Summary of major changes in the 2015 version of the IMNCI Materials

This revised version (2015 edition) of the ***Integrated Management of Newborn and Childhood Illness*** training material has incorporated the following changes over the 2011 version

Sick Young Infant <2 months section

Essential newborn care actions

- ► Step 1. Of ENC, add wrap with 2nd dry towel and cover head.
- ► Step 5 add initiate immediate breast feeding within an hour
- ► Step 7 apply 1st dose of chlorohixidine gel on cord and previous step 7 (Vit K injection) will be step 8 and step 8(weighing baby) will be 9
- ► On the Note section add: if there is meconium stained clear the airway before stimulation; continue to apply chlorohixidine for 7 days, make sure to record all treatments on register/charts/ appointment cards; place an identification band on wrist or ankle

Check the Newborn for birth asphyxia

- ► In the assess part, if there is Birth Asphyxia, complete resuscitation within the 1st minute "Golden Minute of life" added.
- ► Treatment column pink row add in the first bullet start resuscitation immediately with in the golden minute and in the green row if no birth asphyxia treatment chlorhexidine cord application for 7 days added
- ► From look the color of tongue & lips (blue or pink) omitted for it adds no additional value if newborn is not breathing or crying

- ► Dose of Vit K for VLBW/VPT decreased to 0.5mg
- ► Jaundice: Yellow row signs change the infant aged 2 -13 days to aged >24hrs - <14days
- ► Jaundice: Green row signs change eye or skin to eye and skin
- ► Diarrhea treatment: add zinc treatment for infants <2 months (as per micro nutrient guide line)
- ► Immunization: Rota 1 added at 6 weeks;
- ► Helping baby breath flow chart added
- ► Warm the young infant using immediate skin-to-skin contact, Keep the young infant warm on the way to the hospital & Kangaroo Mother Care (KMC) sequences were rearranged.
- ► Amoxicillin three times is changed to bid and Amoxicillin 125 mg formulation added.
- ► On when to return immediately: when palms and soles appear yellow is added.
- ► Under feeding problem If the young infant is Underweight for age, additional follow up is recommended at 14 days. Under thrush follow up if it gets ***worse,*** check that treatment is being given correctly added
- ► Routine PNC follow up: in all visits recommendations add chlorehexidine use; add rota vaccine checking in 6 week visit.
- ► Vit A administration removed from all PNC sections

Sick Child 2 – 59 Months Section

Cough or difficulty breathing section

- ► In the assessment section of cough or difficult breathing: an issue related to wheezing is added to further count the breaths and look for chest in-drawing.
- ► If pulse oxymeter is available, it is included to determine the oxygen saturation (the sick child will be referred if < 90%)
- ► Chest in-drawing is categorized as a sign of pneumonia in addition to fast breathing and can be treated at OPD.
- ► Assess and classify for TB for children with malnutrition, HIV and cough > 14 days
- ► The pre-referral treatment of severe pneumonia or very severe disease changed to IV/IM Ampicillin and Gentamycin injection
- ► The treatment of pneumonia changed to Amoxicillin twice daily for 5 days rapidly acting inhaled bronchodilator for 5 days is added for wheezing

Diarrhea section

- ► The first line drug for dysentery/bloody diarrhea is changed from Cotrimexazole to Ciprofloxaci due to documented resistance to Contrimexazole
- ► Give Zinc for 10 days for treatment of diarrhea is also added for persistent diarrhea

Fever section

- ► Fever malaria risk is classified in to two, High or Low Malaria Risk and No Malaria Risk and No travel to Malarious area
- ► Addition of provision of appropriate antibiotics for identified other causes of fever in the treatment portion under each classification
- ► Oral antimalarial – only generic name written, the dose for children weighing <15 kg and < 2years introduced

Acute ear infection section

- ► The treatment of acute ear infection was Cotrimoxazole two times daily is replaced by Amoxicillin twice daily for 5 days

Anemia section

- ► Counsel the mother on feeding recommendation if no anemia is added

Underweight and Malnutrition section

- ► Visible severe wasting is **no more** considered a criteria for Admission of young Infants <6 months of age
- ► In WFH or WFL calculations, NCHS reference is **no more** to be used- but only WHO Z-scores
- ► Target weight must **not** be used as a discharge criteria for children admitted with MUAC <11cm
- ► Discharge criteria for Uncomplicated SAM in >6months old children is updated to: WFH/L ≥–2 Z-score and they have had no oedema for at least 2 weeks or MUAC is ≥125 mm and they have had no oedema for at least 2weeks
- ► Mebendazole is given for children > 2 year of age as routine medication in OTP or Phase 2
- ► Weight range for calculation of RUTF amount changed to reflect recent WHO protocol
- ► Assessment of TB and other chronic communicable diseases to be routinely done for SAM and MAM cases /as part of assessment for medical complications/ and those children with positive TB contact Specific changes incorporated to messages in counseling of mothers on IYCF and nutrition

HIV section

- ► HIV exposed Treatment**,** refer to ART clinic changed to "Ensure mother is tested & enrolled in mother- baby cohort follow up at ANC/PMTCT clinic"
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INTEGRATED MANAGEMENT OF NEWBORN AND CHILDHOOD ILLNESS

ESSENTIAL NEWBORN CARE ACTIONS

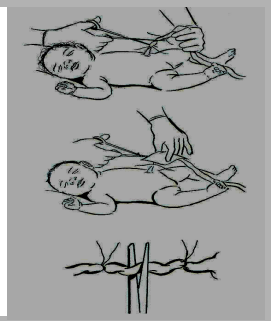
Immediate Newborn Care After Birth

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-see BIRTH ASPHYXIA chart and manage accordingly.

Step 3
Clamp/tie the cord two fingers from abdomen and another clamp/tie two fingers from the 1st one.

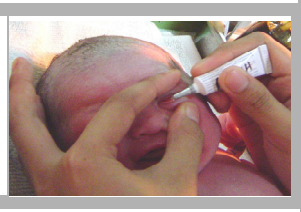
Cut the cord between the 1st and 2nd clamp/tie.



Step 4
Place the baby in skin-to-skin contact with the mother.

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,1mg IM on anterior mid lateral thigh.

Step 9
Weigh baby & classify -
See BIRTH WEIGHT & GESTATIONAL AGE 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 and OPV 0 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.
- Provide postnatal visits at 6 - 24 hours, 3 days,7 days and immunization visit at 6 weeks.

CHECK THE NEWBORN FOR BIRTH ASPHYXIA

ASSESS

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"

Assess, Look

Classify ALL Newborns

- 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)?

CLASSIFY

IDENTIFY TREATMENT

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
If any of the following sign: • Not breathing, OR • Gasping, OR • Breathing poorly (<30 breaths/minute)	**BIRTH ASPHYXIA**	▸ **Start resuscitation immediately** ▸ **Clear mouth first, then nose with bulb syringe** **If not breathing** ▸ **Clamp/tie and cut the cord immediately** ▸ **Position the newborn supine with neck slightly extended** ▸ **Ventilate with appropriate size bag & mask** ▸ **If the baby start breathing regularly continue giving essential newborn care** ▸ **If the baby remains weak or is having irregular breathing after 20 minutes of resuscitation; refer urgently to hospital while continuing to resuscitate on the way** ▸ Stop resuscitation after 20 minutes if no response (no spontaneous breathing) ▸ Monitor continuously for 6 hours baby with the mother ▸ Follow 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 cord care ▸ Initiate skin-to-skin contact ▸ Initiate breastfeeding ▸ Give eye care ▸ Give Vitamin K ▸ Apply Chlorhexidine gel ▸ Give 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

ASSESS THE NEWBORN FOR BIRTH WEIGHT AND GESTATIONAL AGE

ASSESS

Assess, Look

- Ask the gestational age
- Ask for birth weight or
- Weigh the baby (with in 7 days of life)

Classify ALL Newborn Babies

CLASSIFY

IDENTIFY TREATMENT

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• 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)** ▶ **Start Kangaroo Mother Care (KMC)** ▶ **Give Vitamin K 0.5mg IM on anterior mid 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 (see page 17) ▶ Counsel on optimal breastfeeding ▶ Counsel mother on prevention of infection ▶ Give Vitamin K 1mg IM on anterior mid thigh if not already given ▶ Provide follow-up for KMC ▶ If baby ≥ 2,000 gms follow-up visits at age 6 –24 hrs, 3 days, 7 days & 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 ▶ Provide follow-up visits at age 6-24 hrs, 3 days, 7 days & 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, CLASSIFY AND TREAT THE SICK YOUNG INFANT FROM BIRTH UP TO 2 MONTHS

CHECK FOR VERY SEVERE DISEASE AND LOCAL BACTERIAL INFECTION

Ask

- Is the infant having difficulty in feeding?
- Has the infant had convulsions?

Look, Listen, Feel:

- Count the breaths in one minute - Repeat the count if ≥ 60/min } *YOUNG INFANT MUST BE CALM*
- Look for severe chest indrawing
- See if the young infant is not feeding
- See if the infant is convulsing now
- Look at the umbilicus. Is it red or draining pus?
- Measure temperature (or feel for fever or low body temperature)
- Look for skin pustules
- Look at the young infant's movements.
  - Infant move on his/her own
  - Infant move only when stimulated
  - Infant doesn't move even when stimulated

Classify all young infants

AND if temp. is from 35.5 - 36.4°C

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Not feeding well, OR • History of convulsions/convulsing now, OR • Fast breathing (≥60 breaths per minute), OR • Severe chest indrawing, OR • Fever (≥37.5°C* or feels hot), OR • Low body temperature (< 35.5°C* or feels cold), OR • Movement only when stimulated or no movement even when stimulated.	**VERY SEVERE DISEASE**	► **Give first dose of intramuscular Ampicillin and Gentamycin** ► **Treat to prevent low blood sugar** ► **Warm the young infant by skin-to-skin contact if temperature is less than 36.5°C (or feels cold to touch) while arranging referral** ► **Advise mother how to keep the young infant warm on the way to the hospital** ► **Refer URGENTLY to hospital**
• Red umbilicus or draining pus, OR • Skin pustules	**LOCAL BACTERIAL INFECTION**	► **Give Amoxicillin for 5 days** ► Teach the mother to treat local infections at home ► Advise mother when to return immediately ► Follow-up in 2 days
• None of the signs of very severe disease, or local bacterial infection	**SEVERE DISEASE, OR LOCAL INFECTION UNLIKELY**	► Advise mother to give home care for the young infant
• Temperature from 35.5℃ – 36.4℃ (both values inclusive)	**LOW BODY TEMPERATURE**	► **Treat to prevent low blood sugar** ► **Warm the young infant using skin-to-skin contact for one hour and reassess. If temperature remains same or worse, refer. (Advise mother to continue feeding and keep the infant warm on the way to the hospital).** ► Advise mother when to return immediately ► Follow-up in 2 days

* These thresholds are based on axillary temperature. The thresholds for rectal temperature readings are approximately 0.5°C higher.

N.B. In a young infant with fever, malaria should be considered based on other associated symptoms.

If referral is not possible, see page 53-63 "Where Referral is not Possible".

CHECK FOR JAUNDICE

ASSESS

- Look for jaundice:
  - Is skin on the face or eyes yellow?
  - Are the palms and soles yellow?

Classify all infants

CLASSIFY

IDENTIFY TREATMENT

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Palms and/or soles yellow, OR • Skin and eyes yellow and baby is < 24 hrs old, OR • Skin and eyes yellow and baby is ≥14 days old	**SEVERE JAUNDICE**	► **Treat to prevent low blood sugar** ► **Warm the young infant by skin-to-skin contact if temperature is less than 36.5°C (or feels cold to touch) while arranging referral** ► **Advise mother how to keep the young infant warm on the way to the hospital** ► **Refer URGENTLY to hospital**
• Only skin on the face or eyes yellow, AND • Infant aged 24 hrs -14 days old	**JAUNDICE**	► Advise mother to give home care for the young infant ► Advise the mother to expose and check in natural light daily ► Advise mother when to return immediately ► Follow-up in 2 days
• No yellowish discoloration of the eye and skin	**NO JAUNDICE**	► Advise mother to give home care for the infant

ASSESS THE YOUNG INFANT FOR DIARRHOEA

THEN ASK:
Does the Young Infant Have Diarrhoea?

Ask

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

Look and Feel:

- Look at the young infant's general condition.
  - Infant moves only when stimulated
  - Infant does not move even when stimulated
  - Infant restless and irritable
- Look for sunken eyes
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (> 2 sec.)?
  - Slowly?

Classify DIARRHOEA

	SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
for dehydration	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 giving frequent sips of ORS on the way** **- Advise mother to continue breastfeeding more frequently** **- Advise mother 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, irritable • Sunken eyes • Skin pinch goes back slowly	**SOME DEHYDRATION**	► **If infant has another severe classification:** **- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** **- Advise mother to continue breastfeeding more frequently** **- Advise mother 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 supplement (Plan B) - Advise mother when to return immediately - Follow-up in 2 days
	• Not enough signs to classify as some or severe dehydration	**NO DEHYDRATION**	► Advise mother when to return immediately ► Follow-up in 5 days if not improving ► Give fluids to treat diarrhoea at home and Zinc supplement (Plan A)
and if diarrhoea 14 days or more	• Diarrhoea lasting 14 days or more	**SEVERE PERSISTENT DIARRHOEA**	► **Give first dose of IM Ampicillin and Gentamycin** ► **Treat to prevent low blood sugar** ► **Advise how to keep infant warm on the way to the hospital** ► **Refer to hospital**
and if blood in stool	• Blood in stool	**DYSENTERY**	► **Give first dose of IM Ampicillin and Gentamycin** ► **Treat to prevent low blood sugar** ► **Advise how to keep infant warm on the way to the hospital** ► **Refer to hospital**

*** What is diarrhoea in young infant?**
If the stools have changed from usual pattern: many and watery (more water than fecal matter). The frequent and loose stools of a breastfed baby may be normal and are not always diarrhoea

CHECK THE YOUNG INFANT FOR HIV EXPOSURE AND INFECTION

ASK:

- What is the HIV status of the mother?
  - Positive
  - Negative
  - Unknown

- What is the HIV status of the young infant?

  Antibody:
  - Positive
  - Negative
  - Unknown

  DNA PCR:
  - Positive
  - Negative
  - Unknown

Classify by Test Result

SIGN	CLASSIFY AS	TREATMENT
• Young infant DNA PCR positive	**HIV INFECTED**	▶ Start Cotrimoxazole Prophylaxis from 6 months of age ▶ Assess feeding and counsel ▶ Advise on home care ▶ Refer to ART clinic for immediate ART initiation and care ▶ Assess for TB infection (Refer table on page 32) ▶ Ensure mother is tested and enrolled for HIV care and treatment
• Mother HIV positive, AND young infant DNA PCR negative/unknown OR • Young infant HIV antibody positive	**HIV EXPOSED**	▶ Start Co-trimoxazole Prophylaxis from 6 weeks of age ▶ Assess feeding and counsel ▶ If DNA PCR test is unknown, test as soon as possible starting from 6 weeks of age ▶ Ensure mother is tested & enrolled in mother-baby cohort follow up at ANC/ PMTCT clinic
• Mother and young infant not tested	**HIV STATUS UNKNOWN**	▶ Counsel the mother for HIV testing for herself and the infant ▶ Advise on home care of infant ▶ Assess feeding and counsel
• Mother or young infant HIV antibody negative	**HIV INFECTION UNLIKELY**	▶ Advise on home care of infant ▶ Assess feeding and counsel ▶ Advise the mother on HIV prevention

CHECK THE YOUNG INFANT FOR FEEDING PROBLEM OR UNDERWEIGHT

Ask

- Is there is any difficulty of feeding?
- Is the infant breastfed? If yes?
  How many times in 24 hours?
- Do you empty one breast before switching to the other?
- Do you increase frequency of breastfeeding during illness?
- Does the infant receive any other foods or drinks?

Look and Feel:

- Determine weight for age
- Look for ulcers or white patches in the mouth (thrush)

Classify FEEDING & UNDER-WEIGHT

IF AN INFANT

- Has no indication to refer urgently to hospital, and
- Infant is on breastfeeding

Assess Breastfeeding

ASSESS BREASTFEEDING: Has the infant breastfed in the previous hour?

- If the infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeeding for 4 minutes.
- If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again.

- **Is the infant well positioned?**
  To check the positioning, look for:
  - Infant's head and body straight
  - Facing her breast
  - Infant's body close to her body
  - Supporting the infant's whole body (all of these signs should be present if the positioning is good)

- **Is the infant able to attach?**
  To check the attachment, look for:
  - Chin touching the breast
  - Mouth wide open
  - Lower lip turned outward
  - More areola visible above than below the mouth (all of these signs should be present if the attachment is good)

- **Is the infant suckling effectively** (that is slow deep sucks, sometimes pausing)?
  Not suckling at all Not suckling effectively Suckling effectively
  Clear blocked nose if it interferes with breastfeeding

SIGN	CLASSIFY AS	TREATMENT
If any of the following signs: • Not well positioned or • Not well attached to breast or • Not suckling effectively or • Less than 8 breastfeeds in 24 hours or • Switching the breast frequently or • Not increasing frequency of breastfeeding during illness or • Receives other foods or drinks or • The mother not breastfeeding at all or • Underweight or • Thrush (ulcers or white patches in mouth)	**FEEDING PROBLEM OR UNDERWEIGHT**	▶ Advise the mother to breastfeed as often and for as long as the infant wants, day and night ▶ If baby not sucking, show her how to express breast milk • If not well positioned, attached or not suckling effectively, teach correct positioning and attachment • If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding • Empty one breast completely before switching to the other • Increase frequency of feeding during and after illness ▶ If receiving other foods or drinks, counsel mother on exclusive breast feeding. ▶ If not breastfeeding at all: • Counsel on breastfeeding and relactation • If no possibility of breastfeeding:* Advise about correct preparation of breast milk substitutes and using a cup ▶ If thrush, teach the mother to treat thrush at home ▶ Advise mother to give home care for the young infant ▶ Ensure infant is tested for HIV ▶ Follow-up any feeding problem or thrush in 2 days ▶ Follow-up for underweight in 14 days
• Not UNDERWEIGHT and no other signs of FEEDING PROBLEM	**NO FEEDING PROBLEM AND NOT UNDERWEIGHT**	▶ Advise mother to give home care for the young infant ▶ Praise the mother for feeding the infant well

*If no possibility of breastfeeding use the chart on page 12, "*Check for feeding problem or underweight when an HIV positive mother has made informed decision not to breastfeed OR no chance of breast feeding by any reason."*

NB. If the young infant has visible severe wasting or oedema, use the sick child acute malnutrition assessment box to classify for Severe Acute Malnutrition.

CHECK FOR FEEDING PROBLEM OR UNDERWEIGHT

WHEN AN HIV POSITIVE MOTHER HAS MADE INFORMED DECISION NOT TO BREASTFEED, OR NO CHANCE OF BREASTFEEDING BY ANY OTHER REASON

Ask

- Is there any difficulty in feeding?
- What milk are you giving?
- How many times during the day and night?
- How much is given at each feed?
- How are you preparing the milk?
  - Let the mother demonstrate or explain how a feed is prepared, and how it is given to the infant
- Are you giving any breast milk?
- What foods or fluids in addition to the replacement feeding is given?
- How is the milk being given? Cup or bottle?
- How are you cleaning the utensils?

Look, Feel:

- Determine weight for age
- Look for mouth ulcers or white patches in the mouth (oral thrush).

Classify FEEDING & UNDER-WEIGHT

SIGNS	CLASSIFY AS	TREATMENT
If any of the following signs: • Milk incorrectly or unhygienically prepared or • Giving inappropriate replacement milk or other foods/fluids or • Giving insufficient replacement feeds or • Mother mixing breast milk and other feeds or • Using a feeding bottle or • Underweight or • Thrush (ulcers or white patches in mouth)	**FEEDING PROBLEM OR UNDERWEIGHT**	▶ Counsel on optimal replacement feeding ▶ Identify concerns of the mother and the family about feeding. Help the mother gradually withdraw other foods or fluids ▶ If mother is using a bottle, teach cup feeding ▶ If thrush, teach the mother to treat thrush at home ▶ Advise mother how to feed and keep the young infant warm at home ▶ Follow-up any feeding problem or thrush in 2 days ▶ Follow-up underweight in 14 days
• Not UNDERWEIGHT and no other signs of FEEDING PROBLEM	**NO FEEDING PROBLEM & NOT UNDERWEIGHT**	▶ Advise mother to give home care for the young infant ▶ Praise the mother for feeding the infant well

CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS

IMMUNIZATION SCHEDULE:

AGE	VACCINE			
Birth		BCG	OPV- 0*	
6 weeks	DPT_1-$HepB_1$-Hib_1	OPV– 1	PCV-1	Rota –1

****Do not Give OPV-0 to an infant who is more than 14 days old.***
Keep an interval of at least 4 weeks between OPV-0 and OPV-1.

