to exclusively breastfeed ➤ If the child is 6 months and above, assess the child's feeding and counsel according to age of the child ➤ Advise Mother/Caregiver when to return immediately ➤ Follow-up in 14 days
No palmar pallor	NO ANEMIA	➤ Advise sleeping under an ITN ➤ If the child is not up to 6 months, assess the breastfeeding practices and support the Mother/Caregiver to exclusively breastfeed ➤ If the child is 6 months and above, assess the child's feeding and counsel according to the age of the baby ➤ Give Mebendazole if child is 1 year or older & has not had a dose in the previous 6months ➤ If breastfeeding/feeding problems, follow up in 5 days ➤ Advise the Mother/Caregiver when to come back immediately

THEN, CHECK FOR NUTRITIONAL STATUS, IN INFANTS < 6 MONTHS

Ask the mother/ care giver:

- Any history of breast feeding difficulty OR failure to feed effectively
- Recent weight loss
- Failure to gain weight, and
- Presence of bilateral edema.
- Recurrent illnesses

LOOK AND FEEL

- Look for visible severe wasting
- For bilateral Pitting edema of the feet
- Determine weight -for- Length (W/L) (<-3Z, -3Z to -2Z, ≥ -2Z)

Classify
NUTRITIONAL
STATUS

ASSESS	CLASSIFY	IDENTIFY TREATMENT
• W/L <-3Z score, OR • Edema of both feet OR • Visible severe wasting OR • Feeding Difficulty OR • Recent weight loss OR • Failure to gain weight	SEVERE ACUTE MALNUTRITION (FAILURE TO THRIVE)	○ If Health Facility has stabilization center, admit to Stabilization Center ○ If the Health Facility don't have stabilization center: - Give first dose of IM Ampicillin & Gentamicin - Treat the child to prevent Low Blood Sugar - Advise mother on the need of referral ➤ Refer Urgently to Hospital
▪ WFL ≥ -3Z to < -2Z score AND - No edema of both feet	MODERATE ACUTE MALNUTRITION (FAILURE TO THRIVE)	○ Assess feeding and advise the mother on feeding ○ Assess for HIV/TB infection ○ Follow up in 5 days if feeding problem ○ Follow up in 30 days if feeding well ○ REFER Urgently if not improving
• WFL ≥ -2Z score AND - No edema of both feet	NO ACUTE MALNUTRITION	○ Assess feeding and counsel the mother on feeding ○ Follow up in 5 days if feeding problem ➤ If no feeding problem-praise the mother

THEN, CHECK FOR NUTRITIONAL STATUS IN CHILDREN 6 - 59 MONTHS

		ASSESS	CLASSIFY	IDENTIFY TREATMENT
LOOK AND FEEL: • Oedema of both feet and legs • Medical complications * • Measure and determine Weight for Length/Height (W/L/H) Z-score (<-3, -3 to -2, ≥ -2) • Determine Weight/Age (W/A) • Determine Height/Age (H/A) • Determine if MUAC (<11.5 cm, 11.5-12.5 cm, ≥ 12.5 cm) • Look for pitting edema of both feet (+, ++,+++) Classify NUTRITIONAL STATUS	Medical complications: - Any general danger signs - Pneumonia - Any Severe classification - Dehydration - Persistent diarrhea - Fever ≥ 38.5°C - Hypothermia, - Signs of shock (cold extremities, pulse not palpable), - Pallor, - Not feeding well - Dysentery - Measles (Now or eye/mouth complications - Low body T° (<35.5°C axillary) - Vitamin A deficiency with eye signs	• WFL/H < -3Z or • MUAC <11.5 cm or • Edema of both feet (+, ++), AND: • Medical complications*, OR • Failed Appetite test • +++ Edema OR • Severe wasting with edema (WFL/H < -3Z with edema) • MUAC <11 cm with edema [MUAC of < 12cm for HIV+/TB+]	SEVERE ACUTE MALNUTRITION WITH COMPLICATIONS	➢ If HF has stabilization center (SC), admit to SC for inpatient care ➢ If the HF don't have SC: ➢ Give first dose of IM Ampicillin & Gentamicin ➢ Treat the child to prevent Low Blood Sugar ➢ Advise Mother/Caregiver on the need of referral and ➢ Refer Urgently to Hospital
		• Medical complications* WITH • W/H/L between -2 & -3 Z AND/OR • MUAC between 11.5 and 12.5 cm [MUAC between 12 and 13 cm for child with HIV or TB]	MODERATE ACUTE MALNUTRITION WITH COMPLICATIONS	
		• WFL/H < -3Z OR • MUAC <11.5 cm [MUAC < 12cm for HIV+/TB+] - OR • Edema of both feet (+, ++), AND: ○ No medical complications*, and ○ Pass Appetite test	UNCOMPLICATED SEVERE ACUTE MALNUTRITION	○ If OTP is available, admit child to OTP and follow standard OTP treatment and care - Counsel the mother on how to feed her child with RUFT, and give her enough for 1 week, if available - Assess the feeding practices & counsel the mother on feeding - Give Mebendazole (if child aged 1 year and above) - Give oral amoxicillin for 5 days - Check for HIV, Assess for TB infection - Follow-up in 7 days - Advise the mother when to come back ➢ If No OTP, Refer child to OTP service/Hospital Refer all < 6 months who are not gaining weight ➢ If No OTP, Refer child to OTP service/Hospital
		• Weight for height between -2 and -3 Z AND/OR • MUAC between 11.5 and 12.5 cm [MUAC between 12 and 13cm for HIV+/TB+]	MODERATE ACUTE MALNUTRITION WITHOUT COMPLICATIONS	
OTP** Outpatient Therapeutic Program, SFP*** Supplementation Feeding Program		• Normal weight for height, height for age and weight for age (Equal or more than - 2 Z, normal MUAC and no Oedema of both feet)	NO MALNUTRITION	➢ Assess the feeding practices and counsel on feeding ➢ Check for HIV ➢ Follow-up in 14 days ➢ Advise the Mother/Caregiver when to come back

Does the child have an ear problem

If YES,
ASK:

- Does the child have ear pain?
- Is there a discharge?
 - If yes, for how many days?

LOOK AND FEEL

- Look for pus draining from the ear.
- Look for the ear pain by pressing the anterior part (tragus) of the ear.
- Feel for tender swelling behind the ear

Classify
EAR
PROBLEM

• Tender swelling behind the ear.	MASTOIDITIS	➤ Give first dose of appropriate antibiotic ➤ Give first dose of paracetamol for pain. ➤ Refer URGENTLY to hospital
• Pus seen draining from the ear less than 14 days - OR • Ear pain.	ACUTE EAR INFECTION	➤ Give antibiotic for 5 days. ➤ Give paracetamol for pain. ➤ Dry the ear by wicking ➤ Advice on Breastfeeding and feeding during illness ➤ Advice mother when to return immediately ➤ Follow-up in 5 days.
• Pus seen draining from the ear for 14 days or more.	CHRONIC EAR INFECTION	➤ Assess for HIV infection ➤ Dry the ear by wicking. ➤ Follow-up in 5 days.
• No ear pain AND • No pus draining is seen.	NO EAR INFECTION	➤ No additional treatment. ➤ Assess Breastfeeding and Counsel

CHECK FOR HIV EXPOSURE AND INFECTION, IN CHILDREN 6 weeks < 24 MONTHS

(A child under ART must not be assessed by this table)

ASK:

- What is the HIV status of the mother?
 - Positive/Negative/Unknown
- What is the HIV antibody test result of the sick child?
 - Positive/Negative/Unknown
- What is the DNA PCR test result of the sick child? *
 - Positive/Negative/Unknown
- Is child on breastfeeding?
 - Yes / No
- If no, was child breastfed in the last 6 weeks?
 - Yes/ No
- If breast feeding: ASK: Is the child on ARV prophylaxis?

Classify

- If DNA PCR isn't available, AND
 - Child antibody is positive, AND
 - ❖ Two of the following :
 - Oral thrush
 - Severe pneumonia OR
 - Severe Sepsis OR
 - ❖ At least one of:
 - Severe unexplained wasting / malnutrition not responding to treatment
 - Pneumocystis pneumonia
 - Candidiasis of esophagus, trachea, bronchi or lungs
 - Cryptococcal meningitis
 - Toxoplasmosis of the brain (from age 1 month
- Consider "PRESUMPTIVE SEVERE HIV DISEASE (PSHD)*"

ASSESS

CLASSIFY

IDENTIFY TREATMENT

- Any age, Child DNA PCR positive - If child is > 12months with HIV antibody positive	HIV INFECTED	- Give Cotrimoxazole prophylaxis - Assess feeding and counsel - Assess for TB infection - Ensure mother is tested & enrolled in HIV care & Rx - Advise on home care - Refer/Link to ART clinic for ART initiation and other components of care ➤ Ensure child has appropriate follow up
- If <12months and DNA PCR isn't available, AND - Child antibody is positive, AND - Two of the following suggestive of PSHD*	PRESUMPTIVE SEVERE HIV DISEASE	
- Mother positive, and child Antibody or DNA PCR negative, and breastfeeding, OR - Mother positive, and child antibody & DNA PCR unknown, OR - If <12 months, Child antibody positive without PSHD	HIV EXPOSED	- Give Co-trimoxazole prophylaxis - Assess feeding and counsel - Assess for TB infection - If child DNA PCR is unknown, test as soon as possible - Ensure both mother and baby are enrolled in follow up at ANC/PMTCT clinic ➤ Ensure provisions of other components of care
Mother and child not tested	HIV STATUS UNKNOWN	- Counsel the mother for HIV testing for herself & the child - Test the child if mother is - Advise the mother to give home care - Assess feeding and counsel
- Mother negative, OR - Mother positive, and child DNA PCR negative, and not breastfeeding, OR - Mother HIV status unknown, and child antibody negative	HIV INFECTION UNLIKELY	- Advise on home care - Assess feeding and counsel - Advise on HIV prevention If mother HIV status is unknown, encourage mother to be tested

CHECK FOR HIV EXPOSURE AND INFECTION, IN CHILDREN 24-59 MONTHS

(A child under ART must not be assessed by this table)

ASK:

- What is the HIV status of the mother?
 - Positive
 - Negative
 - Unknown
- What is the HIV antibody test result of the sick child?
 - Positive
 - Negative
 - Unknown
- Is the child on breastfeeding?
 - Yes
 - No
- If no, was child breastfed in the last 6 weeks?
 - Yes
 - No

Classify

• Child antibody positive	HIV INFECTED	○ Give cotrimoxazole prophylaxis ○ Assess feeding and counsel ○ Advise on home care ○ Refer/link to ART clinic for ARV initiation & other components of care ○ Ensure mother is tested & enrolled in HIV care & treatment
▪ Mother positive, AND ▪ Child antibody negative or unknown, and breastfeeding	HIV EXPOSED	○ Give Cotrimoxazole prophylaxis ○ Assess feeding and counsel ○ Assess for TB infection ○ If child antibody test is unknown, test as soon as possible ○ If child antibody test is negative, repeat 6 wks after complete cessation of breastfeeding ○ Ensure both mother and baby are enrolled at ANC/PMTCT clinic ➤ Ensure provisions of other components of care
▪ Mother and child not tested	HIV STATUS UNKNOWN	○ Counsel the mother for HIV testing for herself and the child ○ Test the child if mother is not available (Eg orphan) ○ Advise the mother to give home care ➤ Assess feeding and counsel
• Mother negative and child not known	HIV INFECTION UNLIKELY	○ Advise on home care ○ Assess feeding and counsel ○ Advise on HIV prevention - If possible, do HIV antibody test for the sick child
• Child antibody negative at least 6 weeks after complete cessation of breastfeeding	NO HIV INFECTION	○ Advise on home care ○ Assess feeding and counsel ○ Advise on HIV prevention

CLASSIFY ALL CHILDREN AGED 2 MONTHS UP TO 5 YEARS FOR TUBERCULOSIS RISK

(Child on anti-TB drugs should not be assessed)

EVALUATE TUBERCULOSIS RISK:	Look and Feel	Classify for Tuberculosis risk
Ask the following screening questions: - Has the child been in contact with a PTBBC*+ case? - Does the child have cough for 14 days or more? - Does the child have fever for 14 days or more? - Has the child had weight loss or failure to thrive? - Does the child have night sweats or fatigue? - Is there any known HIV infection or immunosuppression condition?	- Look for Malnutrition (any Yellow or Red category) - Check for multiple enlarged lymph nodes > 2 cm - Check of mass (knot) along the spinal column (back)	

Perform full TB assessment for any child classified «high risk of TB »

CHECK FOR THE FOLLOWING ELEMENTS IN FAVOUR OF TUBERCULOSIS:	DO	Classify for Tuberculosis
- Cough for 14 days or more despite antibiotic dispensed for 5 days - Fever for 14 days or more despite antibiotic dispensed for 5 days, negative blood smear with negative assessment for other infectious diseases including urinary infection. - Has multiple enlarged lymph nodes > 2 cm - Has mass (knot) along the spinal column (back)	- Microscopy (AFB) - GeneXpert or culture if available - Chest X-Ray if available - TST if available - HIV test if not already done	

Note: * TST: TUBERCULIN SKIN TEST

- A close TB contact with an adult who has had pulmonary TB bacteriologically confirmed who lives in the same household as the child, or some-one with whom the child is in close contact or in contact for extended periods
- If you are unsure about the diagnosis of TB, refer the child for assessment and investigations
- PTBBC+ : pulmonary TB bacteriologically confirmed

Affirmative answer to one or more screening questions	HIGH RISK OF TB	Perform full Tuberculosis assessment
No affirmative answer to any of screening questions	LOW RISK OF TB	No full Tuberculosis assessment

- Positive microscopy OR - Positive culture positive or positive Gene Xpert	PULMONARY TUBERCULOSIS BACTERIOLOGICALLY CONFIRMED	- Treat other classifications - Refer to next level facility with TB treatment for management
- One or more features of TB present and positive TST OR - One or more features of TB present and with at least two of the following features: - History of contact of pulmonary TB bacteriologically confirmed, - HIV Positive, - Severe malnutrition OR - One or more features of TB present with Chest X-ray suggesting TB	TUBERCULOSIS CLINICALLY DIAGNOSED	- Treat other classifications - Refer to next level facility with TB treatment for management
A close contact of pulmonary TB bacteriologically confirmed with no features of Tuberculosis	TB EXPOSED	- Treat other classifications - Refer to next level facility with TB treatment for INH
No close contact of pulmonary TB bacteriologically confirmed but with one of the features of Tuberculosis	POSSIBLE TUBERCULOSIS	- Treat other classifications - Refer to hospital for investigations
No close contact of pulmonary TB bacteriologically confirmed and no features of Tuberculosis	TUBERCULOSIS UNLIKELY	- Treat other classifications - No specific interventions for Tuberculosis

THEN, CHECK FOR THE CHILD'S IMMUNIZATION STATUS AND VITAMIN A SUPPLEMENTATION

IMMUNIZATION SCHEDULE:

Age	VACCINES			
Birth	BCG	Polio 0	Hep B *	
6 weeks	Polio- 1	Pentavalent -1	Rotavirus -1	PCV -1
10 weeks	Polio- 2	Pentavalent - 2	Rotavirus - 2	PCV- 2
14 weeks	Polio- 3	Pentavalent- 3	IPV	PCV -3
5 Months	Malaria 1			
6 months	Malaria 2	Vit A 1		
7months	Malaria 3			
9 months	Measles 1 vaccine	Yellow Fever	Typhoid Fever	Vit A
15 months	Measles 2 vaccine or MMR		Malaria 4	Deworm

VITAMIN A SUPPLEMENTATION AND DEWORMING: *HBV: Birth dose of HBV Vaccine is not included in the current national EPI schedule!

- Check the date for the last dose
- Give Vitamin A to all children from the older than 6 months once every 6 months
- Every 6 months after 1 year

ASSESS FOR OTHER PROBLEMS THAT THE CHILD MAY HAVE AND ASSESS THE MOTHER'S HEALTH STATUS

TREAT THE CHILD

FOLLOW THE TREATMENT STEPS IDENTIFIED ON THE ASSESS AND CLASSIFY CHART

GIVE THE FOLLOWING TREATMENTS ONLY IN HEALTH CENTER

Stop convulsions with Diazepam

- **Clear airways**
 - Turn the child to the side
 - Do not put anything in its mouth
 - If lips and tongue are bluish, open the mouth to ensure airways are clear
 - If need be, aspirate secretions from the throat with a tube introduced through the nostril into the Penguin
- **Give Diazepam per rectal route**
 - Aspirate the necessary amount of diazepam into a syringe
 - Remove the needle from the syringe
 - Insert the syringe (without needle) at 1 or 2 cm into the rectum and inject the diazepam solution
 - Hold the buttocks tight for a few minutes

AGE OR WEIGHT	DIAZEPAM TO BE GIVEN BY <u>IV</u> <u>ROUTE</u> Solution of 10 mg/2ml Dose: 0,3 mg/kg	DIAZEPAM TO BE GIVEN BY <u>RECTAL</u> <u>ROUTE</u> Solution of 10 mg/2ml Dose: 0,5 mg/kg
< 6 kg (2 months up to 4 months)	0.3 ml	0.5 ml
6 up to < 9 kg (4 up to 12 months)	0.6 ml	1 ml
9 up to < 13 kg (12 up to 30 months)	0.7 ml	1,25 ml
13 up to ≥18 kg (30 months up to 5 years)	0.9 ml	1,5 ml

- If fever: Lower the temperature with a lukewarm laundry
- Treat to prevent low blood sugar

Treat the child to prevent low blood sugar

- **If the child is able to breastfeed:**
 - Ask the mother to breastfeed the child
- **If the child is not able to breastfeed but is able to swallow:**
 - Give expressed breast milk or a breastmilk substitute
 - If neither of these is available, give sugar water
 - Give 30 - 50 ml of milk or sugar water before departure

NB: To make sugar water: dissolve 4 level teaspoon of sugar (20 grams) in a 200-ml cup of clean water.
- **If the child is not able to swallow:**
 - IV line is available, give 10% dextrose (Dose :5 ml/kg)
 - Give 50 ml of milk or sugar water by nasogastric tube

TREAT ORAL THRUST

Give Nystatin 100000 UI/1ml

Age	Dosage
Less than 12months	2ml 3 times a day
More than 12months	5ml 3 times a day

TREAT A WHEEZING CHILD

- Administer salbutamol to be inhaled by mouth before the reference
 - 2 up to 4 puffs every 20 minutes (maximum 3 doses)
 - Refer the child to the hospital

❖ GIVE THE FOLLOWING TREATMENTS ONLY IN HEALTH FACILITY

- Explain to the mother why the drug is given.
- Determine the appropriate dose based on the child's weight (or age).
- Use a sterile needle and a sterile syringe. Measure the dose accurately.
- Inject Artesunate in intramuscular
- Inject quinine in IR or in infusion.
- If child cannot be referred, follow the instructions provided.

TREAT MALARIA

- Give IM artesunate for Uncomplicated malaria with minor digestive symptoms or severe malaria.
 - Give IM Artesunate (3 mg/kg) for a child weighing less than 20kg and 2.4mg/kg for a child weighing 20 kg and more in case of Uncomplicated malaria with minor digestive symptoms
 - If the patient becomes able to take the oral treatment, initiate ARTEMETHER + LUMEFANTRINE for 3 days
 - Give Artesunate in IV or IM for severe malaria (first dose).

Weight in Kg	6-7	8-10	11-13	14-16	17-20
Quantity in ml IV (10mg/ml)	2ml	3 ml	4ml	5 ml	6ml
Quantity in ml IM (20mg/ml)	1ml	2ml	2ml	3ml	3ml

IF REFERAL IS NOT POSSIBLE:

- Give the first dose of IM Artesunate according to the guideline for guiding severe malaria, until the patient is able to take an oral antimalarial.
- If the patient becomes able to take the oral treatment, initiate ARTEMETHER + LUMEFANTRINE for 3 days

Give an intramuscular antibiotic

FOR CHILDREN REFERRED URGENTLY AND WHO CANNOT TAKE ORAL ANTIBIOTICS:

- Give the first dose of IV / IM ampicillin and IV / IM Gentamycin for severe pneumonia or very severe disease
- Give the first dose of Ampicillin and Chloramphenicol for very severe febrile disease,
- Refer the child URGENTLY to hospital

IF REFERENCE IS NOT POSSIBLE:

- Repeat the injection of ampicillin 50 mg / kg / dose every 6 hours and Gentamycin 7.5 mg / kg / day or Chloramphenicol 25 mg / kg every 6 hours for 5 days by intravenous route
- Then, replace the treatment with a suitable oral antibiotic to complete the 5 days of treatment

AGE OR WEIGHT	AMPICILLIN Dose: 50mg / kg/ IV or IM/ every 6hrs	
	For a 500 mg vial Add 2 ml of sterile water (25 mg / 0.1 ml)	For a 1000 mg vial Add 4 ml of sterile water (25 mg / 0.1 ml)
< 6 kg (2 M up to 4 months)	0.15 ml per dose	
6 to < 9 kg (4 to 12 months)	0.35 ml per dose	
9 to < 13 kg (12m up to 30 y)	0.5 ml per dose	
13 to ≤18 kg (30m up to 5 y)	0.8 ml per dose	

AGE OR WEIGHT	CHLORAMPHENICOL Dose: 25 mg / kg IV or IM every 6 hrs
	Add 5 ml of sterile water to a vial containing 1000 mg = (180 mg / ml)
< 6 kg (2 M up to 4 months)	
6 to < 9 kg (4 à 12 months)	0.4ml per dose
9 à < 13 kg (12 M up to 30 M)	0.6ml per dose
13 to ≤18 kg (30 M up to 5 Y)	0.9ml per dose

AGE OR WEIGHT	GENTAMYCIN Dose: 7.5 mg / kg/Day IV or IM
	80mg/2ml vial
< 6 kg (2 m up to 4 months)	1ml
6 to < 9 kg (4 to 12 months)	1.5 ml
9 to < 13 kg (12 M up to 30 M)	2.0 ml
13 to ≤18 kg (30 M up to 5 Y)	3.0 ml

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home. Also follow the instructions listed with each drug's dosage table

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

- Follow the instructions below for every oral drug to be given at home.