ASSESS OTHER PROBLEMS

COUNSEL THE MOTHER ABOUT HER OWN HEALTH — Refer to page 52

CHECK FOR MATERNAL DANGER SIGNS (Only for women presenting within 6 weeks of delivery).

Maternal danger signs:- Refer mother and baby urgently for proper care if any of the following is present:

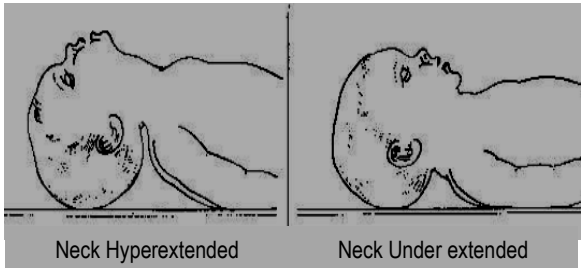
- Excessive vaginal bleeding
- Foul smelling vaginal discharge
- Severe abdominal pain
- Fever
- Excessive tiredness or breathlessness
- Swelling of the hands and face
- Severe headache or blurred vision
- Convulsion or impaired consciousness

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

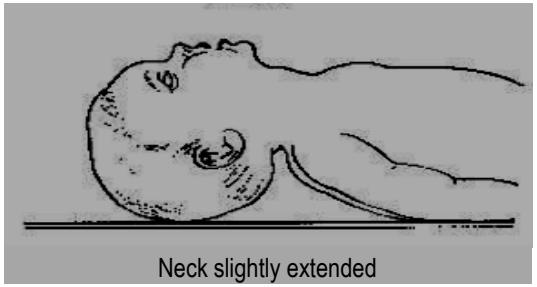
NEWBORN RESUSCITATION — follow HBB Action Plan see page 15

Clear Airway	▸ Clear the airway by wiping out the mouth with gauze or syringe bulb ▸ Suction the baby's mouth first then nose gently ▸ Reassess the baby's breathing
Position	▸ Place the baby on his back with the neck slightly extended
Ventilate	▸ Use baby bag and mask to ventilate at 40 breaths per minute ▸ Continue to ventilate until the baby breathes independently ▸ If the baby remains weak or is having irregular breathing after 20 minutes of resuscitation; refer urgently to hospital while continuing to resuscitate on the way ▸ Stop after 20 minutes if the baby has not responded (no breathing at all)
Monitor	▸ Keep the baby warm (skin-to-skin) ▸ Defer bathing for 24 hours after the baby is stable ▸ Breastfeed as soon as possible ▸ Watch for signs of a breathing problem; rapid, labored, or noisy breathing ▸ If breathing problem occurs, stimulate, give oxygen [if available], and refer

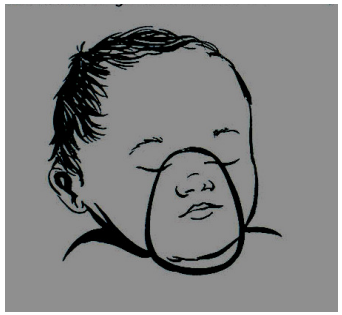
Incorrect Position



Correct Position



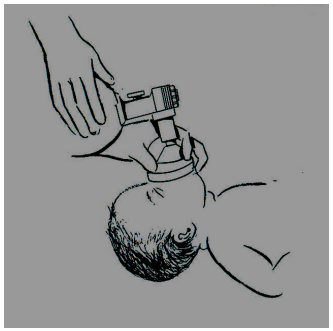
Incorrect: Bigger Mask



Incorrect: Smaller Mask

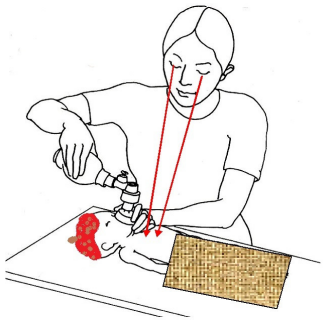
Correct: Proper Mask

Bag & Mask Resuscitation

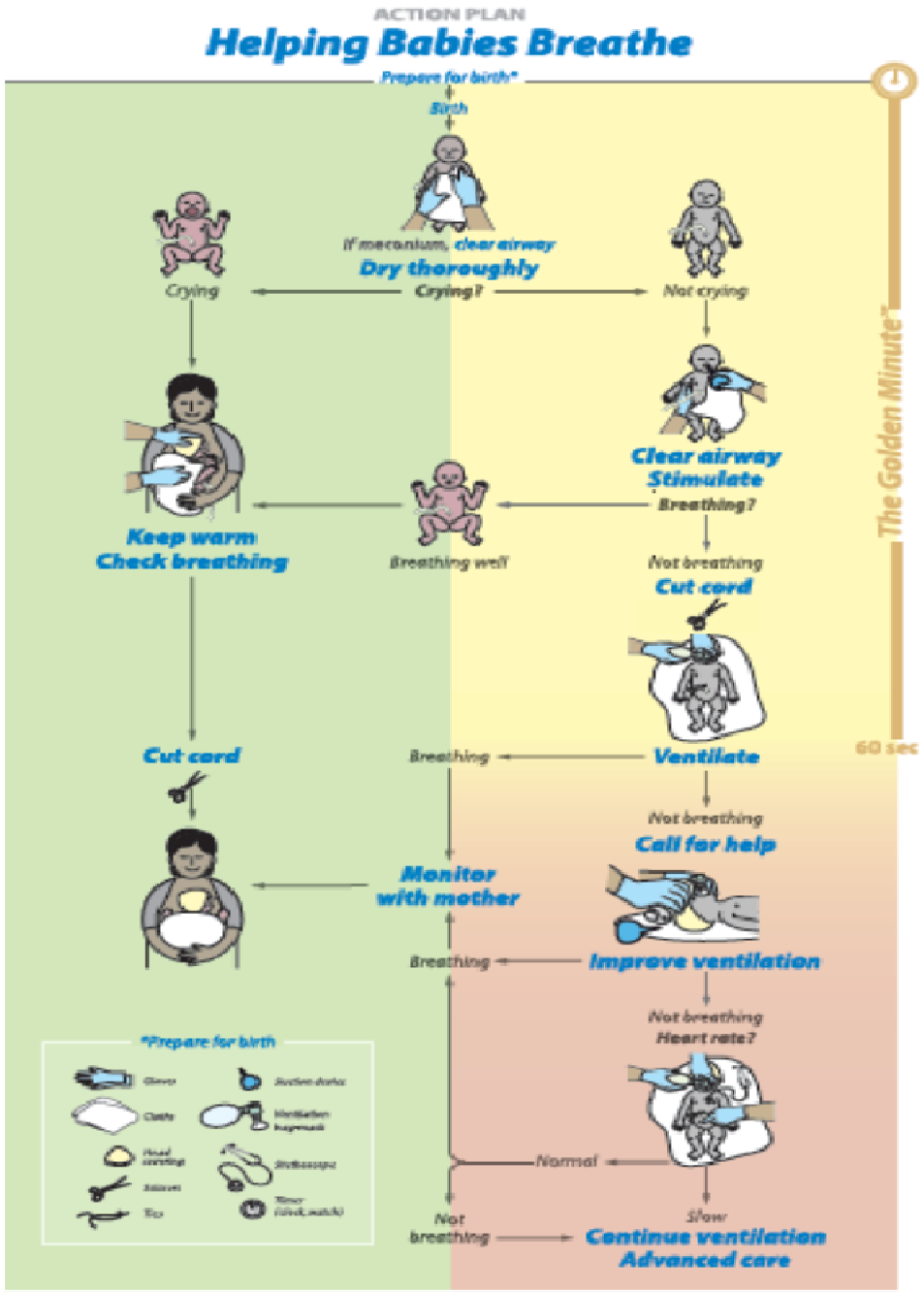


How to Ventilate

- Squeeze bag with 2 fingers or whole hand, 2-3 times
- Observe for rise of chest
- IF CHEST IS NOT RISING:
  - Reposition the head
  - Check mask seal
- Squeeze bag harder with whole hand
- Once good seal and chest rising, ventilate at 40 squeezes per minute
- Observe the chest while ventilating:
  - Is it moving with the ventilation?
  - Is baby breathing spontaneously?



- 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 or receive help to breathe.



TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

CARE OF THE LOW BIRTH WEIGHT (LBW) NEWBORN

Tips to help a mother breastfeed her LBW baby

- Express a few drops of milk on the bay's lip to help the baby start nursing.
- Give the baby short rests during a breastfeed; feeding is hard work for LBW baby.
- If the baby coughs, gags, or spits up when starting to breastfeed, the milk may be letting down too fast for the little baby. Teach the mother to take the baby off the breast if this happens.
- Hold the baby against her chest until the baby can breathe well again then put it back to the breast after the let-down of milk has passed.
- If the LBW baby does not have enough energy to suck for long or a strong enough sucking reflex: Teach the mother to express breast milk and feed it by a cup.

Expressing breast milk (can take 20-30 minutes or longer in the beginning)

- Wash hands with soap and water.
- Prepare a cleaned and boiled cup or container with a wide opening.
- Sit comfortably and lean slightly toward the container. Hold the breast in a "C-hold".
- Gently massage and pat the breast from all directions.
- Press thumb and fingers toward the chest wall, role thumb forward as if taking a thumb print so that milk is expressed from all areas of the breast.
- Express the milk from one breast for at least 3-4 minutes until the flow slows and shift to the other breast.
- Alternate between breasts 5 or 6 times, for at least 20 to 30 minutes.

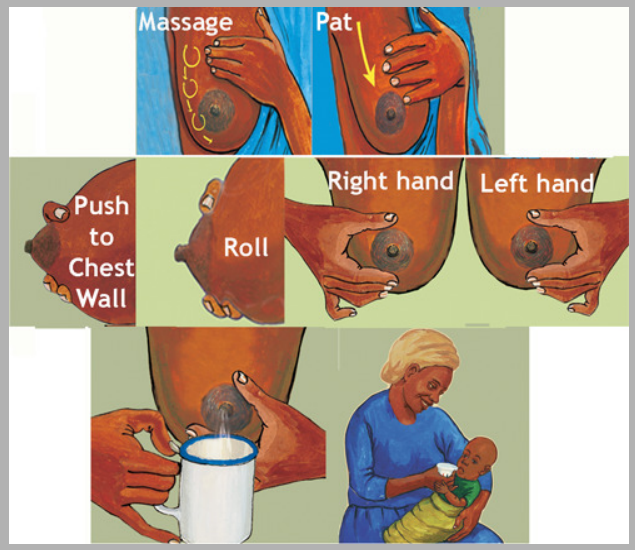
TIPS for storing and using stored breast milk

Fresh breast milk has the highest quality. If the breast milk must be saved, advise the mother and family to:

- Use either a glass or hard plastic container with a large opening and a tight lid to store breast milk.
- Use a container and lid which have been boiled for 10 minutes.
- If the mother is literate, teach her to write the time and date the milk was expressed (or morning, afternoon, evening) on the container before storing.
- Store the milk in a refrigerator for 24 hours or in a cool place for 8 hours.

Show families how to cup feed

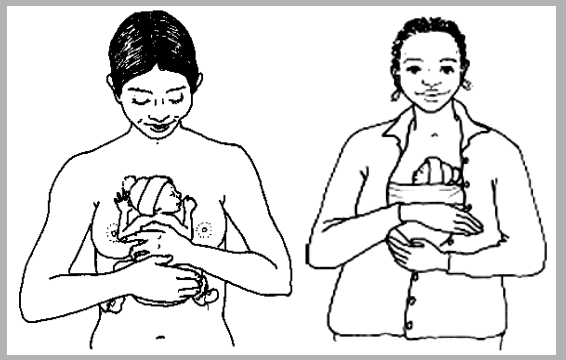
- Hold the baby closely sitting a little upright as shown in the picture.
- Hold a small cup half-filled to the babies lower lip.
- When the baby becomes awake and opens mouth, keep the cup at the baby's lips letting the baby take the milk.
- Give the baby time to swallow and rest between sips.
- When the baby takes enough and refuses put to the shoulder & burp her/him by rubbing the back.
- Measure baby's intake over 24 hours rather than at each feeding.
- Allow the infant to take the milk himself. DO NOT pour the milk into the infant's mouth.



Technique for expressing breast milk and cup feeding of young infants

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

KEEP THE YOUNG INFANT WARM



► ***Warm the young infant using Immediate skin-to-skin contact***

REASSESS after 1 hour:

- Check for signs of Very Severe Disease and
- Measure axillary temperature by placing the thermometer in the axilla for 5 minutes (or feel for low body temperature).

If any signs of Very Severe Disease OR temperature still below 36.5°C (or feels cold to touch)

- ***Refer URGENTLY to hospital after giving pre-referral treatments for Very Severe Disease.***
- If no sign of Very Severe Disease AND temperature 36.5°C or more (or is not cold to touch):
  - Advise how to keep the infant warm at home
  - Advise mother to give home care
  - Advise mother when to return immediately
- If skin-to-skin contact is not possible:
  - Clothe the baby in 3-4 layers, cover head with a cap and body with a blanket; hold baby close to caregiver's body, OR
  - Place the baby under overhead radiant warmer, if available.

► **(*Avoid direct heat from a room heater and use of hot water rubber bottle or hot brick to warm the baby because of danger of accidental burns*).**

Keep the young infant warm on the way to the hospital

► By skin-to-skin contact, OR
► Clothe the baby in 3-4 layers, cover head with a cap and body with a blanket or Gabi
► Hold baby close to caregiver's body

Kangaroo Mother Care — KMC, for babies below 2,000gms

Provide privacy to the mother. If mother is not available, prolonged skin-to-skin contact may be provided by the father or any other adult.

► Council the mother on the importance and how to do KMC
► Check if the mother can correctly provide KMC
► Request the mother to sit or recline comfortably
► Undress the baby gently, except for cap, nappy and socks
► Place the baby prone on mother's chest in an upright and extended posture, between her breasts, in skin-to-skin contact; turn baby's head to one side to keep airways clear. Keep the baby in this position for 24 hrs every day
► Cover the baby with mother's blouse, 'or gown; wrap the baby-mother together with an added blanket or "Gabi"
► Breastfeed the baby every two hours
► Keep the room warm

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

AGE or WEIGHT	AMOXICILLIN Give two times daily for 5 days		
	DISPERSIBLE TABLET (DT) 250 mg	DISPERSIBLE TABLET (DT) 125mg	SYRUP 125 mg in 5 ml
Birth up to 1 month (< 4kg)	1/4	1/2	2.5 ml
1 month up to 2 months (4-6kg)	1/2	1	5 ml

➢ ***Give First Dose of Intramuscular Antibiotics - Ampicillin and Gentamycin***

- ***For Very Severe Disease***
- **Give first dose of Ampicillin and Gentamycin intramuscular**

Weight	Ampicillin Dose: 50 mg per kg to vial of 250mg Add 1.3 ml sterile water = 250mg/1.5 ml	GENTAMICIN Undiluted 2 ml vial containing 20 mg = 2 ml at 10 mg/ml Add 6 ml sterile water to 2 ml vial containing 80 mg*= 8ml at 10 mg/ml	
		Age <7 days Dose: 5 mg per kg	Age >7 days Dose: 7.5 mg per kg
1-<1.5 kg	0.4 ml	0.6 ml*	0.9 ml*
1.5 - <2kg	0.5 ml	0.9 ml*	1.3 ml*
2 -<2.5kg	0.7 ml	1.1 ml*	1.7 ml*
2.5 - 3kg	0.8 ml	1.4 ml*	2.0 ml*
3 -<3.5 kg	1.0 ml	1.6 ml*	2.4 ml*
3.5 -<4kg	1.1 ml	1.9 ml*	2.8 ml*
4 - <4.5kg	1.3 ml	2.1 ml*	3.2 ml*

* Avoid using undiluted 40mg/ml Gentamycin. The dose is ¼ of that listed

- Referral is the best option for a young infant classified with VERY SEVERE DISEASE.
- If referral is not possible, give Ampicillin /Benzyl Penicillin and Gentamycin for at least 7 days. Give Ampicillin/Benzyl Penicillin every 12 hours plus Gentamycin every 24 hours.

► If very preterm, Gentamycin every 48 hrs

➢ ***To Treat Diarrhoea,***
See TREAT THE CHILD Chart

➢ ***Immunize Every Sick Young Infant, as Needed***

➢ *Teach the Mother to Treat Local Infections at Home*

- Explain how the treatment is given.
- Watch her as she does the first treatment in the clinic.
- Tell her to do the treatment twice daily. She should return to the clinic if the infection worsens.

To Treat Skin Pustules or Umbilical Infection

The mother should

- Wash hands
- Gently wash off pus and crusts with soap and water
- Dry the area
- Paint with Gentian Violet (GV) (0.5%) twice daily
- Wash hands

To Treat Thrush (ulcers or white patches in mouth)

The mother should:

- Wash hands
- Wash mouth with clean soft cloth wrapped around the finger and wet with salt water
- Instill Nystatin 1 ml, 4 times a day or
- Paint the mouth with half-strength (0.25%) GV twice daily for 7 days
- Avoid feeding for 20 minutes after medication
- Wash hands

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

➢ *Teach correct positioning and attachment for breastfeeding*

- Show the mother how to hold/position her infant
  - with the infant's head and body straight
  - facing her breast, with infant's nose opposite her nipple
  - with infant's body close to her body
  - supporting infant's whole body, not just neck and shoulders.

- Show her how to help the infant to attach. She should:
  - touch her infant's lips with her nipple
  - wait until her infant's mouth is opening wide
  - move her infant quickly onto her breast, aiming 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, try again.
- Advise the mother to empty one breast before switching to the other so that the infant gets the nutrient-rich hind milk.

➢ *Advise mother to give home care for the young infant*

1. ***Food & Fluids -*** Breastfeed frequently, as often and for as long as the infant wants, day or night, during sickness and health. More frequently during sickness
2. **Keep the young infant warm at all times** - In cool weather, cover the infant's head and feet and dress the infant with extra clothing
3. ***When to Return -*** advise mother to bring the young infant for follow up visit or immediately according to the tables below

Follow up visits

If the infant has:	Return in:
• LBW/PRETERM • LOCAL BACTERIAL INFECTION • LOW BODY TEMPERATURE • JAUNDICE • SOME DEHYDRATION • FEEDING PROBLEM • THRUSH	2 days
• UNDERWEIGHT	14 days

When to Return Immediately:

Return immediately if the young infant has any of these signs:
• Breastfeeding or drinking poorly • Vomiting after each feeding • Convulsion • Reduced activity • Fast or difficult breathing • Develops a fever or feels cold to touch • Blood in stool • Becomes sicker • Palms and soles appear yellow

NB: All newborns should be seen on day 1, 3, 7 and 6 weeks.

FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

➢ *LOW BIRTH WEIGHT/PRETERM, LOW BODY TEMPERATURE*

After 2 days

Weekly follow-up for low birth weight

- Check for danger signs in the newborn
- Counsel and support optimal breastfeeding
- Follow-up of kangaroo mother care
- Follow-up of counseling given during previous visits
- Counsel mother/ family to protect baby from infection
- Immunize baby with OPV & BCG if not given before

➢ *LOCAL BACTERIAL INFECTION*

After 2 days:

- Ask for new problems, if there is any do a full assessment.
- Look at the umbilicus. Is it red or draining pus? Does redness extend to the skin?
- Look at the skin pustules. Are there many or severe pustules?

Treatment:

- If ***pus or redness remains or is worse,*** refer to hospital.
- If ***pus and redness are improved***, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home.

➢ *JAUNDICE*

After 2 days:

- Ask for new problems, if there is any do a full assessment.
- Look for jaundice - Are the palms and soles yellow?

Treatment:

- If the palms and soles are yellow or age ≥14 days. refer to hospital
- If palms and soles are not yellow and age ≤14 days, and jaundice has not decreased; advise on home care, when to return immediately and ask her to return for f/up in 2 days.
- If jaundice has started decreasing, reassure mother and ask her to continue home care. Ask her to return for f/up at 2 weeks of age. If jaundice continues beyond 2 weeks of age, refer to hospital.

➢ *DIARRHOEA (Some Dehydration)*

After 2 days:

- Ask for new problem, if there is any do a full assessment.
- Ask if the diarrhoea has stopped?

Treatment:

- If diarrhoea persists, Assess the young infant for diarrhoea and manage as per initial visit (see Assess the Young Infant for Diarrhoea chart).
- If diarrhoea stopped-reinforce exclusive breastfeeding.

FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

➢ *FEEDING PROBLEM*

After 2 days:

- Ask for new problems, if there is any do a full assessment.
- Reassess feeding. See " Check for Feeding Problem or Underweight" chart.
- Ask about any feeding problems found on the initial visit.

Treatment:

➢ Counsel the mother about any new or continuing feeding problem. If you counsel the mother to make significant changes in feeding, ask her to bring the young infant back again.

➢ If the young infant is Underweight for age, ask the mother to return 14 days of this follow up visit. Continue follow-up until the infant is gaining weight well.

Exception:

- If you think that feeding will not improve, or if the young infant has ***lost weight***, refer the child.

➢ *THRUSH*

After 2 days

- Ask for new problems, if there is any do a full assessment.
- Look for ulcers or white patches in the mouth (thrush).
- Reassess feeding. See "Check for feeding problem or underweight" above.

Treatment:

➢ If ***thrush is worse,*** check that treatment is being given correctly.

► The infant has problems with attachment or suckling, refer to hospital.

➢ If ***thrush is the same or better***, and if the infant is feeding well, continue Nystatin or half-strength gentian violet (0.25%) for a total of 7 days.

➢ *UNDERWEIGHT IN YOUNG INFANT*

After 14 days:

- Ask for new problems, if there is any do a full assessment.
- Weigh the young infant and determine if the infant is still underweight.
- Reassess feeding. See "Check for Feeding Problem or underweight." above.

Treatment:

➢ If the infant is ***no longer underweight***, praise the mother and encourage her to continue.

➢ If the infant is ***still underweight, but is feeding well;*** praise the mother. Ask her to have her infant weighed again within a month or when she returns for immunization.

➢ If the infant is ***still underweight and still has a feeding problem***, counsel the mother about the feeding problem. Ask the mother to return again in 14 days (or when she returns for immunization, if this is within 2 weeks). Continue to see the young infant every few weeks until the infant is feeding well and gaining weight regularly or is no longer underweight.

Exception:

If you think that feeding will not improve, or if the young infant has **lost weight**, refer to hospital.

FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

Routine Postnatal Follow Up Care

6 –24 hours evaluation/visit

- Measure and record weight & temperature
- Check for any newborn danger signs listed below
- Check for any danger signs in the mother (see page 13)

- Refer newborn & mother to hospital if any danger sign in the newborn or mother
- Classify by birth weight/GA (see Assess & Classify Chart) & counsel on extra care for the Low Birth Weight baby (pg.15 & 16)

- Give Vitamin K, OPV-0 & BCG if not given
- Counsel mother on optimal breastfeeding, & teach ALL mothers on proper positioning & attachment for breast feeding
- Counsel mother to keep the baby warm (delay bath after first 24 hrs, skin-to-skin care, proper wrapping & put a hat)
- Counsel on hygiene and good skin, eye and cord care
- Teach mother to identify neonatal danger signs & to seek care immediately

- Counsel the lactating mother to take at least 2 more variety meals than usual
- Advise on importance of postnatal visits on days 3 & 7
- Apply Chlorhexidine

3 & 7 days' visit

- Measure temperature; & weight (if no birth weight record)
- Check for any newborn danger signs listed below
- Check for any danger signs in the mother (see page 13)
- Refer newborn & mother to hospital if any danger sign in the newborn or mother
- Classify by birth weight/GA (see Assess & Classify Chart) & counsel on extra care for the Low Birth Weight baby (pg.15 & 16)
- Give OPV-0 & BCG if not given before
- Counsel mother on optimal breastfeeding, & teach ALL mothers on proper positioning & attachment for breast feeding
- Counsel mother to keep the baby warm (delay bath after first 24 hrs, skin-to-skin care, proper wrapping & put a hat)
- Counsel on hygiene and good skin, eye and cord care
- Teach mother to identify neonatal danger signs & to seek care immediately
- Counsel the lactating mother to take at least 2 more variety meals than usual
- Advise mother to return for next PNC follow up visit
- Counsel the mother to apply Chlorhexidine at home

6 weeks visit

- Check for danger signs in the newborn and mother
- Check for Feeding Problem or Underweight (see ASSESS & CLASSIFY Chart)

- Refer newborn & mother to hospital if any danger sign in the newborn or mother
- Give appropriate counseling based on the assessment for Feeding Problem or Underweight
- Give DPT1- HepB1-Hib1, OPV-1, PCV-1; Rota & BCG (if not given before)
- Follow-up advices given during previous visits
- Counsel mother to protect baby from infection & to continue immunization schedule
- Counsel mother on the need of family planning & eating 2 more extra meals
- Advise mother & baby to sleep under ITN (in malarious areas)

Newborn danger signs

- Unable to feed or sucking poorly
- Repeated Vomiting
- Convulsions
- Movement only when stimulated or no movement, even when stimulated
- Gasping or breathing < 30 per minute
- Fast breathing (>60/minute, counted 2 times), grunting or severe chest indrawing
- Fever (hot to touch or axillary temperature ≥ 37.5℃)
- Hypothermia (cold to touch or axillary temperature <35.5℃)
- Severe jaundice (observed at <24 hrs or ≥ 14 days of age, or involving soles & palms)
- Pallor or bleeding from any site
- Red swollen eyelids and pus discharge from the eyes
- Very small baby (<1,500 grams or <32 weeks gestational age)
- Any other serious newborn problem

ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UPTO 5 YEARS

ASSESS

CLASSIFY

IDENTIFY TREATMENT

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 instructions on 'GIVE FOLLOW UP CARE" chart.
  - If initial visit, assess the child as follows:

CHECK FOR GENERAL DANGER SIGN

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.
- ► Is the child convulsing now?

URGENT attention

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign	**VERY SEVERE DISEASE**	► Give diazepam if convulsing now ► Quickly complete the assessment ► Give appropriate pre-referral treatment immediately ► Treat to prevent low blood sugar ► Keep the child warm ► Refer URGENTLY.

A child with any general danger sign needs urgent attention, complete the assessment and any pre-referral treatment immediately so referral is not delayed

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK:
- For how long?
- Contact with TB patient

LOOK, LISTEN, FEEL:
- Count the breaths in one minute
- Look for chest indrawing
- Look and listen for stridor
- Look and listen for wheezing

CHILD MUST BE CALM

If wheezing with either fast breathing or chest indrawing: Give a trial of rapid acting inhaled bronchodilator for up to three times 15-20 minutes apart. Count the breaths and look for chest indrawing again, and then classify.

Classify COUGH or DIFFICULT BREATHING

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

• Any general danger sign OR • Stridor in calm child.	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	► Give first dose of IV/IM Ampicillin and gentamycin* ► **Refer URGENTLY to hospital****
• Fast breathing OR • Chest indrawing	**PNEUMONIA**	► **Give oral Amoxicillin for 5 days** ► If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days*** ► Soothe the throat and relieve the cough with a safe remedy ► If Chest indrawing in HIV exposed child, give first dose of amoxicillin and refer ► If coughing for ≥ 14 days or there is contact with TB patient do assessment for TB**** ► Advise mother when to return immediately ► Follow-up in 2 days
No signs of: • Very severe disease OR • Pneumonia	**COUGH OR COLD**	► If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days*** ► Soothe the throat and relieve the cough with a safe remedy ► If coughing for > 14 days or there is contact with TB patient assess for TB**** ► Advise mother when to return immediately ► Follow-up in 5 days if not improving

**If pulse oximeter is available, determine oxygen saturation and refer if < 90%.*
*** If referral is not possible, manage the child as described in the pneumonia section of the national referral guidelines or as in Ethiopian pocket book for hospital care for children.*
**** If inhaled bronchodilator is not available, oral salbutamol may be tried but not recommended for treatment of severe acute wheeze.*
***** Assess for TB infection (see page 32)*
► *Refer Page 60 for Wheezing*

Does the child have Diarrhoea?

IF YES, ASK

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

LOOK AND FEEL:

- Look at the child's general condition
  Is the child:
  - Lethargic or unconscious?
  - Restless and irritable?
- Look for sunken eyes.
- Offer the child fluid. Is the child:
  - Not able to drink or drinking poorly?
  - Drinking eagerly, thirsty?
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (> 2 seconds)?
  - Slowly?

Classify DIARRHOEA

	SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
For Dehydration	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:*** • ***Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way.*** • ***Advise the mother to continue breastfeeding.*** ► **If child is 2 years or older, and there is cholera in your area, give antibiotic for cholera.**
	Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	**SOME DEHYDRATION**	► Give fluid, Zinc supplements and food for some dehydration (Plan B) ***If child also has a severe classification:*** - ***Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way.*** ***Advise the mother to continue breastfeeding***. ► Advise mother when to return immediately. ► Follow-up in 5 days if not improving.
	• Not enough signs to classify as some or severe dehydration	**NO DEHYDRATION**	► Give fluid, Zinc supplements and food to treat diarrhoea at home (Plan A) ► Advise mother when to return immediately ► Follow-up in 5 days if not improving
and if diarrhoea 14 days or more	• Dehydration present	**SEVERE PERSISTENT DIARRHOEA**	► **Treat dehydration before referral unless the child has another severe classification** ► ***Give Vitamin A*** ► ***Refer to hospital***
	• No dehydration	**PERSISTENT DIARRHOEA**	► Advise the mother on feeding recommendation for a child who has PERSISTENT DIARRHOEA ► **Give Vitamin A, therapeutic dose** ► **Give Zinc for 10 days** ► Advise mother when to return immediately ► Follow-up in 5 days
and if blood in stool	• Blood in the stool	**DYSENTERY**	► **Treat for 3 days with Ciprofloxacin** ► Advise mother when to return immediately ► Follow-up in 2 days

Does the Child Have Fever? (by history, or feels hot or temp. of ≥37.5°C)*

IF YES:

- Decide Malaria Risk: High/Low or No.
  If " no" malaria risk, then ask:
  - Has the child traveled outside this area during the previous 30 days?
  - If yes has he been to a malarious area?

Do blood film or RDT, If malaria risk is High/Low or history of travel to a malarious area, AND there is no Severe Classification***

High/Low Malaria Risk

THEN ASK:

- For how long has the child had fever?
- If more than 7 days, has fever been present every day?
- Has the child had measles within the last 3 months?

If the child has measles now OR within the last 3 months

LOOK AND FEEL:

- Look or feel for stiff neck.
- Look or feel for bulging fontanels (< 1 year of age)
- Look for any bacterial causes of fever**
- Look for runny nose.
- Look for signs of MEASLES
  - Generalized rash, AND one of these: cough, runny nose or red eyes.
- Look for mouth ulcers:
  - Are they deep or extensive?
  - Are they not deep or extensive?
- Look for pus draining from the eye.
- Look for clouding of the cornea.

No Malaria Risk and No travel to Malarious area

IF MEASLES now or within the last 3 months, Classify

SIGNS	CLASSIFY	TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign, OR • Stiff neck, OR • Bulging fontanels (< 1 yr)	**VERY SEVERE FEBRILE DISEASE**	▶ **Give first dose Artesunate or Quinine for severe malaria** ▶ **Give first dose of IV/IM Ampicillin and Gentamycin** ▶ **Treat the child to prevent low blood sugar** ▶ **Give Paracetamol in health facility for high fever (≥38.5°C)** ▶ **Refer URGENTLY to hospital**
• Positive blood film/RDT, OR • If blood film/RDT not available, any fever (by history, or feels hot, or temp ≥ 37.5°C)	**MALARIA**	▶ **Treat with Artemeter-Lumefantrine for P. falcip. or mixed or no confirmatory test done** ▶ **Treat with Chloroquine for confirmed P. vivax** ▶ **Give Paracetamol in health facility for high fever (38.5°C or above)** ▶ **Give an appropriate antibiotic for identified bacterial cause of fever** ▶ Advise mother when to return immediately ▶ Follow-up in 2 days if fever persists ▶ If fever is present every day for more than 7 days, refer for assessment
• RDT negative, OR • Blood film negative • Other cause of fever present	**FEVER: N0 MALARIA**	▶ **Give one dose of Paracetamol in health facility for high fever (≥38.5°C)** ▶ **Give an appropriate antibiotic for identified bacterial cause of fever** ▶ Advise mother when to return immediately ▶ Follow-up in 2 days if fever persists ▶ If fever is present every day for more than 7 days, refer for assessment
• Any general danger sign, OR • Stiff neck, OR • Bulging fontanels (< 1 year of age)	**VERY SEVERE FEBRILE DISEASE**	▶ **Give first dose of IV/IM Ampicillin and Gentamycin** ▶ **Treat the child to prevent low blood sugar** ▶ **Give Paracetamol in health facility for high fever (≥38.5°C)** ▶ **Refer URGENTLY to hospital**
• Any fever	**FEVER**	▶ ***Give one dose of Paracetamol in health facility for high fever (≥38.5°C)*** ▶ **Give an appropriate antibiotic for identified bacterial cause of fever** ▶ Advise mother when to return immediately ▶ Follow-up in 2 days if fever persists ▶ If fever is present every day for more than 7 days refer for assessment
• Any general danger sign, OR • Clouding of cornea, or • Deep or extensive mouth ulcers	**SEVERE COMPLICATED MEASLES ******	▶ **Give *Vitamin A, first dose*** ▶ ***Give first dose of IV/IM Ampicillin and Gentamycin*** ▶ ***If clouding of the cornea or pus draining from the eye, apply Tetracycline eye ointment*** ▶ ***Refer URGENTLY to hospital***
• Pus draining from the eye or • Mouth ulcers (not deep or extensive)	**MEASLES WITH EYE OR MOUTH COMPLICATIONS ******	▶ **Give Vitamin A, therapeutic dose** ▶ ***If pus draining from the eye, treat eye infection with Tetracycline eye ointment*** ▶ If mouth ulcers, treat with gentian violet ▶ Advise mother when to return immediately ▶ Follow–up in 2 days
• Measles now or within the last 3 months	**MEASLES**	▶ **Give Vitamin A, therapeutic dose** ▶ Advise mother when to return immediately

** These temperatures are based on axillary temperature . Rectal temperature readings are approximately 0.5°C higher.*

*** Look for local tenderness; orals sores; refusal to use a limb; hot tender swelling; red tender skin or boils; lower abdominal pain or pain on passing urine in older children.*

**** If no malaria test available:: High/Low malaria risk and no known cause of fever-classify as MALARIA.*

*****Other important complication of measles-pneumonia, stridor, diarrhoea, ear infection, and acute*

Does the Child Have an Ear Problem?

IF YES, ASK:

- Is there ear pain?
- Is there ear discharge? If yes, for how long?

LOOK, AND FEEL:

- Look for pus draining from the ear
- Feel for tender swelling behind the ear

Classify EAR PROBLEM

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Tender swelling behind the ear	**MASTOIDITIS**	► ***Give first dose of*** **Ampicillin and Choramphenicol IV/IM** ► ***Give first dose of Paracetamol for pain*** ► ***Refer URGENTLY to hospital***
• Ear pain, OR • Pus is seen draining from the ear and discharge is reported for less than 14 days	**ACUTE EAR INFECTION**	► **Give Amoxicillin for 5 days** ► **Give Paracetamol for pain** ► Dry the ear by wicking ► Follow-up in 5 days
• Pus is seen draining from the ear and discharge is reported for 14 days or more	**CHRONIC EAR INFECTION**	► Dry the ear by wicking ► Treat with topical Quinolone eardrops for 2 weeks ► Follow-up in 5 days
• No ear pain and • No pus seen draining from the ear	**NO EAR INFECTION**	► No additional treatment

CHECK FOR ANEMIA

LOOK

- Look for palmar pallor, is it;
  - Severe palmar pallor?
  - Some palmar pallor?
  - No palmar pallor?

Classify ANEMIA

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Severe palmar pallor	**SEVERE ANEMIA**	► ***Refer URGENTLY to hospital***
• Some palmar pallor	**ANEMIA**	► Assess the child's feeding and counsel the mother on feeding according to the FOOD box on the COUNSEL THE MOTHER chart ► Give Iron** ► Do blood film or RDT for malaria, if malaria risk is high or has travel history to malarious area in last 30 days. ► Give Mebendazole or Albendazole, if the child is ≥ 2 years old and has not had a dose in the previous six months ► Advise mother when to return immediately ► Follow-up in 14 days
• No palmar pallor	**NO ANEMIA**	► No additional treatment ► Counsel the mother on feeding recommendation

**If child has severe acute malnutrition and is receiving RUTF, DO NOT give iron because there is already adequate amount of iron in RUTF.

CHECK FOR ACUTE MALNUTRTION, IN INFANTS < 6 MONTHS

LOOK AND FEEL

1. Check for presence of oedema of both feet
(or sacrum) Does the child have oedema?

2. Check the weight and Length

- What is the weight for length Z score?

3. Check for signs of medical complications:

- Any General Danger Sign
- Any severe classification
- Pneumonia
- Dehydration*
- Persistent diarrhoea
- Dysentery
- Fever ≥ 38.5ºC
- Measles [now or with eye/mouth complications]
- Low body temperature (<35ºC axillary)
- Dermatosis+++

SIGNS	CLASSIFY AS	TREATMENT
• WFL <-3Z score, and presence of complications OR • Oedema of both feet	**COMPLICATED SEVERE ACUTE MALNUTRITION**	► Give first dose of Ampicillin and Gentamaycin IM ► Treat the child to prevent Low Blood Sugar ► Advise mother on the need of referral ► Refer Urgently to Hospital
• WFL < -3Z score AND no complications AND • No oedema of both feet	**UNCOMPLICATED SEVERE ACUTE MALNUTRITION**	► Counsel on breast feeding and care ► Undertake appropriate counseling and feeding advise in cases where a child is orphaned with no other option for breastfeeding ► Assess for TB infection (Refer table on page 32)*
• WFL ≥ -3Z to < -2Z score, AND • No oedema of both feet	**MODERATE ACUTE MALNUTRITION**	► Assess feeding and advise the mother on feeding ► Assess for TB infection (Refer table on page 32)* ► Follow up in 5 days if feeding problem ► Follow up in 30 days
• WFL ≥ -2Z score AND • No oedema of both feet	**NO ACUTE MALNUTRITION**	► Assess feeding and advise the mother on feeding ► Follow up in 5 days if feeding problem ► If no feeding problem-praise the mother

- Diagnosis of dehydration in SAM is mainly used on the history rather than on patient's examination alone.

CHECK FOR ACUTE MALNUTRTION, IN CHILDREN 6 - 59 MONTHS

LOOK AND FEEL

1. **Check for presence of oedema of both feet** (orsacrum)
   - ♦ Does the child have oedema**? (+, ++, +++)
2. **Check the weight and height**
3. **Check MUAC**
4. **Check for signs of medical complications:**
   - Any General Danger Sign
   - Any severe classification
   - Pneumonia
   - Dehydration*
   - Persistent diarrhea
   - Dysentery
   - Fever ≥ 38.5ºC
   - Measles [now or with eye/mouth complications]
   - Low body temperature (<35ºC axillary)
   - Dermatosis+++

Do Appetite test (Passed, Failed)
- Appetite test should be done ONLY when there is:
- NO medical complication, and
- NO +++ oedema, and
- NO +++ dermatosis***, and
- NO marasmic kwashiorkor ****

SIGNS	CLASSIFY AS	TREATMENT

• WFL/H < -3Z score or MUAC <11 cm or Oedema of both feet (+, ++), and any of the following:
  • Any one of the medical complications , or
  • Failed Appetite test
• +++ Oedema OR
• Marasmic Kwashiorkor (WFL/H < -3Z with oedema or MUAC <11 cm with oedema)
	COMPLICATED SEVERE ACUTE MALNUTRITION	► **Give 1st dose of Ampicillin and Gentamycin IM**
		► **Treat the child to prevent low blood sugar**
		► **Advise the mother to feed and keep the child warm**
		► **Advise mother on the need of referral**
		► **Refer Urgently to Hospital or admit to inpatient care**

• WFL/H < -3Z score or MUAC <11 cm or oedema of both feet (+, ++) AND
  • No medical complication and
  • Pass appetite test
	UNCOMPLICATED SEVERE ACUTE MALNUTRITION	► If Outpatient Treatment Program (OTP) is available, manage as follows:
		► Give RUTF for 7 days,
		► Give oral Amoxicillin for 7 days
		► Give single dose of 5 mg folic acid for those with anemia
		► Counsel on how to feed RUTF to the child
		► Advise the mother when to return immediately
		► Assess for TB infection (Refer table on page 32)
		► Follow-up in 7 days
		► If OTP is not available, refer to a facility with OTP service
		► If there is any social problem at home treat as in patient

• WFL/H ≥ -3Z to < -2Z score or MUAC 11 cm to <12 cm AND • No oedema of both feet	**MODERATE ACUTE MALNUTRITION**	► Refer to Supplementary Feeding Program if available ► Asses for feeding and counsel the mother accordingly ► Assess for possible TB infection (Refer table on page 32) ► If feeding problem, follow up in 5 days ► Follow up in 30 days
• WFL/H ≥ -2Z score or MUAC ≥ 12 cm AND • No oedema of both feet	**NO ACUTE MALNUTRITION**	► Assess feeding and advise the mother on feeding ► Follow up in 5 days if feeding problem ► If no feeding problem-praise the mother

*** Diagnosis of dehydration in SAM is mainly used on the history rather than on patient's examination alone.**
**** Oedema grading: bilateral oedema below ankles (+); below the knees & the elbows (++); generalized oedema involving the upper arms & face (+++).**
***** Dermatosis grading: few discolored or rough patches of skin (+); multiple patches on arms and/or legs (++); flaking skin, raw skin or fissures (openings in the skin) is grade +++ dermatosis.**
****** Child with WFH <-3 Z plus oedema, or with MUAC<11.5cm plus oedema.**

CHECK FOR HIV EXPOSURE AND INFECTION, IN CHILDREN 2 - < 18 MONTHS

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

Classify for HIV Infection

SIGN	CLASSIFY	TREATMENT
• Child DNA PCR positive	**HIV INFECTED**	► Give Cotrimoxazole prophylaxis ► Assess feeding and counsel ► Assess for TB infection (Refer table on page 32) ► Ensure mother is tested & enrolled in HIV care & treatment ► Advise on home care ► Refer to ART clinic for ART initiation/care & treatment
• Mother positive, and child Antibody or DNA/PCR negative, and breastfeeding **OR** • Mother positive, and child antibody & DNA/PCR unknown **OR** • Child antibody positive	**HIV EXPOSED**	► Give Co-trimoxazole prophylaxis ► Assess feeding and counsel ► If child DNA/PCR is unknown, test as soon as possible ► Ensure mother is tested & enrolled in mother-baby cohort follow up at ANC/PMTCT clinic
• Mother and child not tested	**HIV STATUS UNKNOWN**	► Counsel the mother for HIV testing for herself & the child ► 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 ► Encourage mother to be tested ► If mother HIV status is unknown, advise her on HIV testing

Note:

- If DNA PCR isn't available, AND child antibody is positive, AND two of the following are present (Oral thrush, Severe pneumonia or Very Severe Disease); Consider this child to have "**PRESUMPTIVE SEVERE HIV DISEASE**".
And this child should be referred to ART clinic and treated as **"HIV INFECTED"** child.