- Also follow the instructions listed with each drug's dosage table.

- Determine the appropriate drugs and dosage according to the child's age or weight.
- Tell the mother the reason for giving the drug to the child.
- Demonstrate how to measure a dose.
- Watch the mother practice measuring a dose herself
- Ask the mother to give the first dose to her child.
- Explain carefully how to give the drug, then label and package the drug.
- If more than one drug will be given, collect, count and package each drug separately.
- Explain that all drugs (the tablets or syrups) must be used to finish the course of treatment, even if the child gets better.

Check the mother's understanding before they leave the health facility.

- Give an appropriate oral antibiotic

- FOR PNEUMONIA OR ACUTE EAR INFECTION:

FIRST-LINE ANTIBIOTIC: Amoxicillin

SECOND-LINE ANTIBIOTIC: Erythromycin

Age or weight	AMOXICILLIN Give twice daily for 5 days (50 mg/kg/day)			ERYTHROMYCIN Give twice a day for 5 days (40-50mg/kg/day)	
	250 mg tablet	125 mg tablet	125mg/5ml.	250 mg tablet	125 mg /5ml syrup
	Dose per intake				
< 6 kg (2 months up to 4 months)	1/2 tab	1 tab	5ml	1/2 tab	5ml
6 to < 9 kg (4 months up to 12 months)	1 tab	2 tabs	10ml	3/4 tab	7.5ml
9 to < 13 kg (12 months up to 30 months)	1 tab and 1/2	3tabs	12.5ml	1 tab	10ml
13 to ≤ 18 kg (30 months up to 5 years)	2 tabs			1 tab and 1/2	

- FOR DIARRHEA Give for 5 days the recommended antibiotic for DYSENTERY

FIRST-LINE ANTIBIOTIC FOR DYSENTERY: CIPROFLOXACIN or SEPTRIN/COTRIMOXAZOLE

SECOND-LINE ANTIBIOTIC FOR DYSENTERY: ADD METRONIDAZOLE

AGE OR WEIGHT	CIPROFLOXACIN Give twice a day for 5 days 20-30 mg / kg / day	COTRIMOXAZOLE (trimethoprim 8mg + Sulfamethoxazole 40 mg) Give 4 mg trimethoprim/kg/dose two times daily for 5 day		METRONIDAZOLE 7.5 mg/kg/day 3 x DAILY For 7 days	
	250 mg TABLETS	TABLET (single strength 80/400 mg)	Syrup (40 trimethoprim + 200 mg Sulphamethaxazole per 5 ml)	Syrup 125mg/5ml	Tablet 250mg
	Dose per intake				
< 6 kg (2 months up to 4 months)		½ tab	5ml	2.5ml	
6 to < 9 kg (4 months up to 12 months)	1/4 tab			2.5ml	¼ tab
9 to < 13kg (12 months up to 30months)	1/2 tab	1 tab	10 ml	5ml	1/2tab
13 to ≤ 18 kg (30 months up to 5 years)	3/4 tab			7.5ml	3/4 tab

- ❖ Give Zinc Sulphate for diarrhea.

Zinc Sulphate		
Age	10mg tablet	Syrup 20mg/5ml
< 6 months	1 tab	2.5ml
<6 months to 5 years	2 tab	5ml

❖ Give an oral antimalarial drug

- **FIRST- LINE ANTIMALARIAL: ARTEMETHER + LUMEFANTRINE IF ARTEMETHER + LUMEFANTRINE**
- Explain the mother that she must monitor the child for 30 minutes.
- If vomiting occurs within 30 minutes after drug administration, she must repeat the dose and return to the health facility to get additional tablets.

ARTEMETHER (A = 20mg) + LUMEFANTRINE (L = 120mg)	
AGE or WEIGHT	Twice a day for 3 DAYS
	Number of tablet
6 months up to 3 years ($5 \leq 14$ kg)	1
3 years up to 5 years ($15 \leq 24$ kg)	2

❖ GIVE Vitamin A to treat measles

- Give two doses.
- Give first dose in facility.
- Give mother another dose to give at home the next day.

AGE	Dose of Vitamin to be given	
	Capsule of 100,000 UI	Capsule of 200,000 UI
6 months up to 12 months	1 capsule	
12 months up to 5 years	2 capsules	1 capsule

❖ Treat 'Cough or cold with:

- **Safe remedies but no honey for under one-year children**
- Paracetamol - If cold, saline nasal sprays)

○ Give Chlorpheniramine in case of « No pneumonia: cough or cold »

- Give first dose in facility - Give mother a dose to give at home.
- Do not give to under one-year children

AGE	Dose of Chlorpheniramine to be given in 3 days preferably evening	
	2mg/ 5 ml syrup	4mg tablets
1 up to 2 years	½ teaspoon per day	-
➤ 2 up to 5 years	1 teaspoon per day	2mg/day, i.e 1/2 tab

❖ Give Paracetamol or Ibuprofen for Fever ($\geq 38^{\circ}\text{C}$ or above), or in case of ear pain for pain - Give Paracetamol every 6 hours or Ibuprofen every 8 hours until free of fever or ear pain

AGE OR WEIGHT	PARACETAMOL (10-15mg/kg)				IBUPROFEN (10mg/kg)	
	125mg/ 5 ml Syrup	Tablet 100 mg	Tablet 500 mg	Suppository 125 mg	Tablet 200 mg	Tablet 400 mg
< 6 kg (2 up to 4 months)	2.5ml	3/4 tab		½ suppo		
6 up to < 9 kg (4 up to 12 months)	5ml	1 tab 1/4	1/4 tab	1 suppo	1/2 tab	1/4 tab
9 up to < 13 kg (12 up to 30 months)		1 tab 3/4	1/2 tab	2 suppo	1 tab	1/2 tab
13 up to ≤ 18 kg (30 months up to 5 years)		2 tab 1/2	1/2 tab	2 suppo	1cp	1/2 tab

❖ Give Iron and Folate: Give one dose daily for 14 days

AGE OR WEIGHT	IRON/FOLATES TABLETS	IRON IN SYRUP Fumarate iron 100 mg per 5 ml (20 mg iron element per ml)
< 6 kg (2 up to 4 months)		1.00 ml (< ¼ teaspoon)
6 up to < 9 kg (4 up to 12 months)		1.25 ml (¼ teaspoon)
9 up to < 13 kg (12 up to 30 months)	½ tab	2.00 ml (½ teaspoon)
13 up to ≥ 18 kg (30 months up to 5 years)	½ tab	2.5 ml (½ teaspoon)

❖ Give Mebendazole

- Give a child 500 mg in a single dose starting from 12 months if the child has not received it within last six months. (Tablets of 100 mg, Tablets of 500 mg).

TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

- Explain to the mother what the treatment is and why it should be given.
- Describe the treatment steps listed in the appropriate box.
- Watch the mother as she gives the first treatment in the facility (except safe remedies for cough or sore throat).
- Tell the mother how often to give the treatment at home.
- If needed for treatment at home, give mother the tube of tetracycline eye ointment.
- Ensure the mother understood well before she leaves the health facility

➤ **Treat Eye Infection with Tetracycline/ Chloramphenicol Eye Ointment**

- Clean both eyes **3 times daily**.
 - Wash hands.
 - The child to close his/her eyes.
 - Use clean cloth and water to gently wipe away pus
- Then apply Tetracycline eye ointment in both eyes 4 times daily/Chloramphenicol 3 times daily for 5 days
 - Ask the child to look up.
 - Apply a small amount of ointment on the inside of the lower lid.
 - Wash hands again.
 - Close eyelids and gently massage eyelids
 - Treat until there is no eye redness
 - Do not use other eye ointments or drops, or put anything else in the eyes.

➤ **Treat chronic ear infection**

- Dry the ear at least 3 times a day
 - Wash hands
 - Roll clean absorbent cloth or soft, strong tissue paper into a wick.
 - Place the wick in the child's ear
 - Remove the wick when wet.
 - Replace the wick with a clean one and repeat these steps until the ear is dry
 - Wash hands again and give drops of antibiotics twice a day for two weeks
- Instill 1 - 2 drops of Ciprofloxacin ear drop after dry wicking three times daily for two weeks
- Plug the ear with cotton soaked in Vaseline during bathing

➤ **Soothe the throat pain and cough with a safe remedy**

- **Safe remedies to recommend:**
 - Breast milk for exclusively breastfed infant.
 - Mixture of lemon juice and honey.
 - Warm tea with sugar
 - Warm ginger tea
 - Normal saline nasal drop, 1 drop each nostril
- **Harmful remedies/practices to discourage:**
 - Syrups containing codeine, sedatives or antihistamine, honey

❖ **Treat for Thrush with Nystatin for 10 days**

- Wash hands
- Wet a clean, soft cloth with salt water and use it to wash the child's mouth
- Apply Nystatin paste for four times a day (To prepare Nystatin paste: Crush 4 Nystatin (500000 IU) tablets and mix in 10 ml Glycerin)
- Avoid feeding for 20 minutes after medication
- If breastfed check mother's breast for thrush. If present treat with Nystatin
- Advise mother to wash breasts before and after feeds
- If bottle fed advise change to cup and spoon

FOR DIARRHOEA, GIVE MORE FLUIDS AND CONTINUE FEEDING

(See advice on FEEDING of the COUNSEL THE MOTHER TABLE)

➤ Plan A: Treat for Diarrhea at Home

Counsel the mother on the 4 rules of home treatment: Give extra fluid, Give Zinc Sulphate, Continue feeding, When to return.

1. GIVE EXTRA FLUIDS: as much as the child wants to take.

• EXPLAIN THE MOTHER:

- That it is necessary to breastfeed more frequently and to prolong each breastfeed
- That if the child is exclusively breastfed, it is necessary to give him ORS in addition to breastmilk
- That if the child is not exclusively breastfed, it should be given one or more times: ORS, liquid foods (fish or meat soup + vegetables, yoghurt, rice water), or clean water.

It is especially important to give ORS at home if:

- ✓ The child has been treated with Plan B or Plan C during this visit.

• TEACH THE MOTHER HOW TO MIX AND GIVE ORS AND GIVE THE FIRST DOSE OF ORS AT HEALTH FACILITY TO PREVENT DEHYDRATION.

• GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME.

• SHOW THE MOTHER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE:

- Up to 2 years: 50 to 100 ml after each loose stool
- 2 years and more: 100 to 200 ml after each loose stool

Explain the mother that it is necessary to:

- ✓ Give frequent small sips from a cup.
- ✓ If the child vomits, wait 10 minutes. Then continue, but more slowly.
- ✓ Continue giving extra fluid until the diarrhoea stops.