CHECK FOR HIV EXPOSURE AND INFECTION, IN CHILDREN 18 - 59 MONTHS

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 child on breastfeeding?
  - Yes
  - No
- If no, was child breastfed in the last 6 weeks?
  - Yes
  - No

Classify for HIV Infection

SIGN	CLASSIFY	TREATMENT
• Child antibody positive	**HIV INFECTED**	► Consider Cotrimoxazole prophylaxis ► Assess feeding and counsel ► Advise on home care ► Refer to ART clinic for ARV initiation ► 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 ► 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 mother is tested & enrolled in mother-baby cohort follow up at ANC/PMTCT clinic
• Mother and child not tested	**HIV STATUS UNKNOWN**	► Counsel the mother for HIV testing for herself and the child ► 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 child
• Child antibody negative at least 6 weeks after complete cessation of breastfeeding	**HIV UNINFECTED**	► Advise on home care ► Assess feeding and counsel ► Advise on HIV prevention

ASSESS AND CLASSIFY THE CHILD FOR TUBERCULOSIS

THEN ASK:
- Cough of ≥14 days
- Fever and night sweats*
- Contact history with TB patient **

LOOK AND FEEL:
- Swelling or discharging wound***
- Signs of acute malnutrition ****

Classify

DO THE FOLLOWING IF AVAILABLE:
- AFB or Gene Xpert if there is sputum production
- Chest X-ray*****

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Contact with a known MDR TB patient	**Suspected MDR TB**	► Advise mother on the need of referral ► Refer Urgently to Hospital for MDR TB investigation and Treatment
• Contact with TB patient And two or more of the signs / One or more of the signs if known HIV+ And/ Or • A sign AND AFB/ GeneXpert +ve Or • A sign AND Chest X ray suggestive of TB (eg. meliary pattern)	**TB**	► Council the mother on DOTS principle ► Advise mother to bring any other contacts ► Do provider initiated HIV testing and Counseling ► Link to TB clinic for initiation of treatment and follow up
• Contact to TB patient (non—MDR) and no other finding	**TB Exposed Child**	► Council the mother on the diagnosis of TB exposure and the need for INH prophylaxis ► Link to TB clinic for INH prophylactic-treatment initiation and follow up
• No conclusive sign and • No Contact with TB patient • AFB/GeneXpert –ve And • Chest X– ray not suggestive	**No TB Infection**	► Look and treat for other causes for the main compliant ► Council the mother on the need for INH prophylaxis in the presence of HIV infection for HIV +ve children ► Link to TB clinic for INH prophylactic-treatment initiation and follow up for HIV +ve children ► Follow up in 30 days

* Fever >38^0 C that continues for greater than two weeks after common causes are excluded.

**Contact history with TB patient : a newly diagnosed TB case (within the past one year) in the close contact or household member

***the swelling and discharging wound in the neck or armpit not due to injury, and staying for a duration of more than one month should not be due to injury of any kind.

**** SAM/MAM: severe or moderate acute malnutrition classification from the assessment and classification table for malnutrition.

***** X-Ray suggestive of TB: however x-ray is not commonly available in health centers and primary hospitals but if it is available

CHECK THE CHILD'S IMMUNIZATION AND VITAMIN A STATUS

	AGE	VACCINE	
IMMUNIZATION SCHEDULE:	Birth	BCG	OPV - 0
	6 weeks	DPT1-HepB1-Hib1, PCV-1	OPV - 1 Rota -1
	10 weeks	DPT2-HepB2-Hib2, PCV-2	OPV - 2 Rota -2
	14 weeks	DPT3-HepB3-Hib3, PCV-3	OPV - 3
	9 months	Measles	Vitamin A (if not given with in last 6 months)

VITAMIN A SUPPLEMENTATION

If 6 months or older

- Check if child has received a dose of Vitamin A during the previous 6 months. If not, give Vitamin A supplementation every 6 months up to the age of 5 years.
- Record the dose on the child's card.

ROUTINE WORM TREATMENT

If 2 years or older

- Check if child has received Mebendazole or Albendazole during the previous 6 months. If not, give child Mebendazole or Albendazole every 6 months.
- Record the dose on the child's card.

ASSESS OTHER PROBLEMS

COUNSEL THE MOTHER ABOUT HER OWN HEALTH

..refer page 52

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments.
Exception: Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed.

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

INSTRUCTIONS TO TEACH THE MOTHER

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 for 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 by 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 the oral drug tablets or syrups must be used to finish the course of treatment, even if the child gets better.
- Check the mother's understanding before she leaves the health facility.

Give an Appropriate Oral Antibiotic

♦ FOR PNEUMONIA, ACUTE EAR INFECTION OR VERY SEVERE DISEASE*
FIRST LINE ANTIBIOTIC: Oral Amoxicillin

AGE OR WEIGHT	AMOXICILLIN** Give two times daily for 05 days		
	250 mg Dispersible Tablet (DT)	125 mg Dispersible Tablet (DT)	250mg Syrup
2 months up to 12 months (4 <10 kg)	1	2	5ml
12 months up to 3 years (10 <14 kg)	2	4	10ml
3 years up to 5 years (14 19 kg)	3	6	15ml

* For severe pneumonia or very severe disease use oral Amoxicillin as pre-referral treatment if IV or IM Ampicillin and Gentamycin not available.
** *Amoxicillin is the recommended first-line drug of choice in the treatment of pneumonia due to its efficacy and increasing high resistance to Cotrimoxazole.*

Give an Appropriate Oral Antibiotic

FOR DYSENTRY: Give Ciprofloxacin
First-Line antibiotic: oral Ciprofloxacin

AGE	CIPROFLOXACIN Give 15mg/kg two times daily for 03 days	
	250 mg Tablet	500mg Tablet
Less than 6 months	1/2	1/4
6 months up to 5 years	1	1/2

FOR CHOLERA:
First-Line Antibiotic for Cholera: **AMOXICILLIN**
Second-Line Antibiotic for Cholera: **TETRACYCLIN**

AGE or WEIGHT	AMOXICILLIN	TETRACYCLIN ➢ Give four times daily for 3 days
	See doses above	CAPSULE 250mg
2 months up to 4 months (4-6 kg)		
4 months up to 12 months (6-10 kg)		½
12 months up to 5 years (10-19 kg)		1

***Follow the latest national recommendation accordingly

FOR SEVERE ACUTE MALNUTRITION :
Give Amoxicillin for 7 days
First-Line Antibiotic: **AMOXICILLIN**

WEIGHT	AMOXICILLIN Give 2 times daily for 7 days		
	SYRUP 125mg per 5 ml	DISPERSIBLE TABLET (DT) 250mg	DISPERSIBLE TABLET (DT) or CAPSULE 500mg
< 5 kg	5 ml	½	
5-10 Kg	10 ml	1	
10-20 kg	20 ml	2	1
20-35 kg		2½	1½
>35 kg			2

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Give Inhaled Salbutamol for Wheezing

USE OF A SPACER*

A spacer is a way of delivering the bronchodilator drugs effectively into the lungs. No child under 5 years should be given an inhaler without a spacer. A spacer works as well as a nebulizer if correctly used.

- From Salbutamol metered dose inhaler (100Ug/puff) give 2 puffs
- Repeat up to 3 times every 15-20 minutes before classifying pneumonia if wheezing with either fast breathing or chest indrawing.

Spacers can be made in the following way:

- Use a 500ml drink bottle or similar.
- Cut a hole in the bottle base in the same shape as the mouthpiece of the inhaler.
- This can be done using a sharp knife.
- Cut the bottle between the upper quarter and the lower 3/4 and disregard the upper quarter of the bottle.
- Cut a small V in the border of the large open part of the bottle to fit to the child's nose and be used as a mask.
- Flame the edge of the cut bottle with a candle or a lighter to soften it.
- In a small baby, a mask can be made by making a similar hole in a plastic (not polystyrene) cup.
- Alternatively commercial spacers can be used if available.

To use an inhaler with a spacer:

- Remove the inhaler cap. Shake the inhaler well.
- Insert mouthpiece of the inhaler through the hole in the bottle or plastic cup.
- The child should put the opening of the bottle into his mouth and breath in and out through the mouth.
- A carrier then presses down the inhaler and sprays into the bottle while the child continues to breath normally.
- Wait for three to four breaths and repeat.
- For younger children place the cup over the child's mouth and use as a spacer in the same way.

**If a spacer is being used for the first time, it should be primed by 4-5 extra puffs from the inhaler.*

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Give an Oral Antimalarial

- First line for P. falciparum and mixed infections (falciparum + vivax malaria) - **Artemether-Lumefantrine**
- First line for P. vivax - **CHLOROQUINE**
- Second line antimalarial: **QUININE**

Artemether-Lumefantrine

Tablet containing 20 mg Artemether and 120 mg Lumefantrine.

Weight (kg)	Age	Number of tablets per dose twice daily for 3 days
<15	< 3 years	1
15-25	3 - 7 years	2
25-35	7 - 10 years	3
35+	10 + years	4

Quinine:

8 mg base/kg, 3 times daily for 7 days

Weight (kg)	Age	Oral tablets, dosage	
		200 mg salt	300 mg salt
4-6	2 - 4 months	¼	
6-10	4 -12 months	1/3	¼
10-12	1 - 2 years	½	1/3
12-19	2 - 5 years	¾	½

Chloroquine

- Tablet 150mg base (250mg Salt)
- Syrup 50mg base in 5ml (80mg Salt per 5ml)
- A total dose of 25mg base per kg over 3 days (10mg base per kg on day 1 and 2 and, 5mg base per kg on day 3).

Weight (kg)	Age (month or year)	Day 1	Day 2	Day 3
5-7	<4 month			
	Tablet	1/4	1/4	1/4
	Syrup	5 ml	5 ml	2.5 ml
7 – 11	4-11 month			
	Tablet	1/2	1/2	1/2
	Syrup	7.5 ml	7.5 ml	5 ml
11 – 15	1-<3 year			
	Tablet	1	1	1/2
	Syrup	12.5 ml	12.5 ml	7.5 ml
15 – 19	3-<5 year			
	Tablet	1	1	1
	Syrup	15 ml	15 ml	15 ml
19 – 25	5-<8 year			
	Tablet	1 1/2	1 1/2	1
	Syrup	20 ml	20 ml	15 ml
25 – 36	8-<11 year			
	Tablet	2 ½	2 ½	1
36 – 50	11-<14 year			
	Tablet	3	3	2
50+	14+ year			
	Tablet	4	4	2

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

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**

Recommended Cotrimoxazole dosage for infants and children			
Age	**Syrup** (40mg Trimethoprim + 200mg Sulphamethoxazole in 5 mls)	**Paediatric tablet** (20 mg Trimethoprim + 100mg Sulphamethoxazole)	**Adult tablet** (**Single strength tablet)** (80mg Trimethoprim + 400mg Sulphamethoxazole)
< 6 months	2.5 ml	1 tablet	¼ tablet
6 months – < 6 years	5 ml	2 tablets	½ tablet
6 – 14 years	10 ml	3 tablets	1 tablet

Give Paracetamol for High Fever

- (≥38.5˚C) or ear pain
- Give Paracetamol every 6 hours until high fever or ear pain is gone

PARACETAMOL						
AGE or WEIGHT	**TABLET (100mg)**	**TABLET (500mg)**	**Syrup (120mg/5ml)**	**Syrup (250mg/5ml)**	**Suppository (125mg)**	**Suppository (250mg)**
2 months up to 3 years (4 -14 kg)	1	¼	5 ml	2.5 ml	1	
3 years up to 5 years (14 -19 kg)	2 ½	½	10 ml	5 ml	2	1

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

➢ Give Vitamin A

- **For MEASLES, MEASLES with EYE/MOUTH complications or PERSISTENT DIARRHOEA,** give three doses
  - Give first dose in health facility
  - Give two doses in the health facility on days 2 and 15
- **For SEVERE COMPLICATED MEASLES or SEVERE PERSISTENT DIARRHOEA,** give one dose in health facility and then refer**.**
- **For SEVERE MALNUTRITION WITH OEDEMA:** give vitamin A on the day of discharge (for those children who have completed Phase 2 as an in-patient) or at the 4th week of the treatment for those in out-patient care.
- For severe malnutrition without oedema, give vitamin A if the child did not receive within the last 6 months.
- **For Routine Vitamin A supplementation for children 6 months up to 5 years,** give one dose in health facility if the child has not received a dose within the last 6 months.

AGE	VITAMIN A CAPSULES		
	200 000 IU	**100 000 IU**	**50 000 IU**
Up to 6 months		½ capsule	1 capsule
6 months up to 12 months	½ capsule	1 capsule	2 capsules
12 months up to 5 years	1 capsule	2 capsules	4 capsules

➢ Give Iron

- Give one dose daily for 14 days

AGE or WEIGHT	IRON TABLET Ferrous sulfate 300 mg (60 mg elemental iron)	IRON SYRUP Ferrous Fumarate 100 mg per 5 ml (20 gm elemental iron per ml)
2 months up to 4 months (4-<6 kg)		1.00 ml (15 drops)
4 months up to 12 months (6-<10 kg)		1.25 ml (20 drops)
12 months up to 3 years (10-1<4 kg)	½ tablet	2.00 ml (30 drops)
3 years up to 5 years (14-19 kg)	½ tablet	2.5 ml (35 drops)

➢ Give Zinc for all children with diarrhoea

- Once daily for 10 days

AGE	DOSE (20 mg tablet)
0-6 months	1/2 tablet
6 months and above	1 tablet

For infants, dissolve the Zinc tablet in a small amount (5 ml) of expressed breast milk, ORS, or clean water in a small spoon. Older children can swallow, chew or take it dissolved in a small amount of clean water.

➢ Give Mebendazole or Albendazole

Age	Give a single dose if child is ≥ 2 years and didn't get within the previous 6 months			
	Mebendazole 500 mg tablet, or 5 tablets of 100 mg	Mebendazole Syrup, 100mg/5ml	Albendazole 400mg tablet	Albendazole Syrup, 100mg/5ml
2 - 5 years	1 tablet (500mg)	5 tsp (25ml)	1 tablet	4 tsp (20ml)

TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

INSTRUCTIONS TO TEACH THE MOTHER

Follow the instructions below for every local treatment to be given 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 does the first treatment in the clinic (except remedy for cough or sore throat).
- Tell her how often to do the treatment at home.
- If needed for treatment at home, give mother the tube of Tetracycline ointment or a small bottle of gentian violet.
- Check the mother's understanding before she leaves the clinic.

➢ Treat Eye Infection with Tetracycline Eye Ointment

- Clean both eyes 3 times daily.
  - Wash hands.
  - Ask child to close the eye.
  - Use clean cloth and water to gently wipe away pus
- Then apply Tetracycline eye ointment in both eyes 3 times daily.
  - Ask the child to look up
  - Squirt a small amount of ointment on the inside of the lower lid.
  - Wash hands again.
- Treat until redness is gone.
- Do not use other eye ointments or drops, or put anything else in the eye.

➢ Treat Mouth Ulcers with Gentian Violet (0.25%)

Treat for mouth ulcers two times daily

- Wash hands
- Wash the child's mouth with a clean soft cloth wrapped around the finger and wet with salt water
- Paint the mouth with 0.25% GV (dilute the 1% solution to 1:3 with water)
- Wash hands again
- Continue using GV for 48 hours after the ulcers have been cured
- Give Paracetamol if needed for pain

➢ Dry the Ear by Wicking and Give Quinolone Eardrops

(Ciprofloxacin, Norfloxacin, or Ofloxacin ear drops)

Dry the ear at least 3 times daily, till discharge stops

- 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
- Instil Ciprofloxacin eardrops (2-3 drops) after dry wicking three times daily for two weeks

➢ Treat Thrush with Nystatin or Gentian Violet (0.25%)

Treat for thrush four times daily for 7 days

- Wash hands
- Wet a clean soft cloth with salt water and use it to wash the child's mouth
- Instill Nystatin 1 ml four times a day or paint with GV as above for 7 days
- Avoid feeding for 20 minutes after medication
- If breastfed, check mother's breasts for thrush. If present treat with Nystatin or GV
- Advise mother to wash breasts after feeds. If bottle fed advise change to cup
- If severe, recurrent or pharyngeal thrush consider HIV
- Give Paracetamol if needed for pain

➢ Soothe the Throat, Relieve the Cough with a Safe Remedy

- Safe remedies to recommend:
  - Breast milk for exclusively breastfed infant.
  - Home fluids such as tea with honey, fruit juices
- Harmful remedies to discourage: Cough syrups containing Diphenyl Hydramine and/or Codeine. Examples: Benylin with and without Codein, Berantin.

GIVE THESE TREATMENTS IN CLINIC ONLY

INSTRUCTIONS ON HOW TO GIVE TREATMENTS

- Explain to the mother why the drug is given.
- Determine the dose appropriate for the child's weight (or age).
- Use a sterile needle and sterile syringe. Measure the dose accurately.
- Give the drug as an intramuscular injection.

➢ **If child cannot be referred, follow the instructions provided.**

➢ Give an Intramuscular Antibiotic

FOR CHILDREN BEING REFERRED URGENTLY WHO CANNOT TAKE AN ORAL ANTIBIOTIC:

- **Sick child:** Give first dose of IV/IM Ampicillin/Chloramphenicol and refer child urgently to hospital,
- **Young infant:** Give first dose of Ampicillin (50mg/kg) and Gentamycin (7.5mg/kg) and refer child urgently to hospital

IF REFERRAL IS NOT POSSIBLE OR DELAYED

- Repeat the Chloramphenicol injection every 12 hours for 5 days, **or**
- Repeat the Ampicillin injection every 6 hours (200mg/kg/day)
- Repeat the Gentamycin every 24 hours (7.5mg/kg/day)
- Where there is a strong suspicion of meningitis, the dose of Ampicillin can be increased to 300mg/kg/day in 4 divided doses.

➢ Then change to an appropriate oral antibiotic to complete 10 days of treatment.

AGE or WEIGHT	Ampicillin 500 mg vial	Gentamycin 2ml 40mg/ml vial	**CHLORAMPHENICOL** Dose: 40 mg per kg (Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml)
2 months up to 4 months (4 – 6 kg)	1 ml	0.5-1.0 ml	1.0 ml = 180 mg
4 months up to 12 months (6 – 10kg)	2 ml	1.1-1.8 ml	2.0 ml = 360 mg
12 months up to 3 years (10 – 14kg)	3 ml	1.9 - 2.7 ml	2.5 ml = 450 mg
3 years up to 5 years (14 – 19kg)	5 ml	2.8 - 3.5 ml	3.5 ml = 630 mg

➢ Treat a Convulsing Child with Diazepam Rectally

MANAGE THE AIRWAYS

- Turn the child on his/her side to avoid aspiration
- Do not insert anything into the mouth
- If the child is blue, open the mouth and make sure the airway is clear
- If necessary, remove secretions from the mouth by inserting a catheter via the nose.

GIVE DIAZEPAM RECTALLY

- Draw up the dose from an intravenous preparation of Diazepam into a small syringe, then **REMOVE THE NEEDLE.**
- Insert approximately 5 cm of a nasogastric tube into the rectum.
- Inject the Diazepam solution into the nasogastric tube and flush it with 2 – 3 ml of water at room temperature.
- Give 0.5mg/kg Diazepam injection solution per rectum using a small syringe without a needle (like a tuberculin syringe) or using a catheter.
- If **High Fever** (temperature 40°C or more), **lower the fever**. Sponge the child with room temperature water.

AGE or WEIGHT	**DIAZEPAM RECTALLY** 10 mg/2 ml Solution, Dose 0.5 mg/kg
2 months up to 6 months (5 - 7 kg)	0.5ml
6 months up to 12months (7 - <10 kg)	1ml
12 months up to 3 years (10 - <14 kg)	1.5ml
3 years up to 5 years (14-19 kg)	2.0ml

➢ 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 breast milk substitute.
  - If neither of these is available, give sugar water.
  - Give 30-50 ml of milk or sugar water before departure.
  - **To make sugar water: Dissolve 4 level teaspoons of sugar (20 grams) in a 200-ml cup of clean water.**
- **If the child is not able to swallow:**
  - Give 50 ml of milk or sugar water by nasogastric tube.

GIVE THESE TREATMENTS IN CLINIC ONLY

PARENTERAL ARTESUNATE: First line treatment for VERY SEVERE FEBRILE DISEASE **(only for High/Low malaria risk areas**)

- Give Artesunate 2.4 mg/kg preferably IV, or IM (alternative) on admission (time = 0), then at 12 h and 24 h, then once a day for 5-7 days. After a minimum of 24 hours of parenteral Artesunate treatment, and as soon as patient is able to take tablets, complete the treatment with full dose of oral Artemether-Lumefantrine.
- For children below 20kg of weight, give 3mg/kg per dose

AGE or WEIGHT	DOSES OF PARENTERAL ARTESUNATE	
	To prepare IV infusion of 10 mg/ml, reconstitute 60mg Artesunate powder with 1 ml of 5% sodium bicarbonate solution, then shake 2-3 minutes, then add 5 ml of 5% glucose or normal saline*	To prepare IM of 20 mg/ml, reconstitute 60mg Artesunate powder with 1 ml of 5% sodium bicarbonate solution, then shake 2-3 minutes, then add 2 ml of 5% glucose or normal saline
2 - 4 months (5 – 6 kg)	1.25 ml	0.6ml
4 - 12 months (6 – 10 kg)	2 .5ml	1.25ml
12 - 24 months (10 – 12kg)	3 ml	1.5 ml
2 - 3 years (12 – 14 kg)	4.0 ml	2ml
3 - 5 years (14 – 19kg)	4.5 ml	2.25 ml
19 - 22 kg	6ml	3ml

Artesunate rectal suppository: pre-referral for VERY SEVERE FEBRILE DISEASE (**only for high/Low malaria risk areas**). Pre-referral single dose for children below 6 years of age (10mg/kg per dose).

Weight (kg)	Age	Artesunate (mg)	Regimen (single dose)
5–9	2–13 months	50	One 50-mg suppository
9–20	13–43 months	100	One 100-mg suppository
20–30	43–60 months	200	Two 100-mg suppository

*Infuse slowly for intravenous administration (3-4 ml per minute)
NB:-Hold the buttocks together for 10 min to ensure retention of the rectal Artesunate. If the Artesunate is expelled from the rectum within 30 min of insertion, a second suppository should be inserted.

Artemether IM: Artemether is an Alternative Pre-referral drug, where Artesunate suppository is not available.
- Dose - 3.2 mg/kg body weight Artemether IM

Quinine: for VERY SEVERE FEBRILE DISEASE, if Artesunate is not available

FOR CHILDREN BEING REFERRED WITH VERY SEVERE FEBRILE DISEASE:

- Check which Quinine formulation is available in your clinic.
- Give first dose of intramuscular Quinine and refer child urgently to hospital. Advise mother to keep child lying down on his way to the hospital

IF REFERRAL IS NOT POSSIBLE:

- Give first dose of intramuscular Quinine –
  - Loading dose of 20mg/kg IM (divided into 2 sites, anterior thigh)
- The child should remain lying down for one hour.
- Repeat the Quinine injection at dose of 10mg/kg, every 8 hours until the child is able to take an oral antimalarial. After 48 hours of parenteral therapy, reduce the maintenance dose by 1/3 to 1/2, 5-7mg/kg every 8 hours. It is unusual to continue Quinine injections for more than 4-5 days.

AGE or WEIGHT	INTRAMUSCULAR QUININE	
	150mg/ml* (in 2 ml ampoules)	300 mg/ml* (in 2 ml ampoules)
2 months up to 4 months (4 – 6 kg)	0.4 ml	0.2 ml
4 months up to 12 months (6 – 10 kg)	0.6 ml	0.3 ml
12 months up to 2 years (10 – 12kg)	0.8 ml	0.4 ml
2 years up to 3 years (12 – 14 kg)	1.0 ml	0.5 ml
3 years up to 5 years (14 – 19kg)	1.2 ml	0.6 ml

* Quinine salt
NB: If possible, for intramuscular use, Quinine should be diluted in sterile Normal Saline to a concentration of 60mg/ml.

GIVE EXTRA FLUIDS FOR DIARRHOEA AND CONTINUE FEEDING (See FOOD advice on COUNSEL THE MOTHER chart)

➢ *Plan A: Treat Diarrhoea at Home*

Counsel the mother on the 4 Rules of Home Treatment:
Give Extra Fluids, Give Zinc Supplements, Continue Feeding, When to Return

1. *GIVE EXTRA FLUIDS* (as much as the child will take)

➢ **TELL THE MOTHER:**

- Breastfeed frequently and for longer at each feed.
- If the child is exclusively breastfed, give ORS in addition to breast milk.
- If the child is not exclusively breastfed, give one or more of the following: ORS solution, food-based fluids (such as soup, rice water and yoghurt drinks), or clean water.

It is especially important to give ORS at home when:

- The child has been treated with Plan B or Plan C during this visit.
- The child cannot return to a clinic if the diarrhoea gets worse.

➢ **TEACH THE MOTHER HOW TO MIX AND GIVE ORS.**
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 10 ml/kg**

Up to 2 years	50 to 100 ml after each loose stool
2 years or more	100 to 200 ml after each loose stool

Tell the mother 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 SUPPLEMENTS :

➢ **TELL THE MOTHER HOW MUCH ZINC TO GIVE**:

0-6 months-	1/2 tablet for 10 days
6 months or more -	1 tablet for 10 days

➢ **SHOW THE MOTHER HOW TO GIVE ZINC SUPPLEMENTS**

Infants- dissolve tablet in a small amount of expressed breast milk, ORS or clean water in a cup
Older children- tablets can be chewed or dissolved in a small amount of clean water in a cup

3. CONTINUE FEEDING
4. WHEN TO RETURN } **See COUNSEL THE MOTHER chart**

➢ *Plan B: Treat Some Dehydration with ORS*

Give in clinic recommended amount of ORS over 4-hour period

➢ **DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS**

AGE	Up to 4 months	4 - 12 months	12 mo - 2 years	2 - 5 years
Weight in kg	<6 kg	6-10kg	10-12 kg	12-19 kg
ORS in ml	200-400	400-700	700-900	900-1400
ORS in coffee cups (70ml)	3-6	6-10	10-13	13-20

** Use the child's age only when you do not know the weight. 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 than shown, give more.
- For infants under 6 months who are not breastfed, also give 100-200 ml clean water during this period.

➢ **SHOW THE MOTHER HOW TO GIVE ORS SOLUTION:**

- Give frequent small sips from a cup.
- If the child vomits, wait 10 minutes. Then continue, but more slowly.
- Continue breastfeeding whenever the child wants.

➢ **AFTER 4 HOURS:**

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

➢ **IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT:**

- Show her how to prepare ORS solution at home.
- Show her how much ORS to give to finish 4-hour treatment at home.
- Give her enough ORS packets to complete rehydration. Also give her 2 packets as recommended in plan A.
- **Explain the 4 Rules of Home Treatment**:

1. GIVE EXTRA FLUID
2. GIVE ZINC
3. CONTINUE FEEDING
4. WHEN TO RETURN } **See Plan A for recommended fluid and See COUNSEL THE MOTHER chart**

GIVE EXTRA FLUID FOR DIARHOEA AND CONTINUE FEEDING *(See FOOD advice on COUNSEL THE MOTHER chart)*

➢ Plan C: Treat Severe Dehydration Quickly

➢ **FOLLOW THE ARROWS. IF ANSWER IS "YES", GO ACROSS. IF "NO" GO DOWN.**

START HERE

Can you give Intravenous (IV) Fluid immediately?

YES →

- Start IV fluid immediately. If the child can drink, give ORS by mouth while the drip is set up. Give 100ml/kg Ringer's Lactate Solution (or, if not available, normal saline), divided as follows:

AGE	First give 30 ml/kg in:	Then give 70 ml/kg in:
Infants (under 12 months)	1 hour*	5 hours
Children (12 months up to 5 years)	30 minutes*	2 ½ hours

* Repeat once if radial pulse is still very weak or not detectable

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

NO ↓

Is IV treatment available nearby (within 30 minutes)?

YES →

- Refer URGENTLY to hospital for IV treatment.
- If the child can drink, provide the mother with ORS solution and show her how to give frequent sips during the trip

NO ↓

Are you trained to use a naso-gastric (NG) tube for rehydration?

YES →

- Start rehydration by tube (or mouth) with ORS solution give 20 ml/kg/hour for 6 hours (total of 120 ml/kg)
- Reassess the child every 1-2 hours:
  - If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly.
  - If hydration status is not improving after 3 hours, send the child for IV therapy.
- After 6 hours, reassess the child. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

NO ↓

Can the child drink?

NO ↓

Refer URGENTLY to hospital for IV or NG treatment

NOTE:
If the child is not referred to hospital, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth.

COUNSEL THE MOTHER

FOOD

➢ Assess the Child's Feeding

If child is < 2 years old, or has anemia or has MAM

Ask questions about the child's usual feeding and feeding during this illness. Note whether the mother is HIV infected, uninfected, or does not know her status. Compare the mother's answers to the feeding recommendations for the child's age in the box below.

ASK:

- Do you breastfeed your child? Yes_____ No_____
  - If Yes, how many times in 24 hours? _____ times.
  - Do you breastfeed during the night? Yes_____ No_____
- Does the child take any other food or fluids? Yes_____ No_____
  - If Yes, what food or fluids? _____
  - How much is given at each feed?_____
  - How many times in 24 hours? _____ times.
  - What do you use to feed the child? Cup____ Bottle____ Other_____
- If on replacement milk: What replacement milk are you giving?_____
  - How many times in 24 hours? _____ times
  - How much is given at each feed? _____
  - How is the milk prepared? _____
  - How are you cleaning the utensils? _____
- If **underweight or moderately malnourished**:
  - How large are servings? _____
  - Does the child receive his own serving? Yes_____ No_____
  - Who feeds the child and how? _____
- During the illness, has the child's feeding changed? Yes_____ No_____

FEEDING RECOMMENDATIONS

Feeding Recommendations FOR ALL CHILDREN during Sickness and Health and including HIV Exposed Children on ARV Prophylaxis

Newborn, birth up 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 at least every 2 to 3 hours. Wake the baby for feeding after 3 hours, if baby does not wake self.
- 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 HIV mother-to-child transmission when compared to exclusive breastfeeding.

1 week up to 6 months

- Breastfeed as often as the child wants, day and night, at least 8 times in 24 hours.
- Feed your child only breast milk for the first 6 months, not even giving water.
- Empty one breast before switching to the other for your baby to get the most nutritious *hind milk.*
- During illness and for at least up to 2 weeks after the illness increase the frequency of breastfeeding to recover faster.
- Do not give other foods or fluids including water.
- Expose child to sunshine for 15 to 20 minutes daily starting within 2 weeks of age.

6 up to 9 months

- Continue breast feeding.
- Start complementary foods at 6 months of age.
- Give adequate servings of freshly prepared and enriched; porridge made of cereal and legume mixes, *shiro fitfiit, merek fitfit*, mashed potatoes and carrot, mashed gommen, eggs and fruits.
- **Enrich** the food by adding some oil or butter every time; give also animal foods (meat, liver, fish, eggs), legumes, vegetables (green leafy, carrots) and yellow fruits (orange, *papaya, mangos*)
- Give these foods; 3 times/day plus 2 snacks/*mekses,* if breast feeding or taking other milk.
- Give these foods; 5 times/day plus 2 snacks/*mekses,* if not breast feeding or taking other milk feeds.
- Increase intake of food and fluids during illness, and give one additional meal of solid food for about 2 weeks after illness for fast recovery.
- Give Vitamin A supplements from the age of 6 months, 2 times per year.
- Expose child to sunshine for 15 to 20 minutes daily.

9 up to 12 months

- Breastfeed as often as your child wants.
- Also give a variety of mashed or finely chopped family food, including animal source foods and vitamin A-rich fruits and vegetables.
- Give 1/2 cup at each meal (1 cup = 250 ml).
- Give 3 to 4 meals each day.
- Offer 1 or 2 snacks between meals. The child will eat if hungry.
- For snacks, give small chewable items that the child can hold. Let your child try to eat the snack, but provide help if needed.

12 months up to 2 years

- Breastfeed as often as the child wants.
- Give adequate servings of enriched family foods: porridge made of cereal and legume mixes, shiro, kik, merek fitfit, mashed potatoes and carrot, gommen, undiluted milk and egg and fruits.
- Add some extra butter or oil to child's food. Give also animal foods (meat, liver, fish, eggs), legumes, vegetables (green leafy, carrots) and yellow fruits (orange, *papaya, mangos*).
- Give these foods at least 3-4 meals plus 2 snacks/m*ekses* if breast feeding or taking other milk.
- Give these foods; 5 times/day plus 2 snacks / *mekses,* if not breast feeding or taking other milk feeds.
- Babies who stopped breastfeeding at early age should also get adequate other milk feeds besides complementary feeding.
- Give your baby his/her own servings and actively feed the child.
- Give freshly prepared food and use clean utensils.
- Increase intake of food and fluids during illness, and give one additional meal of solid food for about 2 weeks after illness for fast recovery.
- Give Vitamin A supplements and Mebendazole/Albendazole every 6 months.

2 Years and Older

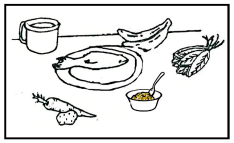
- Give adequate servings of freshly prepared enriched family foods, 3 meals a day.
- Also, twice daily, give nutritious food between meals, such as: egg, milk, fruits, kitta, dabo, ripe yellow fruits.
- Give your baby his/her own servings and actively feed the child.
- Give freshly prepared food and use clean utensils.
- Increase intake of food and fluids during illness, and give one additional meal of solid food for about 2 weeks after illness for fast recovery.
- Give Vitamin A supplements and Mebendazole/Albendazole every 6 months.

Feeding recommendations for a child with UNCOMPLICATED SEVERE ACUTE MALNUTRITION

- If still breastfeeding, give more frequent, longer breastfeeds, day and night
- Always give breast milk before RUTF (Ready to Use Therapeutic Food)
- Feed the child RUTF until cured
- Do not give other food than RUTF except breast milk
- Offer plenty of clean water to drink with RUTF
- Give the RUTF only to the severely malnourished child

Feeding Recommendations for a child with PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent, longer breastfeeds, day and night.
- If taking other milk:
  - Replace with increased breastfeeding OR
  - Replace with fermented milk products, such as yoghurt OR
  - Replace half the milk with nutrient-rich semisolid food.



COUNSEL THE MOTHER

Feeding recommendations for non-breastfeeding child by any reason and HIV-infected mother who chose formula feeding after adequate counseling

Up to 6 Months of Age

- FORMULA FEED exclusively. Do not give any breast milk (For HIV Exposed infants).
- Other foods or fluids are not necessary.
- Prepare correct strength and amount just before use. Use milk within two 2 hrs. Discard any left over - a fridge can store formula for 24hrs.
- Cup feeding is safer than bottle feeding. Clean the cup and utensils with hot soapy water.
- Give the following amounts of formula 8 to 6 times per day:

Age in months	Approx. amount & times per day
0 up to 1	60 ml x 8
1 up to 2	90 ml x 7
2 up to 4	120 ml x 6
4 up to 6	150 ml x 6

- Expose child to sunshine for 15 to 20 minutes daily starting within 2 weeks of age.

6 Months Up to 12 Months

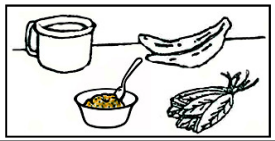
♦ **Give 1-2 cups (250 - 500 ml) of infant formula or boiled, then cooled, full cream milk. Give milk with a cup, not a bottle.**

- Start complementary foods at 6 months of age.

♦ **Start by giving 2-3 tablespoons of food 2 - 3 times a day. Gradually increase to 1/2 cup (1 cup = 250 ml) at each meal and to giving meals 3-4 times a day. Offer 1-2 snacks each day when the child seems hungry.**

♦ **For snacks give small chewable items that the child can hold. Let your child try to eat the snack, but provide help if needed.**

- Give adequate servings of freshly prepared and enriched; porridge made of cereal and legume mixes, *shiro fitfiit, merek fitfit*, mashed potatoes and carrot, mashed gommen, eggs and fruits.
- **Enrich** the food by adding some oil or butter every time; give also animal foods (meat, liver, fish, eggs), legumes, vegetables (green leafy, carrots) and yellow fruits (orange, *papaya, mangos*).
- Give these foods; 3 times/day plus 2 snacks/*mekses,* if breast feeding or taking other milk.
- Give these foods; 5 times/day plus 2 snacks / *mekses,* if not breast feeding or taking other milk feeds.
- Increase intake of food and fluids during illness, and give one additional meal of solid food for about 2 weeks after illness for fast recovery.
- Give Vitamin A supplements from the age of 6 months, 2 times per year.
- Expose child to sunshine for 15 to 20 minutes daily.

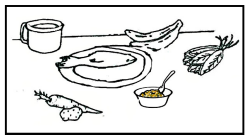


12 Months Up to 2 Years

♦ **Give 1-2 cups (250 - 500 ml) of boiled, then cooled, full cream milk or infant formula. Give milk with a cup, not a bottle.**

♦ **Give 3/4 cup (1 cup = 250 ml) at each meal. Offer 1-2 snacks between meals. Continue to feed your child slowly, patiently. Encourage - but do not force - your child to eat.**

- Give adequate servings of enriched family foods: porridge made of cereal and legume mixes, shiro, kik, merek fitfit, mashed potatoes and carrot, gommen, undiluted milk and egg and fruits.
- Add some extra butter or oil to child's food. Give also animal foods (meat, liver, fish, eggs), legumes, vegetables (green leafy, carrots) and yellow fruits (orange, *papaya, mangos*)
- Give these foods at least 3-4 meals plus 2 snacks/*mekses* if breast feeding or taking other milk.
- Give these foods; 5 times/day plus 2 snacks / *mekses,* if not breast feeding or taking other milk feeds.
- Babies who stopped breastfeeding at early age should also get adequate other milk feeds besides complementary feeding.
- Give your baby his/her own servings and actively feed the child.
- Give freshly prepared food and use clean utensils.
- Increase intake of food and fluids during illness, and give one additional meal of solid food for about 2 weeks after illness for fast recovery.
- Give Vitamin A supplements and Mebendazole/Albendazole every 6 months.



2 Years and Older

- Give adequate servings of freshly prepared enriched family foods, 3 meals a day.
- Also, twice daily, give nutritious food between meals, such as: Egg, milk, fruits, kitta, dabo, ripe yellow fruits.
- Give your baby his/her own servings and actively feed the child.
- Give freshly prepared food and use clean utensils.
- Increase intake of food and fluids during illness, and give one additional meal of solid food for about 2 weeks after illness for fast recovery.
- Give Vitamin A supplements and Mebendazole / Albendazole every 6 months.

Safe preparation of replacement feeding

♦ **Infant formula: Always use a marked cup or glass and spoon to measure water and the scoop to measure the formula powder. Wash your hands before preparing a feed. Bring the water to boil and then let it cool. Keep it covered while it cools. Measure the formula powder into a marked cup or glass. Make the scoops level. Put in one scoop for every 25 ml of water. Add a small amount of the cooled boiled water and stir. Fill the cup or glass to the mark with the water. Stir well. Feed the infant using a cup. Wash the utensils.**

♦ **Cow's milk : Cow' s or other animal milks are not suitable for infants below 6 months of age (even modified). For a child between 6 and 12 month of age: boil the milk and let it cool (even if pasteurized).**

➢ **Feed the baby using a cup.**

Counsel the Mother About Feeding Problems

If the child is not being fed as described in the above recommendations, counsel the mother accordingly. In addition**:**

- If the mother reports difficulty with breastfeeding, assess breastfeeding (*See YOUNG INFANT* chart.)
  As needed, show the mother correct positioning and attachment for breastfeeding.

- **If the child is less than 6 months old and is taking other milk or foods:**
  - Build mother's confidence that she can produce all the breast milk that the child needs.
  - Suggest giving more frequent, longer breastfeeds, day or night, and gradually reducing other milk or foods.