2. GIVE ZINC SULPHATE

3. CONTINUE FEEDING

4. WHEN TO RETURN

SEE table COUNSEL THE MOTHER

➤ Plan B: Treat for Some Dehydration with ORS with low osmolality and Zinc

Give, in a health facility and over a 4-hour period, recommended amount of ORS with low osmolality + Zinc

➤ DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS:

- Use the age only when the weight is unknown. The approximate amount of ORS required (in ml) can also be calculated by multiplying the child's weight (in kg) times 75.
- If the child wants more ORS, give him/her more

AGE*	Up to 4 months	4 up to 12 months	12 M up to 2 years	2 up to 5 years
WEIGHT	< 6 kg	6 - < 10 kg	10 - < 12 kg	12 - 19 kg
In ml	200 - 400	400 - 700	700 - 900	900 - 1400

- For child less than 6 months of age who are not breastfed, also give 100 - 200 ml clean water during this period.

➤ SHOW THE MOTHER HOW TO GIVE ORS SOLUTION.:

- Give the child drink frequently from a cup, in small sips.
- If the child vomits, wait 10 minutes. Then continue, but more slowly.
- Check the ORS intake
- Continue breastfeeding frequently

➤ AFTER 4 HOURS:

- Reassess the child and classify the child for dehydration.
- Select the appropriate plan to continue treatment.
- Begin feeding the child in health facility

➤ IF MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT:

- Show her how to prepare ORS solution at home.
- Show her how much ORS to give to finish the 4-hour treatment at home.
- Give her enough ORS packets to complete the rehydration
- Also give her 2 packets, as recommended in Plan A.

➤ TEACH THE 4 RULES OF HOME TREATMENT:

1. GIVE EXTRA FLUIDS: See Plan A for recommended fluids

2. GIVE ZINC SULPHATE

3. CONTINUE FEEDING

4. WHEN TO RETURN

SEE table COUNSEL THE MOTHER

➤ Plan C: Treat Severe Dehydration Quickly

❖ FOLLOW THE ARROWS. IF ANSWER IS “YES”, GO ACROSS (RIGHT SIDE). IF ANSWER IS “NO”, GO DOWN:

START FROM HERE

Can you give intravenous (IV) fluid immediately?

YES

NO

Is IV treatment available nearby (within 30 minutes)?

YES

NO

Are you trained to use a nasogastric (NG) tube for rehydration?

NO

Can the child drink?

NO

Refer URGENTLY to hospital for IV or NG treatment

START IV FLUID IMMEDIATELY.

❖ If the child can drink, give ORS by mouth while the drip is set up. Give 100 ml/Kg of Ringer lactate (or if not available, isotonic saline) as follows:

AGE	Give first 30 ml/Kg in:	Then give 70 ml/Kg in:
Young infant (Less than 12 month)	1 hour*	5 hours
Children (12 months up to 5 years)	30 minutes*	2 ½ hours

* Repeat this amount once if the radial pulse is weak or not detectable

- Reassess the child every 30mins -1 hour. If hydration status is not improving, give the IV drip more rapidly
- Also give ORS (about 5 ml/Kg/h) as soon as the child can drink: usually after 3 - 4 hours (young infants) or 1 - 2 hours (children).
- Reassess the young infant after 6 hours and after 3 hours for the child. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment

• REFER URGENTLY TO HOSPITAL FOR IV TREATMENT.

- If the child can drink, give the mother ORS solution and show her how to give the child frequent sips during the trip.

• START REHYDRATION WITH ORS SOLUTION, BY TUBE (OR BY ORAL ROUTE): give 20 ml/ kg for 6 hours (total of 120 ml per kg).

○ Reassess the child every 1-2 hours:

- In case of repeated vomiting or abdominal distension, give the fluid more slowly
- If hydration status is not improving after 3 hours, refer the child for IV fluid quickly
- After 6 hours, reassess the child. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment

NOTE:

If possible, observe the child at least 6 hours after rehydration, to be sure the mother can maintain hydration by giving the child ORS by mouth.

For Patients with Confirmed or Possible HIV Infection, Start Prophylaxis

Give Cotrimoxazole Prophylaxis for HIV Exposed and Infected Infant/Child

- For HIV exposed, give Cotrimoxazole once daily from the age of 6 weeks until HIV infection has been definitely ruled out and the mother is no longer breastfeeding
- For HIV INFECTED give Cotrimoxazole based on national guideline
- DO NOT GIVE COTRIMOXAZOLE TO INFANTS UNDER 6 WEEKS OF AGE

CO-TRIMOXAZOLE dosage—single dose per day Cotrimoxazole prophylaxis (Dosage)

Age	5 ml syrup 40 mg/200 mg	Single strength paediatric tablet 20 mg/100 mg	Single strength adult tablet 80 mg/ 400 mg
Less than 6 months	2.5 ml	1 tablet	1/4 tablet
6 months up to 5 years	5 ml	2 tablets	1/2 tablet

COUNSEL THE MOTHER

FOOD

➤ *Assess child's feeding*

Ask questions about the child's usual feeding and feeding during this illness.

Compare the mother's answers to **the Feeding Recommendations** for the child's age as bellow:

ASK:

- **Do you breastfeed your child?**
 - How many times during the day?
 - Do you also breastfeed during the night?
- **Does the child take any other food or fluids?**
 - What food or fluids?
 - How many times a day?
 - What do you use to feed the child)?
- **If the child's weight is low for height:**
 - How much do you give him/her at each meal?
 - Does the child receive his/her portion separately?
 - Is the child supervised when eating?
 - Who feeds the child and how do you feed him?
- **During this illness, did the child's feeding habits change?**
 - If yes, how?
 - Why?

Feeding recommendations (For sick and healthy child)

A good daily diet should be adequate in quantity and include an energy-rich food (for example, thick cereal porridge with added oil); meat, fish, eggs, or pulses; fruits and vegetables

0 up to 6 months



Exclusive breastfeeding

- Breastfeed as often
- As the child wants, night and day.
- Do not give other foods or fluids, unless medically indicated.

6 up to 9 months



Breastfeeding upon demand and complementary foods

- Breastfeed as often as the child wants, day and night
- Give adequate servings of cereal enriched (with milk, egg yolk, soybeans or flour of small fish or peanut...)
- Give 1 to 2 meals of cereal porridge per day and breast milk

N.B. For non-breastfed children, give breast-milk substitute.

9 up to 12 months



Breastfeeding upon demand and complementary foods

- Breastfeed as often as the child wants, day or night
- Give adequate servings of cereal enriched (with milk, egg yolk, soybeans or flour of small fish or peanut...)
- Give:
 - Give 2 meals of cereal porridge per day +
 - 1 family meal +
 - a snack between meals (plum fruit, bananas, etc.)

N.B. For non-breastfed children, give breast-milk substitute.

12 up to 24 months



Breastfeeding upon demand and complementary foods

- Breastfeed as often as the child wants, day or night.
- Give adequate servings of cereal enriched (with milk, egg yolk, soybeans or flour of small fish or peanut...).
- In addition, give:
 - 2 family meals
 - snacks between meals (plum fruit, bananas, etc.)

N.B. For non-breastfed children, give breast-milk substitute.



24 up to 59 months



Breastfeeding as needed

- Breastfeed as often as the child wants, day or night (and if the mother wishes)
- Give 3 family meals
- Give at least 1 meal of enriched cereal porridge.
- Give snacks between meals



Feeding recommendations for a child who has PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent and longer breastfeeds, day and night.
- If the child is taking other milk and is under mixed breastfeeding:
 - replace that milk with increased breastfeeding OR
 - replace that milk with fermented milk products, such as yoghurt OR
 - replace half the milk with nutrient-rich semisolid food.
- For other foods, follow feeding recommendations for the child's age.

Recommendations for a child born to HIV-positive mother

- Help the mother choose the type of breastfeeding.
- Support the mother in her choice
- From 6 up to 24 months, give complementary foods and micronutrient supplements.
- The child can be breastfed for 18 months

➤ Counsel on feeding problems

If the child is not fed as indicated on the previous page, advise the mother accordingly, in addition:



- **If the mother reports that she is having difficulty breastfeeding, assess for breastfeeding. (See ASSESS, CLASSIFY AND TREAT THE YOUNG INFANT chart). If necessary, show the mother the correct positioning for breastfeeding and the correct attachment to the breast.**
- **If the child is less than 4 months old and is taking other milk, other food or water:**
 - Build the mother's confidence by assuring her that she can produce all the milk the child needs.
 - Suggest her to breastfeed more frequently, leaving it longer, day and night, and gradually reducing other milk or food or water.
- **If the consumption of other milk must continue, advise the mother**
 - Breastfeed as much as possible, including at night
 - To ensure that the other milk is a locally appropriate breast-milk substitute.
 - To ensure that other milk is prepared correctly, hygienically and is given in the appropriate quantity.
 - To finish the prepared milk within an hour
- **If the mother feeds the child using feeding bottle:**
 - Advise to replace the bottle with a cup.
 - Show the mother how to use a cup to feed her child.
- **If the child feeds poorly, advise the mother:**
 - To sit down with the child and encourage him/her to eat
 - To give the child an adequate serving on a plate or in a separate bowl
- **If the child feeds poorly during illness, advise the mother:**
 - Breastfeed more frequently and longer, if possible.
 - Offer foods that are easy to eat, varied, appetizing and preferred by the child to encourage him/her to eat as much as possible, and give him/her frequent small meals.
 - To clear the blocked child's nose if his/her blocked nose prevents him from eating.
 - Tell the mother that his/her appetite will be better when the child is better.
- **Review any feeding problem in 5 days**

FLUIDS

➤ *Advise the mother to increase fluid during any illness*

FOR ANY SICK CHILD:

- Breastfeed more frequently and for longer.
- Increase fluids. For example, give rice water, monkey bread powder dissolved in water, yoghurt drinks or clean water

FOR CHILD WITH DIARRHOEA:

- Giving extra fluid can save the life of the child with diarrhoea. Give fluid according to Plan A or Plan B on TREAT THE CHILD chart

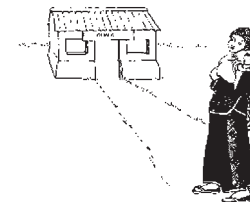
WHEN TO RETURN

➤ *Explain the mother when to return to the health center*

FOLLOW-UP VISIT:

Ask the mother to return for follow-up visit at the earliest time listed for the child's problems.