- **If other milk needs to be continued, counsel the mother to:**
  - Breastfeed as much as possible, including at night. (for infants who are not HIV exposed).
  - Make sure that other milk is a locally appropriate breast milk substitute. (for infants who are not HIV exposed).
  - Make sure other milk is correctly and hygienically prepared and given in adequate amounts.
  - Finish prepared milk within an hour.
  - In an HIV-Exposed infant with no hope of adequate breast milk production, stop breast feeding and continue with appropriate replacement milk.

- **If the child is being given diluted milk or gruel (*muk*):**
  - Do not dilute the milk
  - Remind mother that thick foods which are dense in energy and nutrients are needed by infants and young children.

- **If the mother is using a bottle to feed the child:**
  - Recommend substituting a cup for bottle.
  - Show the mother how to feed the child with a cup (*senee or finjal)*

- **If the child is not being fed actively, counsel the mother to:**
  - Sit with the child and encourage eating.
  - Give the child an adequate serving in a separate plate or bowl.

- **If the child is not feeding well during illness, counsel the mother to:**
  - Breastfeed more frequently and for longer if possible.
  - Use soft, varied, appetizing, favorite foods to encourage the child to eat as much as possible, and offer frequent small feedings.
  - Clear a blocked nose if it interferes with feeding.
  - Expect that appetite will improve as child gets better.

Counsel the Mother About Feeding Problems (contd.)

If the child is not being fed as described in the above recommendations, counsel the mother accordingly.
In addition:

- **If the mother is not giving Vitamin A-rich foods:**
  - Encourage her to provide Vitamin A-rich foods frequently - Cabbage (*gommen*), liver, carrot, egg.

- **If the mother is not giving the young child a share of meat, chicken or fish when these are eaten by the family:**
  - Explain young child needs them and encourage her to provide whenever they are available in the household.

- **If the child has poor appetite**

  - Plan small frequent meals.
  - Give milk rather than other fluids except where there is diarrhoea with some dehydration.
  - Give snacks between meals.
  - Give high energy foods by adding oil or butter to the food.
  - Check regularly for oral thrush or ulcers.

- **If the child has sore mouth or ulcers**

  - Give soft foods that will not burn the mouth, such as eggs, mashed potatoes, pumpkin or avocado.
  - Avoid spicy, salty or acid foods.
  - Chop foods finely.
  - Give cold drinks or ice (if available) before feeding.

- **Follow-up any feeding problem in 5 days.**

COUNSEL THE MOTHER about Safe Preparation of Formula Feeding

Safe Preparation of Formula Milk

Always use a marked cup or glass and spoon to measure water and the scoop to measure the formula powder.

Wash your hands before preparing a feed.

Bring the water to the boil and then let it cool. Keep it covered while it cools.

Measure the formula powder into a marked cup or glass according to the preparation advise on the package of the formula milk.

Add a small amount of the cooled boiled water and stir. Fill the cup or glass to the mark with the water. Stir well.

Feed the baby using a cup.

Wash the utensils.

Counsel the HIV Positive Mother Who Has Chosen Not to Breastfeed despite adequate counseling

The mother or caretaker should have received full counseling before making this decision

- Asses and ensure that the mother or caretaker has an adequate supply of commercial infant formula (at least for 12 months).
- Asses and ensure that the mother or caretaker knows how to prepare milk correctly & safely and has the facility and resources to do it.
- Demonstrate how to feed with a cup and spoon rather than a bottle.
- Make sure that the mother or caretaker understands that mixing breastfeeding with replacement feeding may increase the risk of HIV infection and should not be done.

COUNSEL THE MOTHER about Safe Preparation of Formula Feeding (contd...)

Appropriate amount of formula needed per day					
Age in months	**Weight in Kg**	**Approx. amount formula in 24 hours**	**Previously boiled water per feed**	**Number of scoops per feed**	**Approx. No. of feeds**
Birth	3	400ml	50	2	8 x 50ml
2 weeks	3	400ml	50	2	8 x 50ml
6 weeks	4	600ml	75	3	7 x 75ml
10 weeks	5	750ml	125	5	6 x 125ml
14 weeks	6.5	900ml	150	6	6 x 150ml
4 months	7	1050ml	175	7	6 x 175ml
5 months	8	1200ml	200	8	6 x 200ml
6-12 months	Starting from 6 months of age the amount of formula may range from 700 to 800 ml in 24 hours.				

➢ How to feed a baby with a cup

- Hold the baby sitting upright or semi-upright on your lap.
- Hold a small cup of milk to the baby's lips.
  - tip the cup so the milk just touches the baby's lips.
  - the cup rests gently on the baby's lower lip and the edges of the cup and touch the outer part of the baby's upper lip.
  - the baby becomes alert and opens his mouth and eyes.
- Do not pour the milk into the baby's mouth. A young infant starts to take the milk with the tongue. An older/ bigger baby sucks the milk, spilling some of it.
- When the baby has had enough he closes his mouth and will not take any more. If the baby has not taken the required amount, wait and then offer the cup again or feed more frequently.

COUNSEL THE MOTHER about Fluids and When to Return

FLUID - *Advise the mother to increase fluids during illness*

FOR ANY SICK CHILD:

- Breastfeed more frequently and for longer at each feed.
- For children on complementary or replacement feeding increase fluid. For example, give soup, rice water, yoghurt drinks or clean water.

FOR CHILD WITH DIARRHOEA:

- Giving extra fluid can be lifesaving. Give fluid according to Plan A or Plan B on TREAT THE CHILD chart.

WHEN TO RETURN - *Advise the mother when to return to the health worker*

A. FOLLOW – UP VISIT - Advise the mother to come for follow-up at the earliest time listed for the child's problems.

If the child has:	Return for Follow-up in:
• PNEUMONIA • SOME DEHYDRATION • DYSENTERY • MALARIA, if fever persists • FEVER, if fever persists • FEVER NO MALARIA, if fever persists • MEASLES WITH EYE OR MOUTH COMPLICATIONS	2 days
• PERSISTENT DIARRHOEA • ACUTE EAR INFECTION • CHRONIC EAR INFECTION • FEEDING PROBLEM • ANY OTHER ILLNESS, if not improving • MAM, if feeding problem	5 days
• UNCOMPLICATED SEVERE ACUTE MALNUTRITION	7 days
• ANEMIA	14 days
• MODERATE ACUTE MALNUTRITION	30 days

B. Return Immediately - Advise the mother to come immediately if the child has any of these signs.

Any sick child	• Not able to drink or breastfeed • Becomes sicker • Develops a fever
If child has COUGH OR COLD, also return if:	• Fast breathing • Difficult breathing
If child has diarrhoea, also return if:	• Blood in stool • Drinking poorly

C. NEXT WELL-CHILD VISIT: - Advise mother when to return for:

- Next immunization
- Next dose of Vitamin A and Mebendazole
- ***Do growth monitoring at each well-child visit using growth charts.***

Counsel the Mother About Her Own Health

- If the mother is sick, provide care for her, or refer her for help.
- If she has a breast problem (such as engorgement, sore nipples, breast infection), advise her not to feed her baby from the affected breast, until it heals express and discard the milk from the affected breast. Provide clinical care for the mother or refer her for help.
- Advise her to eat well to keep up her own strength and health.
- If she is breastfeeding, advise her to eat 2 more varied extra meals a day to maintain her health and health of the baby.
- Advise a mother from malarious area for herself and all under five children to sleep under **ITN** to prevent malaria.
- Advise the mother to ensure that all family food is cooked using ***iodized salt*** so that family members remain healthy.
- Check the mother's immunization status and give her tetanus toxoid if needed.
- Make sure she has access to:
    - Family planning
    - Counseling on STD and HIV prevention
    - Antenatal care if she is pregnant
- Encourage her to seek voluntary HIV counseling and testing.
- Reassure her that with regular follow-up, much can be done to prevent serious illness, and maintain her and the child's health.
- Emphasize good hygiene, and early treatment of illnesses.

COUNSEL THE MOTHER using the Family Health Card (FHC)

Counsel the mother on foods, fluids and when to return immediately using the Family Health Card (FHC: September 2011 version): See the messages below:

1. **About Food**
   - ► Messages 28 - 42 & 46
   - ► And specifically about feeding during illness
     Messages: 47 & 48

2. About Fluids
   - ► Messages 47 - 50

3. When to return immediately
   - ► Young infant - See messages 16
   - ► Any sick child - Messages 15
   - ► Child with Diarrhoea - Messages 38

4. About Immunization:
   - ► Message 29

GIVE FOLLOW–UP CARE

- **Care for the child who returns for follow-up using all the boxes that match the child's previous classifications.**
- **If the child has any new problem, assess, classify and treat the new problem as on the ASSESS AND CLASSIFY chart.**

➢ PNEUMONIA

After 2 days:

Check the child for general danger signs.
Assess the child for cough or difficult breathing.

} See ASSESS & CLASSIFY chart

Ask:

- Is the child breathing slower?
- Is there less fever?
- Is the child eating better?
- Is chest in drawing decreasing?

Treatment:

- If ***any general danger sign or stridor*****,** refer URGENTLY to hospital.
- If ***chest indrawing and/or breathing rate****, fever and eating are the same or worse,* refer **URGENTLY** to hospital**.**
- If ***breathing slower, no chest indrawing, less fever, and eating better***, complete the 5 days of antibiotic.

➢ PERSISTENT DIARRHOEA

After 5 days:

Ask:

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

Treatment:

- If ***the diarrhoea has not stopped (child is still having 3 or more loose stools per day),*** do a full reassessment of the child. Give any treatment needed. Then refer to hospital.
- If the ***diarrhoea has stopped (child having less than 3 loose stools per day),*** tell the mother to follow the usual feeding recommendations for the child's age.

IF ANY MORE FOLLOW-UP VISITS ARE NEEDED BASED ON THE INITIAL VISIT OR THIS VISIT, ADVISE THE MOTHER THE NEXT FOLLOW-UP VISIT

ALSO, ADVISE THE MOTHER WHEN TO RETURN IMMEDIATELY (SEE COUNSEL CHART)

➢ DYSENTERY

After 2 days:

Assess the child for diarrhoea. *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 eating better?

Treatment:

- If the child is dehydrated, treat dehydration
- **If *number of stools, amount of blood in stools, fever, abdominal pain, or eating is the same or worse: REFER TO HOSPITAL***

Exceptions - if the child: - is less than 12 months old, or
- was dehydrated on the first visit, or
- had measles within the last 3 months

} Refer to hospital

- ***If fewer stools, less blood In the stools, less fever, less abdominal pain, and eating better,*** continue giving the same antibiotic until finished.

GIVE FOLLOW–UP CARE

➢ MALARIA (Low/High Malaria Risk)

If fever persists after 2 days:

- Do a full reassessment of the child. See ASSESS & CLASSIFY Chart
- Ask if the child has actually been taking his antimalarial.

Treatment:

- ➢ If the child has ***any general danger sign or stiff neck***, treat as VERY SEVERE FEBRILE DISEASE.
- ➢ If fever has been present every day for more than 7 days, refer for assessment.
- ➢ Suspect relapsing fever if other cases are occurring and the child has high fever, headache with chills and rigor, refer. If referral is not possible treat with Amoxicillin. Advise the mother to return again in 2 days
- ➢ If the child has any ***cause of fever other than malaria***, provide treatment.

If malaria is the only apparent cause of fever

- Repeat blood film:
  - If positive and no improvement,
    - If he hasn't taken the antimalarial properly, make sure that he takes it.
    - If he took the antimalarial properly, give second line antimalarial drug. If no second line antimalarial refer.

➢ FEVER (No Malaria Risk)

If fever persists after 2 days:

Do a full reassessment of the child,. See ASSESS & CLASSIFY Chart
Enquire thoroughly about travel to malarious areas
Assess for other causes of fever.
.

Treatment:

- ➢ If the child has ***any general danger sign or stiff neck***, treat as VERY SEVERE FEBRILE DISEASE.
- ➢ If there is travel history do BF/RDT.
  - If positive treat with first-line oral anti malarial and advise the mother to return again in 2 days if the fever persists.
  - If BF/RDT is negative manage for other cause of fever
- ➢ If *fever has been present every day for more than 7 days, refer for assessment.*
- ➢ Suspect relapsing fever if other cases are occurring and the child has high fever with chills and headache, refer, if not possible treat with Amoxicillin. Advise the mother to return again in 2 days if fever persists

➢ FEVER-NO MALARIA (Low/High Malaria Risk)

If fever persists after 2 days:

- Do a full reassessment of the child. See ASSESS & CLASSIFY Chart
- Assess for other causes of fever.

Treatment:

- ➢ If the child has ***any general danger sign or stiff neck***, treat as VERY SEVERE FEBRILE DISEASE.
- ➢ If fever has been present every day for more than 7 days, refer for assessment.
- ➢ Suspect relapsing fever if other cases are occurring and the child has high fever, headache with chills and rigor, refer, if not possible treat with Amoxicillin. Advise the mother to return again in 2 days.
- ➢ If the child has any ***cause of fever other than malaria***, provide treatment.

If *malaria is the only apparent cause of fever:*

- Repeat BF/RDT:
  - If positive treat with the first -line oral antimalarial. Advise the mother to return again in 2 days if the fever persists.
  - If negative manage for other causes of fever

➢ MEASLES WITH EYE OR MOUTH COMPLICATIONS

After 2 days:

Do a full reassessment of the child. See ASSESS & CLASSIFY Chart
Look for red eyes and pus draining from the eyes.
Look for mouth ulcers.

Treatment

- ➢ If the child has ***any general danger sign or clouding of cornea or deep or extensive mouth ulcer, treat as SEVERE COMPLICATED MEASLES***
- ➢ If ***pus is draining from the eye,*** ask the mother to describe how she has treated the eye infection. If treatment has been correct, refer to hospital. If treatment has not been correct, teach mother correct treatment.
- ➢ If ***the pus is gone but redness remains***, continue the treatment.
- ➢ If ***no pus or redness***, stop the treatment.
- ➢ If **mouth ulcers are the same or better,** continue using half-strength gentian violet for a total of 5 days.

GIVE FOLLOW–UP CARE

➢ EAR INFECTION

After 5 days:

Reassess for ear problem. *See ASSESS & CLASSIFY* chart

Treatment:

- If there is ***tender swelling behind the ear*** refer URGENTLY to hospital.
- ***Acute ear infection:*** if ear pain or discharge persists, treat with same antibiotics for 5 more days. Continue wicking to dry the ear. Follow-up in 5 days.
- ***Chronic ear infection:*** Check that the mother is wicking the ear correctly.
- Encourage her to continue wicking and the topical Quinolone ear drops.
- If ***no ear pain or discharge,*** praise the mother for her careful treatment. If she has not yet finished the 5 days of antibiotic, tell her to use all of it before stopping.

➢ FEEDING PROBLEM

After 5 days:

Reassess feeding. See question at the top of the COUNSEL chart.
Ask about any feeding problems found on the initial visit.

Treatment:

- Counsel about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the child back again.
- If the child is <2 months and Underweight or has Moderate Acute Malnutrition, ask the mother to return 14 days after the initial visit to measure the child's weight gain.
- If the child is 2 months to 5 years and has Moderate Acute Malnutrition or Underweight, ask the mother to return 30 days after the initial visit to measure the child's weight gain.

➢ ANEMIA

After 14 days:

Reassess feeding. See question at the top of the COUNSEL chart.
Ask about any feeding problems found on the initial visit.

Treatment:

- Give iron. Advise mother to return in 14 days for more iron.
- Continue giving iron every 14 days for 2 months.
- If the child has palmar pallor after 2 months, refer for assessment

➢ UNCOMPLICATED SEVERE MALNUTRITION

After 7 days: - (Repeat every week for at least 2 months)

Ask about

- Feeding, if the child is finishing the weekly ration
- Diarrhoea, vomiting, fever or any other new complaint

Check for - General danger signs, Medical complication, Temperature and Respiratory Rate
- Weight, MUAC, oedema and anaemia
- Do appetite test
- Assess and classify if there is any new complaint (Use Assess & Classify Chart)

Treatment:

If there is any one of the following, refer for inpatient care :

- Any danger sign or medical complication present or failed appetite test
- Poor response - Increase/develop oedema, weight loss of more than 5% of body weight at any visit or for 2 consecutive visits, static weight for 3 consecutive visits or failure to reach the discharge criteria after 2 months of OTP treatment.

If there is no indication for referral, :

- Continue OTP treatment :give a weekly ration of RUTF
- Give routine drugs at appropriate times: Mebendazole on 2nd visit; Measles Vaccine on the 4th week; Vitamin A on the 4th week or at discharge if oedema persist.
- Record the information on the OTP card
- Give appointment for next follow up

If the following criteria are fulfilled, discharge from OTP follow up :

- Weight-for-height/length is ≥–2 Z-score and they have had no oedema for at least 2 weeks OR
- Mid-upper-arm circumference is ≥125 mm and they have had no oedema for at least 2 weeks..

Note: Transfer from in-patient care to OTP is not considered as discharge rather it is a transfer out to OTP

➢ Moderate Acute Malnutrition (MAM)

After 30 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 oedema of both feet. See questions at the top of the COUNSEL chart.

Treatment:

- If feeding did not improve and/or child has lost weight, refer the child. And also if you think that feeding will not improve, refer the child.
- If the child **no longer has MAM,** praise the mother and encourage her to continue age appropriate feeding.
- If the child still **has MAM,** counsel the mother about any feeding problem found. Ask the mother to return again in one month. Continue to see the child monthly until the child is feeding well and gaining weight regularly or no longer has MAM or UW for age.

WHERE REFERRAL IS NOT POSSIBLE

INTRODUCTION

The best possible treatment for a child with a very severe illness is usually at a hospital. Sometimes referral is not possible. Distances to a hospital might be too far; the hospital might not have adequate equipment or staff to care for the child; transportation might not be available. Sometimes parents refuse to take a child to a hospital, in spite of the health worker's effort to explain the need for referral.

If referral is not possible, you should do whatever you can to help the family care for the child. To help reduce deaths in severely ill children who cannot be referred, you may need to arrange to have the child stay in or near the clinic where he may be seen several times a day. If not possible, arrange for visits at home.

This Part of the module describes treatment to be given for specific severe disease classifications when the very sick child cannot be referred. It is divided into 2 sections: "Essential Care" and "Treatment Instructions on How to Give Specific Treatment for Severely Ill Children Who Cannot Be Referred".

To use this part of the chart booklet, first find the child's classifications and note the essential care required. Then refer to the respective treatment boxes on the chart booklet ***and*** the instructions in this section of the booklet. Because it may be difficult to treat a child at specific times during the day in clinic or at home, the Treatment Instructions include 6-hour, 8-hour and 12-hour dosing schedules for giving various drugs.

Remember that you must also give treatment for the non-severe classifications that you identified. These treatments should be marked on the Sick Child Recording Form. For example, if the child has SEVERE PNEUMONIA and MALARIA, you must treat the MALARIA ***and*** follow the guidelines below to treat the SEVERE PNEUMONIA.

Although only a well-equipped hospital with trained staff can provide optimal care for a child with a very severe illness, following these guidelines may reduce mortality in high risk children where referral is not possible.

SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

Essential Care for SEVERE PNEUMONIA OR VERY SEVERE DISEASE

1. **Give antibiotic treatment -** It is essential that children with SEVERE PNEUMONIA OR VERY SEVERE DISEASE receive antibiotic treatment.

   - If the child has a **general danger sign but does *not* have the classification VERY SEVERE FEBRILE DISEASE**:
     - Give IM Ampicillin and Gentamycin. Treat with IM Ampicillin and Gentamycin until the child has improved. Then continue with oral Amoxicillin and IM Gentamycin. Treat the child for 10 days total.
     - If IM Ampicillin and Gentamycin is not available, give IM Benzyl Penicillin. If neither IM Ampicillin and Gentamycin nor Benzyl Penicillin is available, give oral Amoxicillin (preferred) , as specified on the TREAT chart. If the child vomits, repeat the dose.

   - In children less than 1 year of age with severe pneumonia and suspected symptomatic or confirmed HIV infection, consider PCP and treat accordingly. Give Cotrimoxazole at a dose of 20mg/kg/day of Trimethoprim divided into 4 doses (every 6 hrs) to be continued for 21 days. Add Prednisolone if in severe distress, at 2mg/kg/day in 2 divided doses for 7 days. Refer the infant to hospital as early as possible for appropriate management.

   - If the child also has the classification **VERY SEVERE FEBRILE DISEASE**, give benzyl penicillin *and* Chloramphenicol *and* antimalarials (for High or Low malaria risk areas) IV/ IM Artesunate or IV/IM Quinine as per the guide on page 41.

2. **Give a bronchodilator -** If the child is wheezing give a bronchodilator if you have it (**See Treat Wheezing, Page 60**).*

3. **Treat fever -** If the child has an axillary temperature of 38.5°C or above, give Paracetamol every 6 hours. This is especially important for children with pneumonia because fever increases consumption of oxygen.