If the child has:	<u>Return for follow- up in:</u>
PNEUMONIA BLOODY DIARRHEA MEASLES WITH COMPLICATIONS AT EYES AND/OR MOUTH MALARIA UNLIKELY if fever persists	2 days
SIMPLE MALARIA if fever persists PERSISTENT DIARRHEA	3 days
ACUTE EAR INFECTION FEEDING PROBLEM ANY OTHER ILLNESS, if there is no <u>improvement</u>	5 days
SOME ANAEMIA	14 days



WHEN TO RETURN IMMEDIATELY

Advise mother to return immediately if the child has any of these signs:

Any sick child who:	• is not able to drink or breastfeed, • becomes sicker • develops a fever
If child is classified NO PNEUMONIA: COUGH OR COLD, also return if:	• fast breathing • difficult breathing
If child has diarrhea, also return if:	• blood in stool • drinking poorly

➤ **Counsel the mother about her own health**

- If the mother is sick, provide care for her, or refer her for help
- If she has breast problems (such as engorgement, sore nipples, breast infection), provide care for her or refer her for treatment.
- Advise her to eat well to keep up her own strength and health.
- Check her immunization status and give an injection of tetanus vaccine if necessary.
- Counsel the mother on:
 - Family planning / birth spacing: recommended inter-reproductive interval = 3 up to 5 years
 - Prevention of sexually transmitted infections and HIV/AIDS
- Get to know about the health status for other children

➤ **Advise the mother on the benefits of birth spacing**

Start by checking what the mother knows or does not know about birth spacing and whether or not she is currently using family planning method.

If the mother is not taking any family planning method

- Counsel her on the benefits of family planning in general for herself, for her children, for her family and for society as a whole,
- Underline the scientifically proven benefits of at least three years for newborns, children under one year and children under five and on herself,
- Explain to her the risks associated with a short birth spacing of less than three years on his health and that of his children, on the family and on society as a whole,
- Give her precise indications on where and how to access most easily to family planning services,
- Answer all questions of clarification and understanding that she would have raised during this talk, otherwise refer her where she could have the answers to these questions

If the mother is already taking a family planning method of her choice

- Give her advice on the benefits of long spacing of at least three years on her health, that of her children, her family and society as a whole,
- Emphasize on the importance and the need for her to continue using the family planning method of her choice to space births at least two years apart,
- Encourage the mother to express any concerns or comments she would like to make about birth spacing to provide appropriate answers to the questions raised, if need be.

FOLLOW-UP CARE

- Care for the child brought back to the health center for follow-up visit, using all the boxes that match the child's previous classifications.
- If the child has a new problem, assess, classify and treat the new problem as on the ASSESS AND CLASSIFY Chart.

➤ PNEUMONIA

After 2 days:

- Check for general danger signs
- Assess the child for cough or difficult breathing (See ASSESS & CLASSIFY CHART).

Ask:

- Is the child's breathing slower?
- Is there less fever?
- Is the child feeding better?

Treatment:

- If **chest in drawing or general danger sign**, give a second-line antibiotic dose or an intramuscular dose of Ampicillin and Gentamycin. Then, refer URGENTLY to the hospital.
- If **breathing, fever and feeding are the same**, change treatment to the second-line antibiotic: Erythromycin and advice the mother to return in 2 days or refer. (If the child has had measles in the past 3 months, is known or is suspected of having HIV infection, refer to hospital).
- If **breathing is slower, fever is less lower or feeding has improved**, complete 5 days of antibiotic treatment.

➤ PERSISTENT DIARRHEA

After 5 days:

Ask:

- Has the diarrhea stopped?
- How many loose stools is the child having per day?

Treatment:

- If the **diarrhea has not stopped** (the child still has 3 or more loose stools per day), redœ full assessment of the child, give the necessary treatment. Then refer the child to referral centre for persistent diarrhea.
- If the **diarrhoea has stopped** (the child still has less than 3 loose stools per day), tell the mother to follow the feeding advice appropriate for the child's age.
- Tell the mother to give him/her an extra meal every day for 2 weeks in case of persistent diarrhoea and to continue giving multivitamins and foods rich in mineral salts.

➤ BLOODY DIARRHOEA

After 2 days:

- Assess the child for diarrhea (See ASSESS & CLASSIFY chart)

Ask:

- Are there fewer stools?
- Is there less blood in the stool?
- Is there less fever?
- Is there less abdominal pain?
- Is the child feeding better?

Treatment:

- If the **child dehydrated**, treat dehydration.
- If the **number of stools, amount of blood in the stool, fever, abdominal pain and feeding are the same or worse**: Replace ciprofloxacin with metronidazole, give it for 5 days. Advise the mother to return in 2 days.

Exception: If the child

- is less than 12 months old, or
- was dehydrated on the first visit, or
- has had measles in the past 3 months

} Refer the child to the hospital

- If the **number of stools, amount of blood in the stool, fever, abdominal pain and feeding have improved**: continue to give the same antibiotic until the end of treatment
- Make sure the mother understands well the oral rehydration method and also understands the need to give an extra meal every day for a one week

FOLLOW-UP CARE

- Care for the child brought back to the health centre for follow-up visit, using all the boxes that match the child's previous classifications.
- If the child has a new problem, assess, classify and treat the new problem as on the ASSESS AND CLASSIFY Chart.

➤ SIMPLE MALARIA

If fever persists after 2 days or returns within 14 days:

- *Redo a full reassessment of the child.*
- *Look for other causes of fever.*

Treatment:

- If the child has any general danger signs or stiff neck, or any sign of severe malaria treat as SEVERE MALARIA if BS/RDT+ and VERY SEVERE FEBRILE DISEASE if BS/RDT -.
- If the child has a cause of fever other than malaria, give the appropriate treatment
- If malaria seems to be the only cause of fever, and BS and/or RDT+
 - Treat with the association “Arthemeter- Lumefantrine”
 - Refer if the association “Arthemeter- Lumefantrine” is not available.
 - Advise the mother to return in 3 days if the fever persists.
 - If fever has been present every day for 7 days, refer for further investigations.

For situations not mentioned, see the national recommendation for the management of malaria such as simple malaria with minor digestive symptoms.

➤ MEASLES WITH COMPLICATIONS AT EYES AND/OR IN THE MOUTH

After 2 days:

- *Look if eyes are red and if there is draining pus.*
- *Look if the mouth has ulcerations.*
- *Smell the smell of the mouth.*

Treat the eye infection

- If pus is draining from the eye again, ask the mother to describe how she has treated the eye infection. If treatment has been correct, refer to the next level. If treatment has not been correct, teach the mother the correct treatment.
- If the pus disappeared but eyes are still red, continue the treatment.
- If there is no neither pus nor redness, stop the treatment after 5 days.

Treat ulcerations of the mouth:

- If mouth ulcers are worse, or there is a very foul smell from the mouth, refer the child to the hospital.
- If mouth ulcers are the same or have improved, continue the treatment with Nystatin for 10 days.

FOLLOW-UP CARE

- Care for the child brought back to the health centre for follow-up visit, using all the boxes that match the child's previous classifications.
- If the child has a new problem, assess, classify and treat the new problem as on the ASSESS AND CLASSIFY Chart.

➤ EAR INFECTION

After 5 days:

- *Reassess for ear problem (See ASSESS AND CLASSIFY chart).*
- *Measure the child's temperature.*

Treatment:

- If there is tender swelling behind the ear or high fever (38.5°C or above), Refer URGENTLY to hospital.
- Acute ear infection: if ear pain or discharge persists, refer the child to hospital.
- If the ear is not painful and there is no discharge, praise the mother for her correct treatment. If she has not yet finished the 5 days of antibiotic treatment, tell her to continue until it is completed.

➤ FEEDING PROBLEM

After 5 days:

- *Reassess feeding. (See questions at the top of the COUNSEL THE MOTHER chart).*
- *Ask questions about any feeding problems found on the initial visit.*
- **Refer to nutritional services**
- Counsel the mother about any new or persistent feeding problems. If you counsel the mother to make significant changes in feeding, ask her to return for follow up visit.

➤ PALLOR

After 14 days: reassess the status of the child:

Treatment:

- If the **pallor worsens**, refer for investigation
- If **pallor persists or improves** give iron / folic acid. Advise mother to return for iron in 14 days. Continue to give iron / folic acid every 14 days for 2 months
- If **palmar pallor is present again after two months**, refer for investigations.

FOLLOW-UP CARE

MALNUTRITION

➤ SEVERE MALNUTRITION WITHOUT COMPLICATIONS

▪ After 7 days or during regular follow-up and Repeat every week:

- Do a full assessment of the child >See ASSESS AND CLASSIFY chart.
- Assess child with the same measurements (WFH/L, MUAC) as on the initial visit.
- Check for edema of both feet.
- Check the child's appetite by offering RUTF if the child is 6 months and older.

➤ MODERATE ACUTE MALNUTRITION

▪ After 14 days:

- Assess the child using the same measurement (WFH/L or MUAC) used on the initial visit.
- If WFH/L, weigh the child, measure height or length and determine if WFH/L.
- If MUAC, measure using MUAC tape.
- Check the child for edema of both feet.
- Reassess feeding.
- See questions in the COUNSEL THE MOTHER chart.

HIV EXPOSED & INFECTED CHILDREN

❖ HIV INFECTED CHILD

▪ After 1 month:

- Assess the child's general condition.
- Do a full assessment of the child >See ASSESS AND CLASSIFY chart.
- Treat the child for any condition found
- Ask for any feeding problems, counsel the mother about any new or continuing feeding problems.
- Advise the mother/caregiver to bring the child back if any new illness develops or she is worried
- Counsel the mother/caregiver on any other problems and ensure community support is being given
- Refer for further psychosocial/ counseling if necessary.
- Continue with routine follow-up for growth and development, nutrition, immunization, vitamin A, deworming.
- Assess adherence to ART and Cotrimoxazole and advice accordingly
- Offer or refer child for comprehensive HIV management and care (including ART) as per the national ART guidelines.
- Follow up monthly.

❖ HIV EXPOSED CHILD (<18 months):

▪ For children tested DNA PCR Negative, after 1 month:

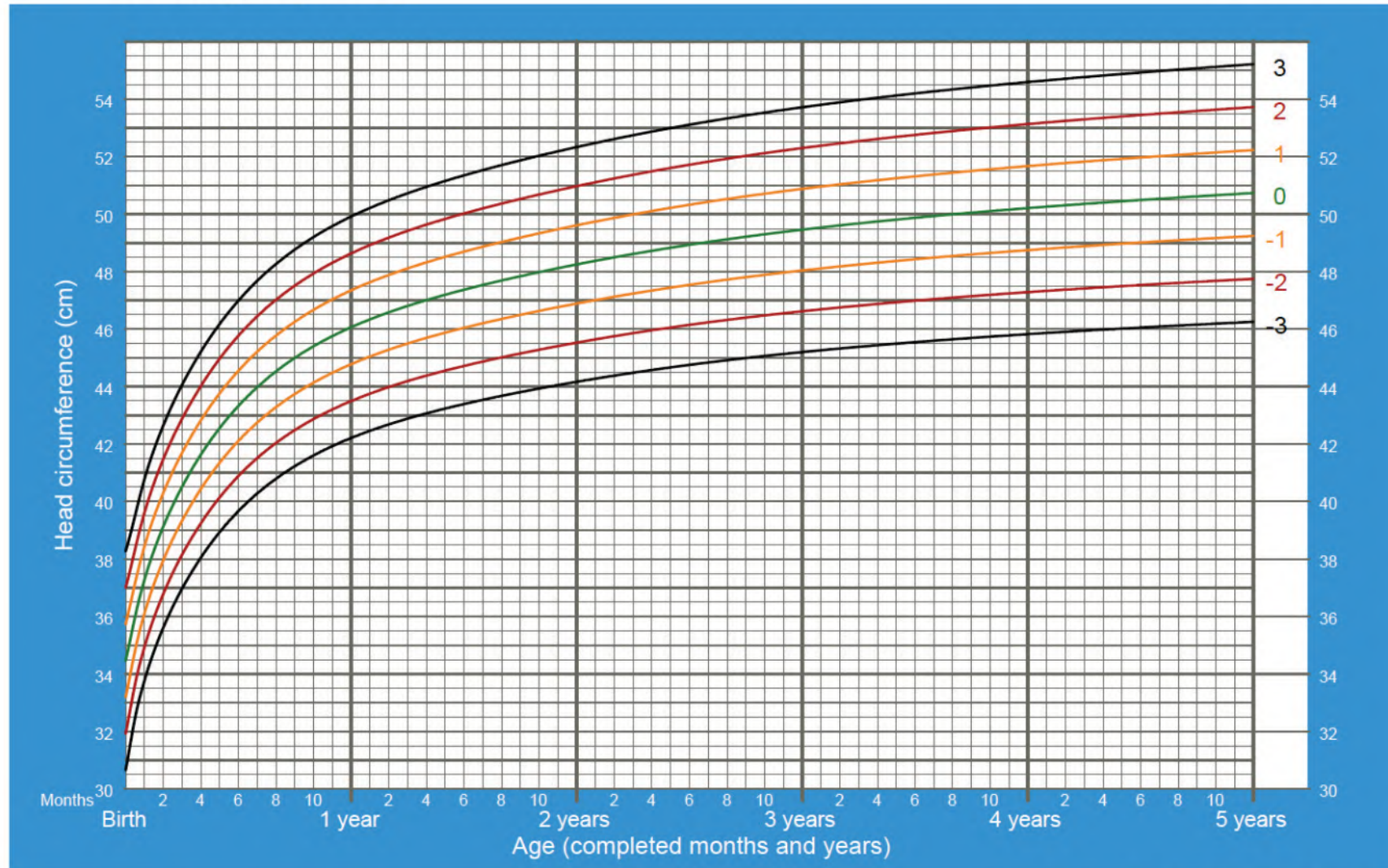
- Assess the child's general condition
 - Do a full re-assessment
 - Ask for any feeding problems or poor appetite, counsel the mother about any new or continuing feeding problems
 - Treat the child for any condition found.
 - Give Cotrimoxazole prophylaxis from 6 weeks and emphasize the importance of compliance.
 - Start or continue with ARV prophylaxis for a total of 6 weeks.
 - Screen for possible TB Disease
 - Continue with routine follow-up for growth and development, nutrition, immunization, vitamin A, deworming.
 - Follow-up schedule of HIV Exposed infant monthly up to 24 months.

IF ANY MORE FOLLOW-UP VISITS ARE NEEDED BASED ON THE INITIAL VISIT OR THIS VISIT, ADVISE THE MOTHER TO RETURN FOR NEXT FOLLOW-UP VISIT. ALSO, ADVISE THE MOTHER WHEN TO RETURN IMMEDIATELY (See COUNSEL THE MOTHER chart)

APPENDICES

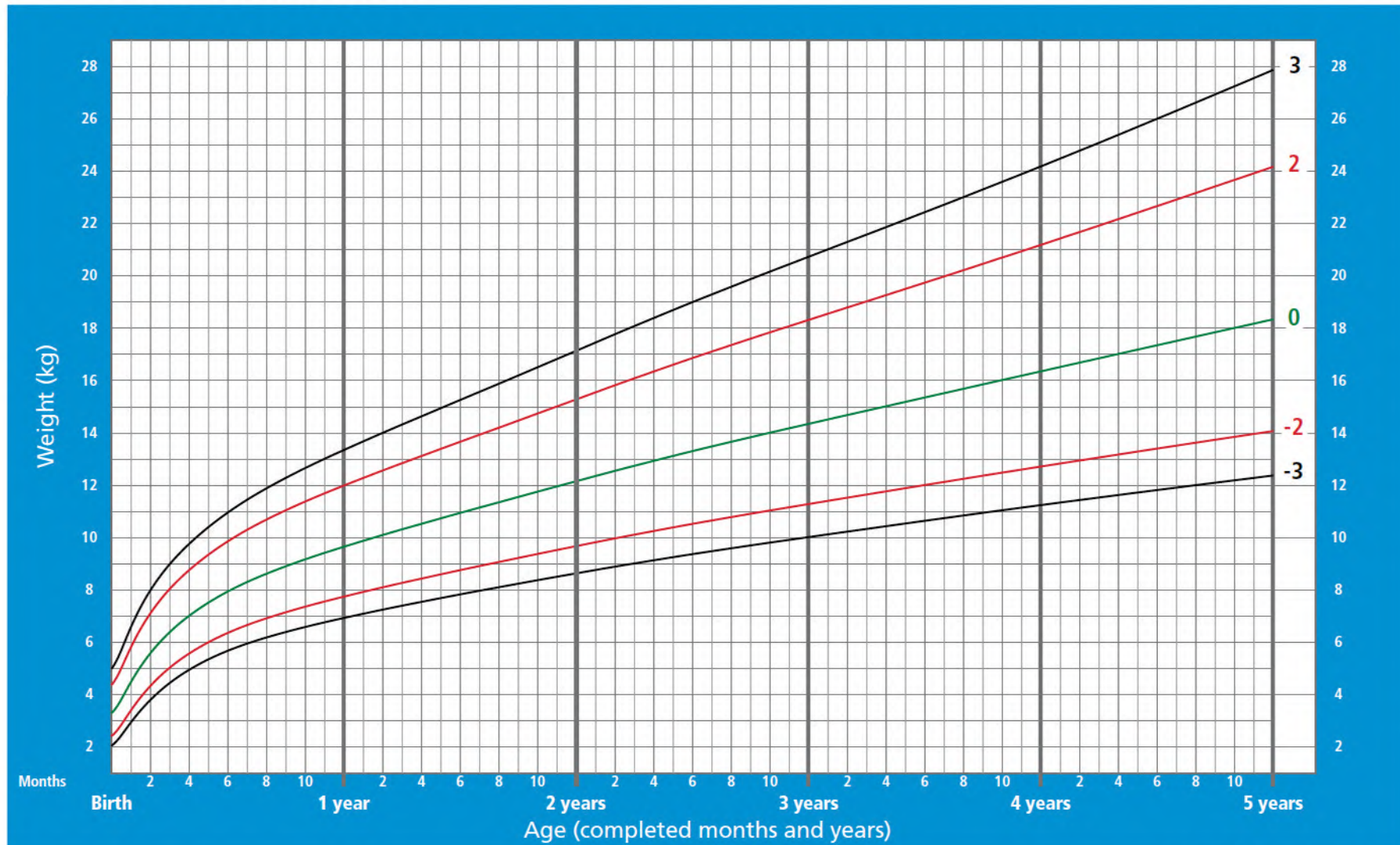
Head circumference-for-age **BOYS**

Birth to 5 years (z-scores)



Weight-for-age BOYS

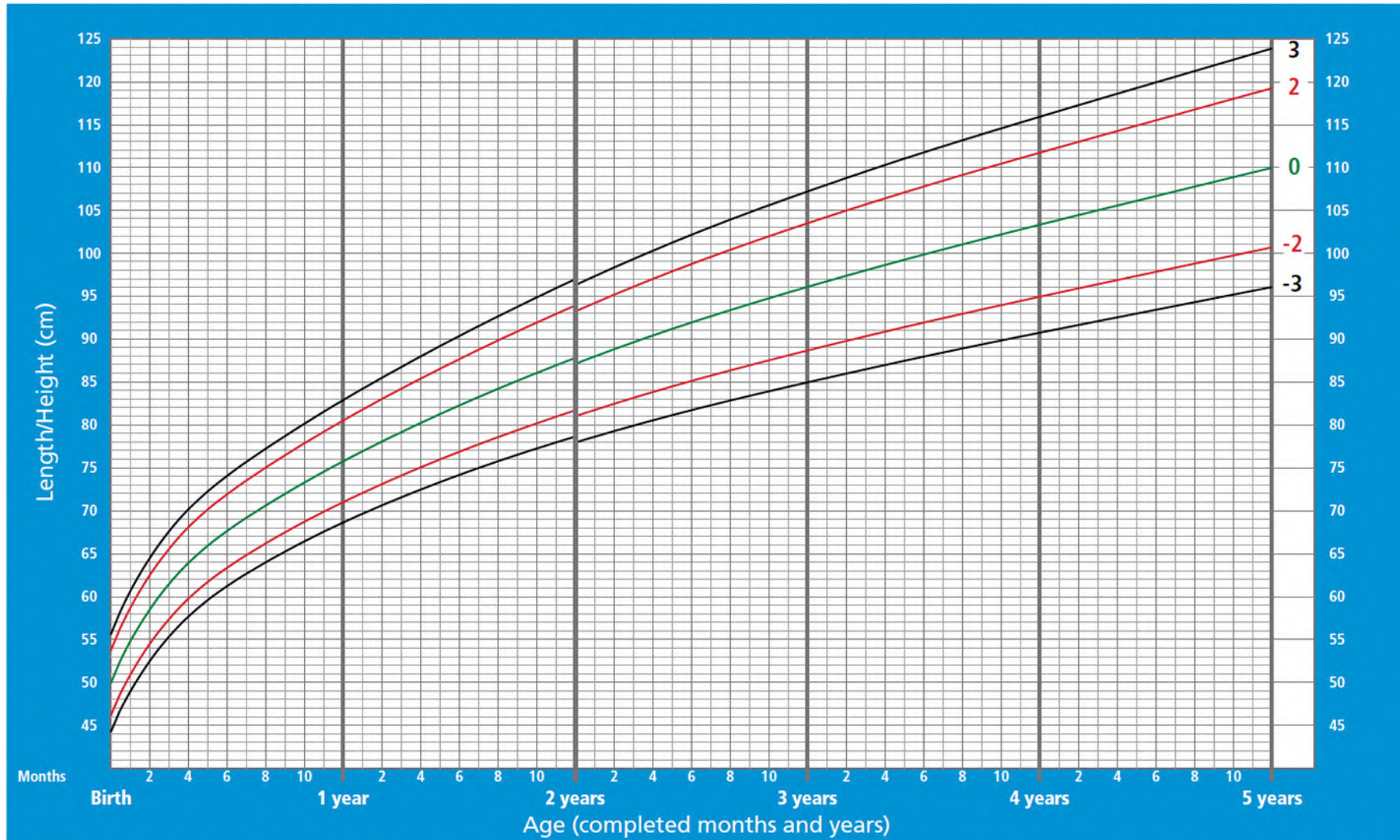
Birth to 5 years (z-scores)