4. **Manage fluids carefully -** Children with SEVERE PNEUMONIA or VERY SEVERE DISEASE can become overloaded with fluids. If they can drink, give fluids by mouth. However, children with SEVERE PNEUMONIA or VERY SEVERE DISEASE often lose water during a respiratory infection, especially if there is fever. Therefore, give fluids, but give them cautiously. Encourage the mother to continue breastfeeding if the child is not in respiratory distress. If the child is too ill to breastfeed but can swallow, have the mother express milk into a cup and slowly feed the child the breast milk with a spoon.

   Encourage the child to drink. If the child is not able to drink, either use a dropper to give the child fluid very slowly or drip fluid from a cup or a syringe without a needle. Avoid using a NG tube if the child is in respiratory distress. Wait until the next day if there is no other option.

* Instructions are provided in *Acute Respiratory Infection in Children: Case Management in Small Hospitals in Developing Countries, A manual for doctors and other senior health workers* (1990) WHO/ARI/90.5.

Essential Care for
SEVERE PNEUMONIA OR VERY SEVERE DISEASE ….

FLUIDS IN SEVERE PNEUMONIA OR VERY SEVERE DISEASE	AGE	Approximate amount of milk or formula to give	Total amount in 24 hours
	Less than 12 months	5 ml/kg/hour	120 ml/kg
	12 months up to 5 years	3 - 4 ml/kg/hour	72 - 96 ml/kg

Avoid giving fluids intravenously unless the child is in shock. A child in shock has cold extremities, a weak and rapid pulse, and is lethargic.

5. **Manage the airway –** Check if there is a blocked nose and clear it. A blocked nose can interfere with feeding. Use a plastic syringe (without needle) to gently suck any secretions from the nose. Dry or thick, sticky mucous can be loosened by wiping with a soft cloth moistened with salt water. Help the child to cough up secretions.

6. **Keep the infant warm -** Small infants lose heat rapidly, especially when wet. Feel the infant's hands and feet. They should be warm. To maintain the body temperature, keep the sick infant dry and well wrapped. If possible, have the mother keep her infant next to her body, ideally between her breasts. A hat or bonnet will prevent heat loss from the head. If possible, keep the room warm.

7. **Give Oxygen (if available) for children having any of the following signs of very severe respiratory distress**
   - Grunting with every breath
   - Unable to feed due to respiratory distress
   - Convulsions, lethargy or unconscious
   - Oxygen saturation <90%

   Give the oxygen through nasal prongs or a nasal catheter at a flow rate of 1-2 liters/minute until the child's condition improves.

TREAT WHEEZING

This annex describes how to treat a child 2 months up to 5 years with a first episode of wheezing, and how to assess a child who has recurrent wheezing. Use a bronchodilator to treat a child with a first episode of wheezing.

Before giving the bronchodilator, look to see if the child who is in "*respiratory distress*" (fast breathing **+** use of accessory muscles of breathing). A child in respiratory distress is uncomfortable, and is obviously not getting enough air into the lungs. The child may have trouble feeding or talking because he cannot get enough air. The condition can usually be recognized by simple observation. They are alert and are getting enough air into their lungs.

RAPID ACTING BRONCHODILATOR*	
Nebulized Salbutamol, 5 mg/ml	0.5 ml Salbutamol plus 2.0 ml sterile water
Subcutaneous Epinephrine (Adrenaline), 1:1000 solution	0.01 ml/kg body weight (maximum 0.3 ml)

** Salbutamol 0.5 ml (2.5mg) diluted in 2.0 ml of sterile water per dose nebulization (vaporization) should be used. If Salbutamol is not available, use Epinephrine (Adrenaline), 0.01 ml/kg (up to a maximum of 0.3ml) of 1:1000 solution given subcutaneously with a 1 ml syringe. In the absence of a response to the first dose, the 2nd dose is given after 30 minutes and the 3rd dose after an hour.*

The steps to follow when treating a child with wheezing

Treat Wheezing

Children with first episode of wheezing

If in respiratory distress → Give a rapid – acting bronchodilator and refer.

If not in respiratory distress → Give oral Salbutamol.

Children with Recurrent Wheezing (Asthma)

Gives a rapid acting bronchodilator
Assess the child's condition 30 minutes later.

IF: **THEN:**

RESPIRATORY DISTRESS OR ANY DANGER SIGN → Treat for SEVERE PNEUMONIA or VERY SEVERE DISEASE (Refer).

NO RESPIRATORY DISTRESS AND:

FAST BREATHING → Treat for PNEUMONIA. Give oral Salbutamol.

NO FAST BREATHING → Treat for NO PNEUMONIA: COUGH OR COLD Give oral Salbutamol

ORAL SALBUTAMOL, three times daily for five days			
Age or Weight	**2 mg/5ml, syrup**	**2 mg, tablet**	**4 mg tablet**
2 months up to 12 months (4-10 kg)	2.5 ml	1/2	1/4
12 months up to 5 years) (10- 19 kg)	5.0 ml	1	1/2

Essential Care for
VERY SEVERE FEBRILE DISEASE

1. **Give antibiotic and antimalarial treatment -** A child with VERY SEVERE FEBRILE DISEASE needs treatment for both meningitis and severe malaria (in high or low malaria risk areas). It is clinically difficult to differentiate between the two. Treat for both possibilities.

   - ***For meningitis***, give both IV/IM Chloramphenicol ***and*** Ampicillin/Benzyl Penicillin. It is preferable to give an injection every 6 hours. If this is not possible, use the 8-hour or the 12-hour dosing schedule (see Treatment Instructions). Give both antibiotics by injection for at least 3-5 days. If the child has improved by this time, switch to oral Chloramphenicol. The total treatment duration should be 10 days.
   - ***For SEVERE MALARIA***, give IV/IM Artesunate (preferable) or IV/IM Quinine. If you start Quinine, repeat the Quinine injection at a dose of 10mg/kg, every 8 hours until the child is able to take an oral antimalarial. See Treatment Instructions on Page 41.

2. **Manage fluids carefully -** The fluid plan depends on the child's signs.
   - If the child also has **diarrhoea with SEVERE DEHYDRATION, but has no stiff neck and no SEVERE MALNUTRITION OR SEVERE ANEMIA**, give fluids according to Plan C.

     The general danger sign which resulted in the classification VERY SEVERE FEBRILE DISEASE may have been due only to dehydration. Rehydrate, and then completely reassess and reclassify the child. The reassessment and reclassification of the child after rehydration may lead to a change in treatment plan if the child no longer is classified as VERY SEVERE FEBRILE DISEASE.
     If the child has **VERY SEVERE FEBRILE DISEASE with a stiff neck or bulging fontanelle**, restrict fluids. The child may have meningitis. Be careful to restrict the amount of fluid as follows:

FLUIDS IF MENINGITIS SUSPECTED (stiff neck or bulging fontanelle)	**AGE**	**Approximate amount of formula to give**	**Total amount in 24 hours**
	Less than 12 months:	3.3 ml/kg/hour	80 ml/kg/day

     - Avoid giving intravenous fluids.
     - If the child is vomiting everything or not able to drink or breastfeed, give fluid by NG tube.
     - If you do not know how to use a NG tube and the child is able to swallow, use a dropper to give the child fluid very slowly, or drip fluid from a cup or a syringe (without needle).
   - If the child has **SEVERE MALNUTRITION**, give fluids as described under Essential Care for SEVERE PNEUMONIA or VERY SEVERE DISEASE (**Page 58-59**).

Essential Care for SEVERE PERSISTENT DIARRHOEA

1. **Treat dehydration using the appropriate fluid plan**

2. **Advise mother how to feed child with persistent diarrhoea -** See the box on the *COUNSEL THE MOTHER* chart. For infants less than 6 months, exclusive breastfeeding is very important. If the mother has stopped breastfeeding, help her relactate (or get help from someone who knows how to counsel on relactation).

3. **Give vitamins and minerals -** Give supplementary vitamins and minerals every day for 2 weeks. Use a mixture containing a broad range of vitamins and minerals, including at least twice the recommended daily allowance of folate, Vitamin A, zinc, magnesium and copper.

4. **Identify and treat infection -** Some children with PERSISTENT DIARRHOEA have dysentery and other infections such as pneumonia, sepsis, and urinary tract infection. These require specific antibiotic treatment. If **no** specific infection is identified, do ***not*** give antibiotic treatment because routine treatment with antibiotics is not effective.

5. **Monitor the child -** See the mother and the child each day. Monitor the child's feeding and treatments and the child's response. Ask what food the child eats and how much. Ask about the number of diarrhoeal stools. Check for signs of dehydration and fever.
   Once the child is feeding well and has no signs of dehydration, see the child again in 2 to 3 days. If there are any signs of dehydration or problems with the changes in feeding, continue to see the child every day. Help the mother as much as possible.

Essential Care for SEVERE COMPLICATED MEASLES

1. **Manage measles complications -** Management depends on which complications are present.

   - If the child has **mouth ulcers**, apply half-strength (0.25%) gentian violet. Help the mother feed her child. If the child cannot swallow, feed the child by NG tube. Treat with IM Chloramphenicol.

   - If the child has **corneal clouding**, be very gentle in examining the child's eye. Treat the eye with Tetracycline eye ointment carefully. Only pull down on the lower lid and do not apply pressure to the globe of the eye. Keep the eye patched gently with clean gauze.

   - Also treat **other complications of measles, such as pneumonia, diarrhoea, ear infection**.

2. **Give Vitamin A -** Give 3 doses of Vitamin A. Give the first dose on the first day and the second dose on day 2. Give the third dose on day 15 (14 days from the 2nd dose).

3. **Feed the child to prevent malnutrition**

Essential Care for MASTOIDITIS **-** Give IV/IM Benzyl Penicillin/Ampicillin and IV/IM Chloramphenicol. Treat for 10 days total. Switch to oral Chloramphenicol after 3-5 days.

Essential Care for SEVERE MALNUTRITION **-** see pages 70-71

Essential Care for SEVERE ANEMIA - A child with severe anaemia is in danger of heart failure.

1. **Give iron by mouth**
2. **Give antimalarial, if needed**
3. **Give Mebendazole/Albendazole** for hookworm or whipworm.
4. **Feed the child -** Give good complementary foods.
5. **Give Paracetamol if fever is present -** Give Paracetamol every 6 hours.
6. **Give fluids carefully -** Let the child drink according to his thirst. Do ***not*** give IV or NG fluids.

Essential Care for Cough of 14 Days or *more - Follow the current national TB guideline.*

1. **Give first-line antibiotic for PNEUMONIA -** If the child has not been treated recently with an effective antibiotic for PNEUMONIA, give an antibiotic for 5 days.
2. **Give Salbutamol—**if the child is wheezing or coughing at night and there is a family history of asthma, give salbutamol for 5-7 days.
3. **Weigh the child and check for possible TB infection.**
4. **Follow-up in 2 weeks -** If there is no response to the antibiotic (with or without Salbutamol) or if the child is losing weight, refer to hospital for appropriate investigation and treatment.

Essential Care for Convulsions (current convulsions, not by history but during this illness)

1. **Manage the airway -**Turn the child on his side to reduce the risk of aspiration. Do ***not*** try to insert an oral airway or keep the mouth open with a spoon or spatula. Make sure that the child is able to breathe. If secretions are interfering with breathing, insert a catheter through the nose into the pharynx and clear the secretions with suction.
2. **Give Diazepam followed by paraldehyde-** See Treatment Instructions on **Page 69.**
3. **If high fever present, lower the fever -** Give Paracetamol and sponge the child with tepid water.
4. **Treat the child to prevent low blood sugar -** See Treatment Instructions on **Page 69.**

SICK YOUNG INFANT BIRTH UP TO 2 MONTHS

Essential Care for VERY SEVERE DISEASE

This young infant may have pneumonia, sepsis or meningitis.

1. **Give IV/M Ampicillin or Benzyl Penicillin and IM Gentamycin -** If meningitis is suspected treat for 21 days total. Give the Gentamycin only for a maximum of 14 days. If meningitis is not suspected, treat for at least 7 days.

   When the infant's condition has improved substantially, substitute an appropriate oral antibiotic such as Amoxicillin for IM Benzyl Penicillin or IM Ampicillin. However, continue to give IM Gentamycin for upto 14 days.

   If there is no response to the treatment after 48 hours, or if the infant's condition deteriorates, continue effort to URGENTLY refer to hospital.

2. **Keep the young infant warm.**

3. **Manage fluids carefully -** The mother should breastfeed the infant frequently. If the infant has difficulty breathing or is too sick to suckle, help the mother express breast milk. Feed the expressed breast milk to the infant by dropper (if able to swallow) or by NG tube 6 times per day. Give 20 ml of breast milk per kilogram of body weight at each feed. Give a total of 120 ml/kg/day.

   If the mother is not able to express breast milk, prepare a breast milk substitute , as described in page 45 & 46 of the chart booklet.

4. **Treat the child to prevent low blood sugar -** See Treatment instructions for treating low blood sugar, **Page 69.**

TREATMENT INSTRUCTIONS

Recommendations on how to give specific treatments for severely ill children who cannot be referred

Three dosing schedules for drugs are provided in this annex. The schedules are for every 6 hours (or four times per day), every 8 hours (or three times per day), and every 12 hours (or twice per day). **Choose the most frequent schedule that you are able to provide**.

For IM Gentamycin daily dosing schedule at a dose of 7.5mg/kg once daily, except for newborns < 7 days old who require 5 mg/kg of Gentamycin once daily.

Ideally, the treatment doses should be evenly spaced. Often this is not possible due to difficulty giving a dose during the night. Compromise as needed, spreading the doses as widely as possible.

Some treatments described below are impractical for a mother to give her child at home without frequent assistance from a health worker, for example, giving injections or giving frequent feedings as needed by a severely malnourished child. In some cases, a health worker may be willing to care for the child at or near his home or in the clinic to permit the frequent care necessary. In other cases, it is simply not practical to give the child the treatments that he needs.

Benzyl Penicillin **-** The first choice is to give IM Benzyl Penicillin. IM Ampicillin can be substituted for Benzyl Penicillin. If you are not able to give IM Benzyl Penicillin or IM Ampicillin, give oral Amoxicillin.

Ampicillin – Ampicillin can be given IV/IM at a dose of 50mg/kg/dose every 6 hours. It should be diluted to a concentration of 200mg/ml (vial of 500 mg mixed with 2.1 ml of sterile water for injection to give 500mg/2.5 ml solution).

TREATMENT INSTRUCTIONS...

Gentamycin - Give IM Gentamycin every 24 hours, 7.5mg/kg/dose for those ≥ 7 days old. Newborns < 7 days old are given 5 mg/kg of Gentamycin once daily. If Gentamycin is not available, give young infants with VERY SEVERE DISEASE both Benzyl Penicillin/Ampicillin and Chloramphenicol.

Avoid using undiluted 40mg/ml Gentamycin. Add 6 ml sterile water to 2 ml vial containing 80 mg which gives you an 8 ml solution with a 10mg/ml Gentamycin concentration.

Chloramphenicol - Give IM Chloramphenicol for 5 days. Then switch to an oral antibiotic to complete 10 days of antibiotic treatment. If you are not able to give IM antibiotic treatment, but oral Chloramphenicol is available, give oral Chloramphenicol by mouth or NG tube. Give every 6 hours, if possible.

***Quinine* – See instruction on Page 41**

Give first dose of IM Quinine at a loading dose of 20mg/kg (divided into 2 sites, anterior thigh). Repeat the IM Quinine injection at a dose of 10mg/kg every 8 hours until the child is able to take an oral anti-malarial. After 48 hours of parenteral therapy, reduce the maintenance dose by 1/3 to 1/2, that is, 5-7mg/kg every 8 hours. Stop the IM Quinine as soon as the child is able to take an oral antimalarial.

The injections of Quinine usually should not continue for more than 4-5 days. Too high of a dosage can cause deafness and blindness, as well as irregular heartbeat or cardiac arrest.

The child should remain lying down for one hour after each injection as the child's blood pressure may drop. The effect stops after 15 - 20 minutes.

When the child can take an oral antimalarial, give a full dose according to national guidelines for completing the treatment of severe malaria. Currently, the oral antimalarial recommended is Artemether-Lumefantrine.

TREATMENT INSTRUCTIONS …

DOSING SCHEDULE — INTRAMUSCULAR DRUGS

AGE or WEIGHT	CHLORAMPHENICOL DOSE: 40 mg/Kg To vial containing 1000mg, add 5ml sterile water = 5.6ml 180mg per ml Two times daily	BENZYL PENICILLINE DOSE: 70 000 units/Kg To vial containing 600mg or (1 000 000 units) Three times daily		GENTAMYCIN DOSE: 7.5MG/Kg Once daily		QUININE DOSE: 10mg/Kg Three times daily	
		Add 2.1ml sterile water = 2.5ml at 400 000 units per ml	Add 3.6ml sterile water = 4ml at 250 000 units per ml	Undiluted 2 ml containing 20 mg = 2 ml at 10 mg/ml	Add 6 ml sterile water vial containing to 2 ml vial 80 mg* =8ml at 10mg/ml	150mg/ml	300 mg/ml
1 Kg		0.2 ml	0.3 ml	0.75 ml		0.07 ml	0.03 ml
2 Kg	0.3 ml	0.3 ml	0.6 ml	1.5 ml		0.13 ml	0.07 ml
3 Kg	0.5 ml	0.5 ml	0.8 m	2.25 ml		0.2 ml	0.1 ml
4 Kg	0.7 ml	0.7 ml	1.1 ml	3 ml		0.3 ml	0.13 ml
5 Kg	0.8 ml	0.9 ml	1.4 ml	3.75 ml		0.3 ml	0.17 ml
4 months up to 9 months (6-<8 Kg)	1.2 ml	1.2 ml	2.0 ml	5.4 ml		0.4 ml	0.2 ml
9 months up to 12 months (8-<10 Kg)	1.5 ml	1.6 ml	2.5 ml	6.6 ml		0.6 ml	0.3 ml
12 months up to 3 years (10-<14 Kg)	2.0 ml	2.0 ml	3.5 ml	9 ml		0.8 ml	0.4 ml
3 years up to 5 years (14-<19 Kg)	2.5 ml	3.0 ml	4.5 ml	12 ml		1.2 ml	0.6 ml

TREATMENT INSTRUCTIONS...

DOSING INTRAMUSCULAR DRUGS—EVERY 8 HOURS (Three times per day)

AGE or WEIGHT	CHLORAMPHENICOL DOSE: 30 mg/Kg To vial containing 1000mg, add 5ml sterile water = 5.6ml 180mg per ml Three times daily	BENZYL PENICILLINE DOSE: 70 000 units/Kg To vial containing 600mg or (1 000 000 units) Three times daily		QUININE DOSE: 10mg/Kg Three times daily	
		Add 2.1ml sterile water = 2.5ml at 400 000 units per ml	Add 3.6ml sterile water = 4ml at 250 000 units per ml	150mg/ml	300 mg/ml
1 Kg		0.2 ml	0.3 ml	0.07 ml	0.03 ml
2 Kg	0.3 ml	0.3 ml	0.6 ml	0.13 ml	0.07 ml
3 Kg	0.5 ml	0.5 ml	0.8 m	0.2 ml	0.1 ml
4 Kg	0.7 ml	0.7 ml	1.1 ml	0.3 ml	0.13 ml
5 Kg	0.8 ml	0.9 ml	1.4 ml	0.3 ml	0.17 ml
4 months up to 9 months (6-<8 Kg)	1.2 ml	1.2 ml	2.0 ml	0.4 ml	0.2 ml
9 months up to 12 months (8-<10 Kg)	1.5 ml	1.6 ml	2.5 ml	0.6 ml	0.3 ml
12 months up to 3 years (10-<14 Kg)	2.0 ml	2.0 ml	3.5 ml	0.8 ml	0.4 ml
3 years up to 5 years (14-<19 Kg)	2.5 ml	3.0 ml	4.5 ml	1.2 ml	0.6 ml

Treat the Child to Prevent Low Blood Sugar

If the child is conscious, follow the instructions on the *TREAT* chart. Feed the child frequently, every 2 hours, if possible.

If the child is unconscious and you have dextrose solution and facilities for an intravenous (IV) infusion, start the IV infusion. Once you are sure that the IV is running well, give 5 ml/kg of 10 % dextrose solution (D10) push, or give 1 ml/kg of 40% dextrose solution (D50) by very slow push. Then insert a NG tube and begin feeding every 2 hours.

Potassium Chloride Solution (100 grams KCl per litre) **-** Give 0.5 ml (or 10 drops from a dropper) per kilogram of body weight with each feed. Mix well into the feed.

Diazepam and paraldehyde

Per rectum - Use a plastic syringe (the smallest available) without a needle. Put the Diazepam or Paraldehyde in the syringe. Gently insert the syringe into the rectum. Squirt the Diazepam or Paraldehyde. Keep the buttocks squeezed tight to prevent loss of the drug.