WHO Child Growth Standards

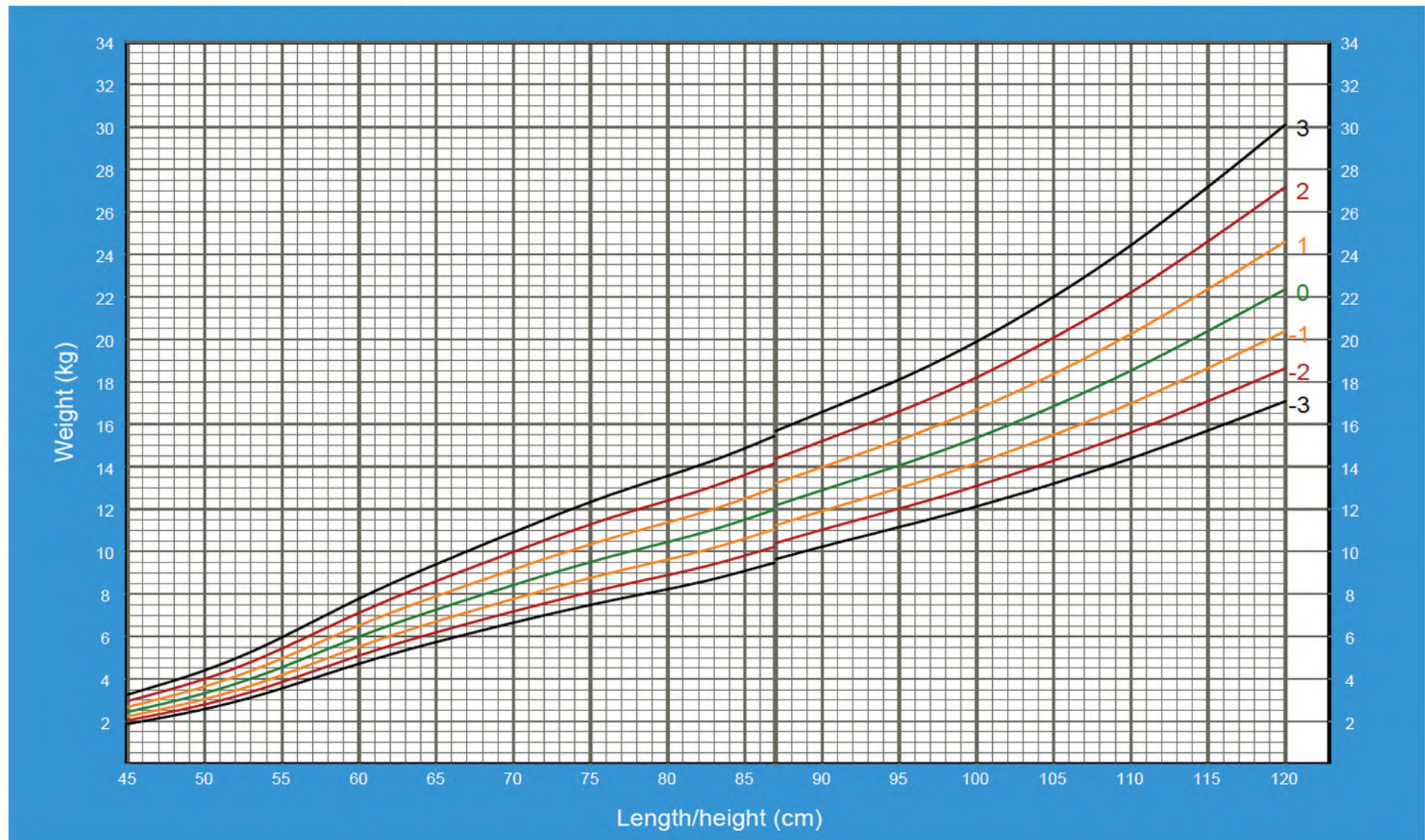
Length/height-for-age BOYS

Birth to 5 years (z-scores)



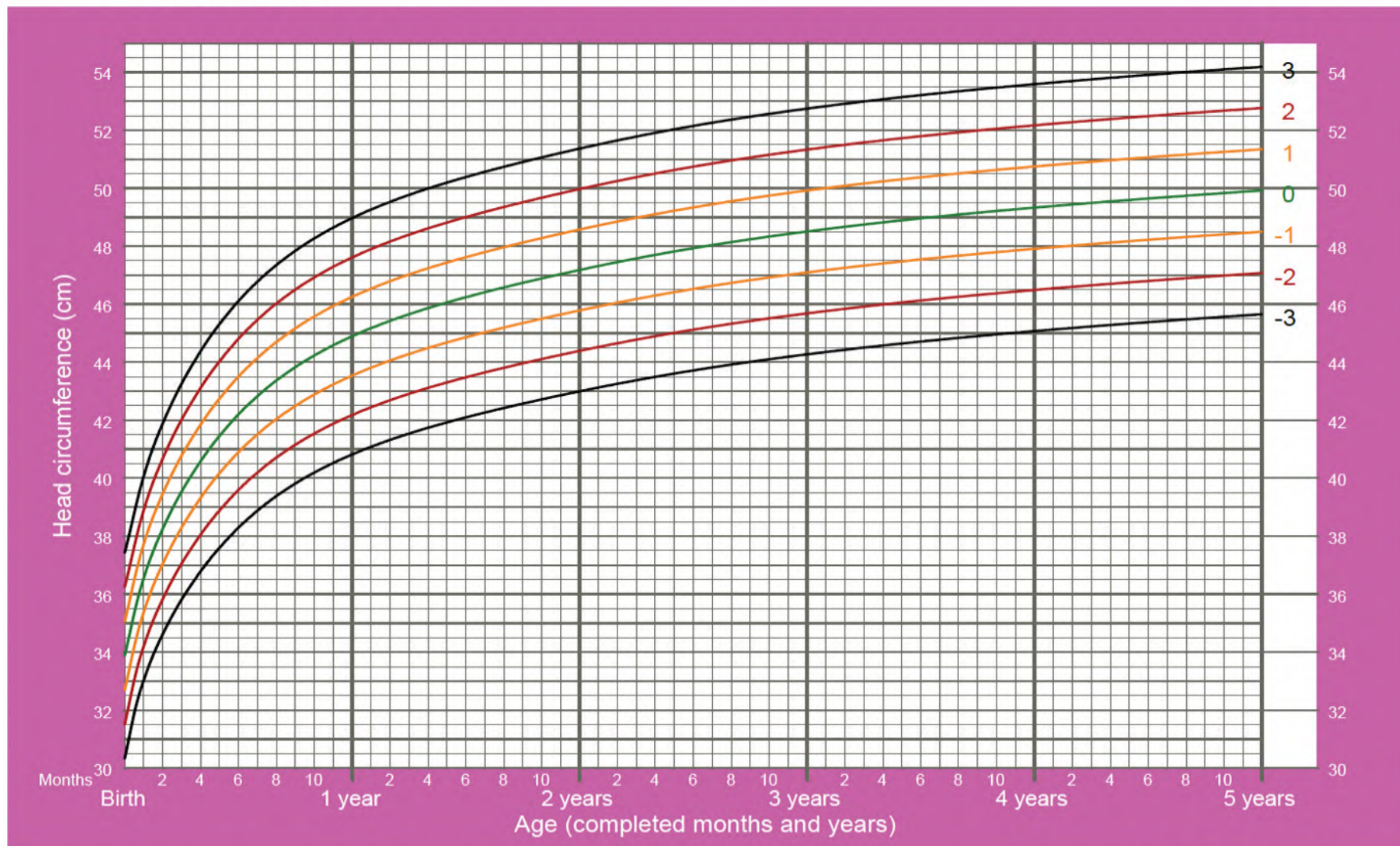
Weight-for-length/height BOYS

Birth to 5 years (z-scores)



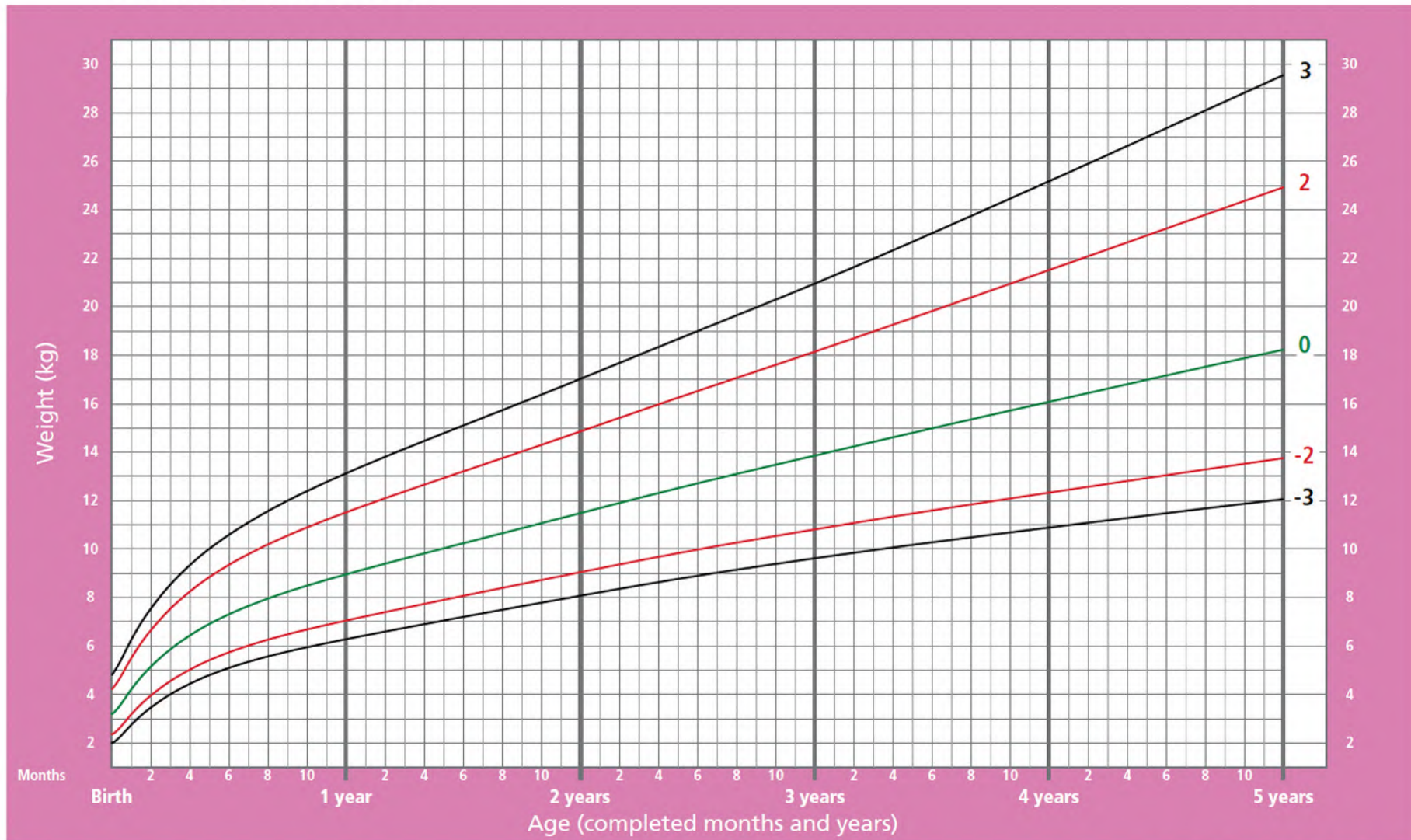
Head circumference-for-age GIRLS

Birth to 5 years (z-scores)



Weight-for-age GIRLS

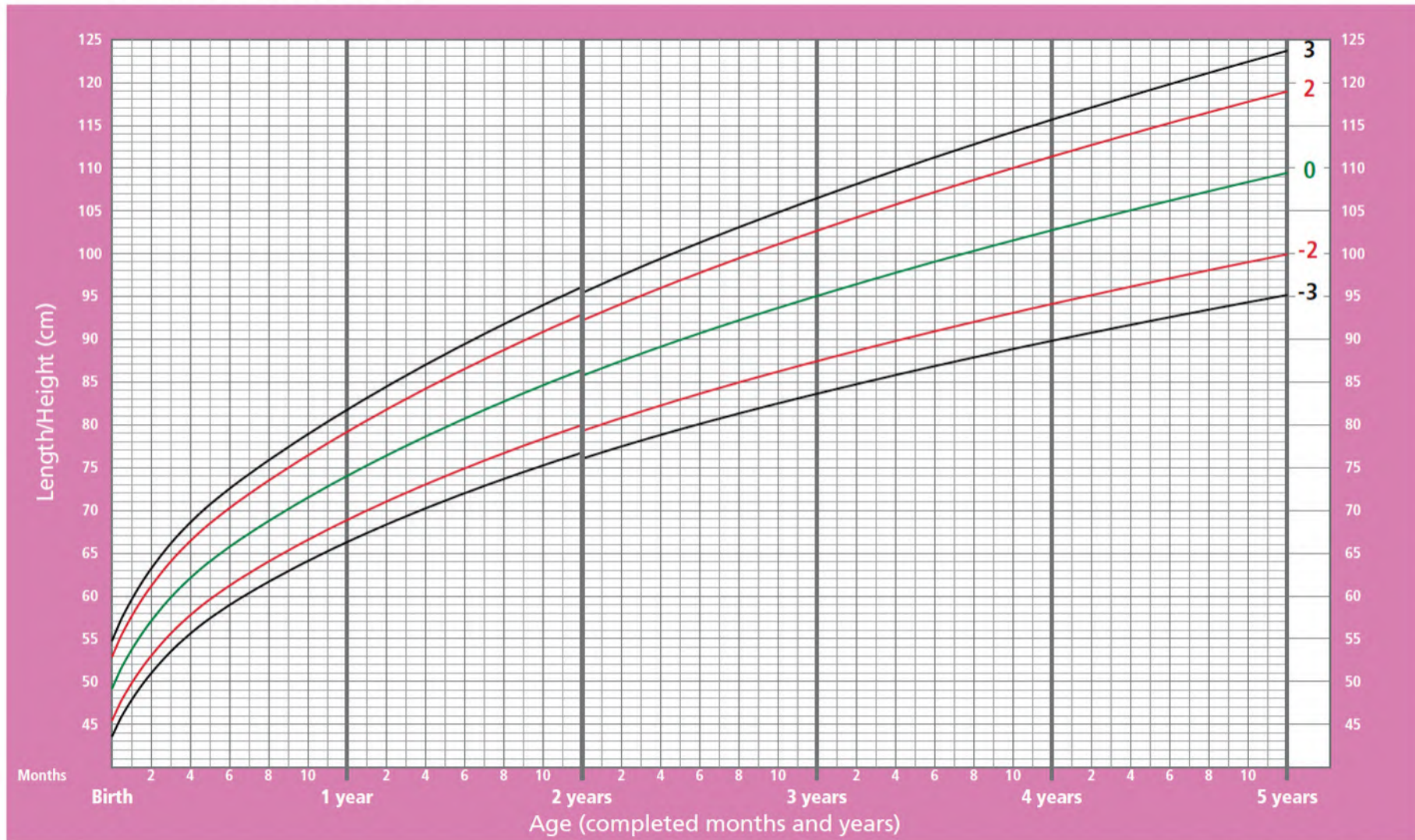
Birth to 5 years (z-scores)



WHO Child Growth Standards

Length/height-for-age GIRLS

Birth to 5 years (z-scores)



WHO Child Growth Standards

Weight-for-length/height GIRLS

Birth to 5 years (z-scores)



PEDIATRIC VITAL SIGNS REFERENCE CHART



Heart Rate (beats/min)				Respiratory Rate (breaths/min)	
Age	Awake	Asleep	Age	Normal	
Neonate (<28 d)	100-205	90-160	Infant (<1 y)	30-53	
Infant (1-12 mos)	100-190				
Toddler (1-2 y)	98-140	80-120	Toddler (1-2 y)	22-37	
Preschool (3-5 y)	80-120	65-100	Preschool (3-5 y)	20-28	
School-age (6-11 y)	75-118	58-90	School-age (6-11 y)	18-25	
Adolescent (12-15 y)	60-100	50-90	Adolescent (12-15 y)	12-20	
Reference: PALS Guidelines, 2015					
Blood Pressure (mmHg)					
Age	Systolic		Diastolic	Systolic Hypotension	
Birth (12 h)	<1 kg	39-59	16-36	<40-50	
	3 kg	60-76	31-45	<50	
Neonate (96 h)	67-84		35-53	<60	
Infant (1-12 mos)	72-104		37-56	<70	
Toddler (1-2 y)	86-106		42-63	<70 + (age in years × 2)	
Preschool (3-5 y)	89-112		46-72		
School-age (6-9 y)	97-115		57-76		
Preadolescent (10-11 y)	102-120		61-80	<90	
Adolescent (12-15 y)	110-131		64-83		
Reference: PALS Guidelines, 2015 For diagnosis of hypertension, refer to the 2017 AAP guidelines Table 4 & 5: http://pediatrics.aappublications.org/content/early/2017/08/21/peds.2017-1904					
Temperature (°C)			Oxygen Saturation (SpO ₂)		
Method	Normal		SpO ₂ is lower in the immediate newborn period. Beyond this period, a SpO ₂ of <90-92% may suggest a respiratory condition or cyanotic heart disease .		
Rectal	36.6-38.0				
Tympanic	35.8-38.0				
Oral	35.5-37.5				
Axillary	36.5-37.5				
Ranges do not vary with age. Screening: axillary, temporal, tympanic (1 accuracy) Definitive: rectal & oral (↑ reflection of core temp.) Reference: CPS Position Statement on Temperature Measurement in Pediatrics (2015)					

NRP for the Non-Neonatologist

Term?
Tone?
Crying?

Warm
Dry
Stimulate

Rate 40-60
Breathe Baby
Breathe Baby JJ

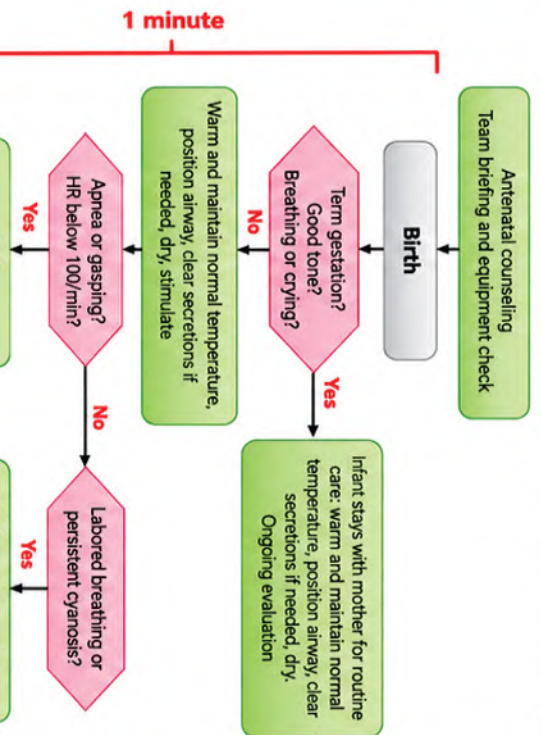
MR. SOPA
Mask Adjust
Reposition Airway
Suction
Open mouth
Pressure increase
Alternate: LMA/ETT
(NG first)

Compressions
Thumbs on sternum
1/3 chest diameter

3 Comp:1 Vent
1 and 2 and 3 and bag JJ

Epi
0.01 mg/kg IV
0.1 mg/kg ETT
q3-5min

Triggers
HR <100 first min → PPV
HR <60 after good PPV → Comp + ↑ FIO2
Timing
Try PPV for **15s** then check HR, then corrective
Good vent for **30s** then HR check
Compressions for **60s** then HR check

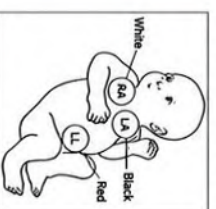


1 minute

Pulse Ox
Pre-ductal
(R arm)



ECG Leads



Mask Fit



Compressions



Ventilation Numbers

Flow Rate **10L**

FIO2 start at **21%**

- If Preterm: 21-30%
- When start comp: ↑ to 100%
- **PEEP 5**
- **PIP 20.** Max 40.

	Targeted Preductal SpO ₂ After Birth
1 min	60% - 65%
2 min	65% - 70%
3 min	70% - 75%
4 min	75% - 80%
5 min	80% - 85%
10 min	85% - 95%

1 - 3 - 5 min : 60 - 70 - 80%

Post-Resus Targets

STABLE

Sugar (4-6)

Temp (36.5-37.5)

Airway

Breathing

Labs (CO2 45-55)

Emotional support

Resources:
<https://www.abdjournal.org/doi/full/10.1161/cir.0000000000000267>
<https://www.ama-assn.org/speicalty/neonatal-resuscitation/https://aap.org/en/learning/neonatal-resuscitation-program/nrp-skill-videos/>

@SarahFoohy

REFERRAL NOTE FOR THE SICK YOUNG INFANT

Infant's name: _____ Family name: _____

Caregiver's name: _____ Age of infant: _____ Temperature: _____

Address or community: _____

Tick ☒ the signs present that are the reason for referral of the young infant.

Reasons for referral

POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE

- ☐ Unable to feed at all or not feeding well
- ☐ Convulsions
- ☐ Severe chest indrawing
- ☐ Temperature 38 °C or more
- ☐ Temperature 35.5 °C or less
- ☐ Movement only when stimulated
- ☐ No movement at all
- ☐ Fast breathing (60 breaths per minute or more) in infants less than 7 days old

SEVERE JAUNDICE

- ☐ Any jaundice in infant aged less than 24 hours
- ☐ Yellow palms or soles at any age

SEVERE DEHYDRATION

- ☐ Sunken eyes
- ☐ Skin pinch goes back very slowly

VERY LOW WEIGHT

- ☐ Weight less than 2.0 kg

Pre-referral treatments given:

Comments:

Date and time of referral: _____

Referred by: _____

(Name of facility and health worker)