If both Diazepam and Paraldehyde are available, use the following schedule:

1. Give **Diazepam**.
2. In 10 minutes, if convulsions continue, give **Diazepam** again.
3. In 10 more minutes (that is, 20 minutes after the first dose), if convulsions continue, give **Paraldehyde**.
4. In 10 more minutes (that is, 30 minutes after the first dose), if convulsions continue, give **Paraldehyde** again.

This is the preferred treatment. It is safer than giving 3 doses of Diazepam in a row due to the danger of respiratory depression.

If only Diazepam is available, use the following schedule:

1. Give **Diazepam**.
2. In 10 minutes, if convulsions continue, give **Diazepam** again.
3. In 10 more minutes (that is, 20 minutes after the first dose), if convulsions continue and the child is breathing well, give **Diazepam** again. Watch closely for respiratory depression.

If only Paraldehyde is available, use the following schedule:

1. Give **Paraldehyde**.
2. In 10 minutes, if convulsions continue, give **Paraldehyde** again.
3. In 10 more minutes (that is, 20 minutes after the first dose), if convulsions continue, give **Paraldehyde** again.

DOSAGE TABLE - DIAZEPAM and PARALDEHYDE

AGE or WEIGHT	DIAZEPAM RECTALLY 10 mg/2 ml Solution, Dose 0.3 mg/kg	PARALDEHYDE, (1 g/ml solution) Dose: 0.15 - 0.3 ml/kg, Give rectally.
2 months up to 6 months (5 - 7 kg)	0.5ml	1.0 ml
6 months up to 12months (7 - <10 kg)	1ml	1.5 ml
12 months up to 3 years (10 - <14 kg)	1.5ml	2.0 ml
3 years up to 5 years (14-19 kg)	2.0ml	3.0 ml

APPETITE TEST FOR CHILDREN WITH SEVERE MALNUTRITION

- **In a child who is 6 months or older, if MUAC is less than 11cms ,** WFL/H < -3Z score **or if oedema of both feet (+ ++) and has no medical complications** (pneumonia, persistent diarrhoea, watery diarrhoea with dehydration, dysentery, malaria, measles, hypothermia (axillary temperature <35^{0}C) or high fever (≥ 38.5^{0}C), open skin lesions, signs of vitamin A deficiency, and excessive oedema involving the feet, legs, hands and face), **assess appetite**.

How to do the appetite test?

1. The appetite test should be conducted in a separate quiet area.
2. Explain to the care taker the purpose of the appetite test and how it will be carried out.
3. The care taker, where possible, should wash his hands.
4. The care taker should sit comfortably with the child on his lap and either offers the Ready to Use Therapeutic Food (RUTF) from the packet or put a small amount on his finger and give it to the child.
5. The care taker should offer the child the RUTF gently, encouraging the child all the time. If the child refuses then the care taker should continue to quietly encourage the child and take time over the test. The test usually takes 15-30 minutes but may take up to one hour. The child must not be forced to take the RUTF.
6. The child needs to be offered plenty of water to drink from a cup as he/she is taking the RUTF.

The result of the appetite test - *See the appetite test table on the next page to determine pass or fail depending on the amount of RUTF consumed.*

Pass

1. A child who takes at least the amount shown in the appetite test table (see next page 71) passes the appetite test.
2. Explain to the care taker the choices of treatment option and decide with the care taker whether the child should be treated as an out-patient or in-patient (nearly all care takers will opt for out-patient treatment).
3. Guide the patient to the Outpatient Therapeutic Program (OTP) for registration and initiation of treatment.

Fail

1. A child that does not take at least the amount of RUTF shown in the table below should be referred for in-patient care.
2. Explain to the care taker the choices of treatment options and the reasons for recommending in-patient care; decide *with the care taker* whether the patient will be treated as an in-patient or out-patient.
3. Refer the patient to the nearest Therapeutic Feeding Unit (TFU) or hospital for Phase 1 management.

The appetite test should always be performed carefully. Patients who fail their appetite tests should always be offered treatment as in-patients. If there is any doubt then the patient should be referred for in-patient treatment until the appetite returns.

APPETITE TEST TABLE

APPETITE TEST Test is the minimum amount that malnourished patients should take to pass the appetite test			
Plumpy nut		BP 100	
Body weight (Kg)	Sachets	Body weight (Kg)	Bars
Less than 4 kg	1/8 to 1/4	Less than 5 kg	1/4 to 1/2
4-6.9	1/4 to 1/3	5-9.9	1/2 to 3/4
7-9.9	1/3 to 1/2		
10-14.9	1/2 to 3/4	10-14.9	3/4 to 1
15-29	3/4 to 1	15-29	1 to 1 1/2
Over 30 kg	>1	Over 30 kg	> 1 1/2

OUTPATIENT MANAGEMENT OF UNCOMPLICATED SEVERE MALNUTRITION

Children (> 6 months) with severe acute malnutrition (SAM) WITHOUT medical complications and who PASS the appetite test – can be treated as outpatients with:

Ready to Use Therapeutic Food (RUTF) according to the following table

	RUTF (Plumpy Nut) 500 Kca/92 gm sachet)		BP 100 biscuits (1 BP 100 Bar = 56.7gm = 300 Kcal)	
Weight of Child (Kgs)	Sachets per day	Sachet per week	Bars per day	Bars per week
3.0 up to 3.5	1 1/4	9	2	14
3.5 up to 5.0	1 1/2	11	2 1/2	17 1/2
5.0 up to 7.0	2	14	4	28
7.0 up to 10	3	21	5	35
10 up to 15	4	28	7	49
15 up to 20	5	35	9	63

Key education messages for care takers of children on OTP

1. RUTF is a food and medicine for malnourished children only. It should not be shared
2. Sick children often do not like to eat. Give small regular meals of RUTF and encourage the child to eat often, every 3-4 hours (up to 8 meals per day)
3. RUTF is the only food these children need to recover during their time in OTP
4. For breast-fed children, always give breast milk before the RUTF and on demand
5. Always offer plenty of clean water to drink while eating RUTF
6. Use soap for child's hand and face before feeding, if possible
7. Keep food clean and covered
8. Sick children get cold quickly, always keep the child covered and warm
9. With diarrhoea, never stop feeding. Give extra food and clean water (or breast milk)

NB – Check the mothers understanding using appropriate checking questions.

1. Oral antibiotics – Give **Amoxycillin** two times per day for 7 days (for dosage see drug table).

2. Vitamin A - Give vitamin A on the day of discharge (for those children who have completed Phase 2 as an in-patient) or at the 4th week of the treatment for those in out-patient care. Do not give Vitamin A at admission for children to be started on therapeutic diet. A high dose of vitamin A should be given ONLY at the end of the rehabilitation phase for children with SAM (with or without oedema) receiving fortified feeds (or after 4 weeks of treatment when the child is treated as outpatient), or whenever the child is switched from F100 or RUTF to the family diet.

However, vitamin A should be given immediately at admission if:

- the child has visible clinical signs of vitamin A deficiency (Bitot's spots, corneal clouding, or corneal ulceration)
- the child has signs of eye infection (pus, inflammation); or
- the child has measles now or has had measles in the past 3 months.

3. Give Mebendazole/Albendazole at the 2nd outpatient visit (after 7 days).

4. Give Measles vaccine on the 4th week of treatment for all children aged 9 months/more and without a vaccination card (unvaccinated).

5. Children should be brought back to the health facility on a weekly basis until they recover. At each follow up visit, health staff should check the following:-

A) Record weight, MUAC and check for oedema
B) Conduct the appetite test (every visit)
C) Do a complete reassessment according to the assess chart (if the child has developed medical complications they should be referred to the nearest in-patient unit)

6. Children may be discharged from the OTP when they reach the following criteria

A) For admissions with oedema - absence of oedema for 2 consecutive visits (2 weeks after oedema disappears)
B) For admissions without oedema – achievement of target weight for discharge (**see page 73**) or a 20% weight gain from admission weight *(e.g.- child was 4.7 kgs on admission: 4.7 + 20% = 5.6 kg) for 2 consecutive weeks.*
C) If a child fails to reach the discharge criteria after 2 months of treatment, they should be referred to the nearest in-patient unit for further investigation and discharged as '*non recovered*' from OTP

TARGET WEIGHT FOR DISCHARGE FROM OTP FOLLOW-UP

Admission	Discharge
3	3.5
3.1	3.6
3.2	3.7
3.3	3.8
3.4	3.9
3.5	4
3.6	4.1
3.7	4.3
3.8	4.4
3.9	4.5
4	4.6
4.1	4.7
4.2	4.8
4.3	4.9
4.4	5.1
4.5	5.2
4.6	5.3
4.7	5.4
4.8	5.5
4.9	5.6
5	5.8
5.1	5.9
5.2	6
5.3	6.1
5.4	6.2
5.5	6.3
5.6	6.4
5.7	6.6
5.8	6.7

Admission	Discharge
5.9	6.8
6	6.9
6.1	7
6.2	7.1
6.3	7.2
6.4	7.4
6.5	7.5
6.6	7.6
6.7	7.7
6.8	7.8
6.9	7.9
7	8.1
7.1	8.2
7.2	8.3
7.3	8.4
7.4	8.5
7.5	8.6
7.6	8.7
7.7	8.9
7.8	9
7.9	9.1
8	9.2
8.1	9.3
8.2	9.4
8.3	9.5
8.4	9.7
8.5	9.8
8.6	9.9
8.7	10

Admission	Discharge
8.8	10.1
8.9	10.2
9	10.4
9.1	10.5
9.2	10.6
9.3	10.7
9.4	10.8
9.5	10.9
9.6	11
9.7	11.2
9.8	11.3
9.9	11.4
10	11.5
10.2	11.7
10.4	12
10.6	12.2
10.8	12.4
11	12.7
11.2	12.9
11.4	13.1
11.6	13.3
11.8	13.6
12	13.8
12.2	14
12.4	14.3
12.6	14.5
12.8	14.7
13	15
13.2	15.2

Admission	Discharge
13.4	15.4
13.6	15.6
13.8	15.9
14	16.1
14.2	16.3
14.4	16.6
14.6	16.8
14.8	17
15	17.3
15.5	17.8
16	18.4
16.5	19
17	19.6
17.5	20.1
18	20.7
18.5	21.3
19	21.9
19.5	22.4
20	23
21	24.2
22	25.3
23	26.5
24	27.6
25	28.8
26	29.9
27	31.1
28	32.2
29	33.4
30	34.5

Admission	Discharge
31	35.7
32	36.8
33	38
34	39.1
35	40.3
36	41.4
37	42.6
38	43.7
39	44.9
40	46
41	47.2
42	48.3
43	49.5
44	50.6
45	51.8
46	52.9
47	54.1
48	55.2
49	56.4
50	57.5
51	58.7
52	59.8
53	61
54	62.1
55	63.3
56	64.6
57	65.6
58	66.7
59	67.9
60	69.0

7. **Criteria for transfer of OTP patients to in-patient care** - Out-patients, who develop any sign of a serious medical complication or develops any of the following s/he should be referred to the in-patient facility.

Criteria for failure to respond and to move back from out-patient to in-patient care	Time after admission
Primary failure to respond	
Failure to gain any weight (non-oedematous children)	21 days
Failure to start to lose oedema	14 days
Oedema still present	21 days
Secondary failure to respond *(signs of deterioration after initial response in appetite, weight gain in marasmic children and loss of all oedema in kwash patients)*	
Failure of Appetite test	At any visit
Weight loss of 5% of body weight	At any visit
Weight loss for two successive visits	During OTP care
Failure to gain more than 2.5g / kg / d for 21 days (after loss of oedema (kwashiorkor) or after day 14 (marasmus)	During OTP care

If a child requires in-patient care, all anthropometric measurements, medical history and physical findings are recorded in the OTP card and the child is classified as *transfer*.

Children with severe acute malnutrition WITH complications or who FAIL the appetite test – need to be referred to an in-patient unit for treatment with therapeutic milks (F-75 and F-100), until their condition stabilizes and they can continue their treatment at home with RUTF.

In-patient treatment should be given in accordance with the Ethiopian National Guideline "Protocol for the management of Severe Acute Malnutrition" FMoH, revised March 2007.

If a carer refuses to take their child to the in-patient unit, the child should be given treatment in OTP and '*refused transfer'* recorded on the chart.

MANAGEMENT OF THE SICK YOUNG INFANT **AGE BIRTH UP TO 2 MONTHS**

Name: _____ Age: _____ weeks Sex:____ Weight: _____ gm Length: _____ cm Temperature: ____°C

ASK: What are the infant's problems? _____ Initial visit? ___ Follow-up Visit? ___

ASSESS (Circle all signs present) CLASSIFY

CHECK FOR BIRTH ASPHYXIA (immediately after birth)

Not breathing
Gasping
Is breathing poorly (< 30 per minute)

ASSESS FOR BIRTH WEIGHT AND GESTATIONAL AGE
(the first7 days of life)
Ask gestational age; <32 wks, 32-37wks, ≥ 37wks

Weigh the baby:
<1,500gms, 1,500-2,500gms,
≥2,500gms

CHECK FOR VERY SEVERE DISEASE and LOCAL BACTERIAL INFECTION

- Is the infant having feeding difficulty?
- Has the infant had convulsions?

· Count the breaths in one minute. ____breaths per minute
Repeat if (≥ 60) elevated _____ Fast breathing?
· Look for severe chest indrawing.
· Look if the Infant is convulsing now.
· Look at umbilicus. Is it red or draining pus?
· Fever (temperature ≥ 37.5°C or feels hot) or body temperature < 35.5°C (or feels cool) or body temperature between 35.5 - 36.4°C.
· Look for skin pustules.
· Look at young infant's movements.
Does the infant move only when stimulated?
Does the infant not move even when stimulated?

CHECK FOR JAUNDICE

Are skin on the face or eyes yellow?
Are the palms and soles yellow?

DOES THE YOUNG INFANT HAVE DIARRHOEA? Yes ____ No ____

· For how long? _____ Days
· Is there blood in the stools?

·Look at the young infant's general condition.
Does the infant move only when stimulated?
Does the infant not move even when stimulated?
Is the infant restless or irritable?
Look for sunken eyes.
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)? Slowly?

CHECK FOR HIV INFECTION

ASK: HIV status of the mother? Positive_____, Negative____, Unknown _____
Antibody HIV status of the infant? Positive_____, Negative____, Unknown _____
DNA/PCR HIV status of the infant? Positive_____, Negative____, Unknown _____

THEN CHECK FOR FEEDING PROBLEM OR UNDERWEIGHT

· Is there any difficulty of feeding? Yes _____ No _____
· Is the infant breastfed? Yes _____ No _____ If Yes, how many times in 24 hrs? _____ times
· Do you empty one breast before switching to the other? Yes___No__
· Do you increase frequency of breastfeeding during illness? Yes___No___
· Does the infant receive any other foods or drinks? Yes ___ No ___ If Yes, how often?_____ times
· What do you use to feed the child?

· Determine weight for age.
Underweight ___
NOT Underweight ___
· Look for ulcers or white patches in the mouth (oral thrush).

If the infant **has no indications to refer urgently AND infant is on breastfeeding, ASSESS BREASTFEEDING**:

- Has the infant breastfed in the previous hour?
- If infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes.
- If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again

- Is the infant positioned well? To check positioning, look for:
  - Infant's head and body straight Yes ___ No ___
  - Facing the breast Yes ___ No ___
  - Infant's body close to her body Yes ___ No ___
  - Supporting the whole body Yes ___ No ___

  Good Positioning_____ Poor positioning_____

- Is the infant able to attach? To check attachment, look for:
  - Chin touching breast Yes ___ No ___
  - Mouth wide open Yes ___ No ___
  - Lower lip turned outward Yes ___ No ___
  - More areola above than below the mouth Yes ___ No ___

  Good attachment_____ Poor attachment_____ No attachment at all ____

- Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)?

Suckling effectively_____ not suckling effectively_____ not suckling at all____

ASSESS FEEDING, WHEN NO CHANCE OF BREASTFEEDING BY ANY REASON

Is there any difficulty feeding?
What milk are you giving?_____
How many times during the day and night?
How much is given at each feed?
How are you preparing the milk?
Let the mother demonstrate or explain how a feed is prepared, and how it is given to the infant
Are you giving any breast milk at all?
What foods or fluids in addition to the replacement feeding is given?
How is the milk being given? Cup or bottle?
How are you cleaning the feeding utensils

· Determine weight for age.
Underweight ___
NOT Underweight ___
· Look for ulcers or white patches in the mouth (oral thrush).

CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS Circle immunizations needed today.

_____	_____	_____	_____	_____	_____
OPV 0	BCG	OPV 1	DPT1-HepB1-Hib1	PCV1	Rota1

Return for next immunization on:
_____

ASSESS OTHER PROBLEMS:

COUNSEL THE MOTHER ABOUT HER OWN HEALTH

Return for follow-up in:_____

Give any immunizations needed today:_____

MANAGEMENT OF THE SICK CHILD AGE **2 MONTHS UP TO 5 YEARS**

Child's Name: _____ Age_____ months Sex _____ Weight: _____kg Lt/Ht _____ cm Temp _____^{0}C

ASK: What are the child's problems? _____ Initial visit? _____ Follow-up visit? ____

ASSESS (Circle all signs present, tick or fill dashes/spaces) **CLASSIFY**

CHECK FOR GENERAL DANGER SIGNS

NOT ABLE TO DRINK OR BREASTFEED CONVULSING NOW

VOMITS EVERYTHING LETHARGIC OR UNCONSCIOUS

History of CONVULSIONS

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes _____ No_____

For how long? _____ Days

- Count the breaths in 1 minute._____ breaths/minute. Fast breathing?

Look for chest indrawing.

Look and listen for stridor.

DOES THE CHILD HAVE DIARRHOEA? Yes _____ No____

For how long? _____ Days

Is there blood in the stool?

- Look at the child's general condition. Is the child:
  Lethargic or unconscious? Restless and irritable?
- Look for sunken eyes.
- Offer the child fluid. Is the child:
  Not able to drink or drinking poorly? Drinking eagerly, thirsty?
- Pinch the skin of the abdomen. Does it go back:

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature ≥37.5^{0}C) Yes___ No____

- Decide MALARIA risk: High/Low No,
  - If "low or no" malaria risk, Has child traveled to malarious area in the last 30 days?
- For how long has the child had fever? _____ Days
  - If >7 days, has fever been present every day?
- Has child had measles within the last 3 months?

Look or feel for stiff neck.
Look for bulging fontanel
Look for runny nose
Look for signs of MEASLES NOW : Generalized rash,
And one of these: Cough, Runny nose or Red eyes.
Blood Film or RDT: Positive____ Negative____ Not Done ____

If the child has measles now or within the last 3 months:

Look for mouth ulcers: If Yes, are they deep and extensive?
Look for pus draining from the eye.
Look for clouding of the cornea.

DOES THE CHILD HAVE AN EAR PROBLEM? Yes___ No ____

- Is there ear pain?
- Is there ear discharge? If Yes, for how long? ____days

- Look for pus draining from the ear.

THEN CHECK FOR ANEMIA

Look for palmar pallor: Severe pallor? Some pallor?

THEN CHECK FOR MALNUTRITION

- For all children. **For children aged ≥ 6 months (Lt/Ht 65 -110cm)**

- Check oedema of both feet: **+, ++, +++** - If WFH not done, Determine MUAC **<11 cm, 11 -12 cm, ≥ 12 cm**
- Determine WFH: **- < -3 Z,** - If child has oedema, or WFH **<-3 Z** or MUAC **<11 cm**;
  --3 Z to <-2 Z, - Look for medical complications,
  -≥ -2 Z - Look for Dermatosis: **+, ++, +++**
  - Assess appetite (as per the criteria), - **Passed Failed**

THEN CHECK FOR HIV INFECTION

- HIV antibody status of the mother? Positive_____ ,Negative____ ,Unknown _____
- HIV Antibody status of the child? Positive_____, Negative____ , Unknown _____
- HIV DNA/PCR status of the infant? Positive_____ , Negative____ , Unknown _____
- Is child on breast feeding? Yes ____, No ____ If no, was he breastfed in the last 6 weeks? Yes ____, No ____

THEN CHECK FOR TUBERCULOSIS

· Cough of ≥14 days
· Fever and night sweats
·Contact history with TB patient
·Contact with a known MDR TB patient

Look for Swelling or discharging wound
Nutritional Status _____
HIV infection status: _____
AFB / Gene Xpert for sputum Positive____ Negative____ Not Done ____

Chest X-ray Positive____ Negative____ Not Done ____

CHECK THE CHILD'S IMMUNIZATION AND VITAMIN A STATUS Circle immunizations/Vitamin A needed today.

BCG DPT1-HepB1-Hib1 PCV1 Rota1 DPT2-HepB2-Hib2 PCV2 Rota2 DPT3-HepB3-Hib3 PCV3

OPV 0 OPV 1 OPV 2 OPV 3 Measles Vitamin A

Return for next Immunization/Vitamin A dose on:

_____
(Date)

ASSESS CHILD'S FEEDING if child is < 2 years old, or has ANEMIA or has MAM:

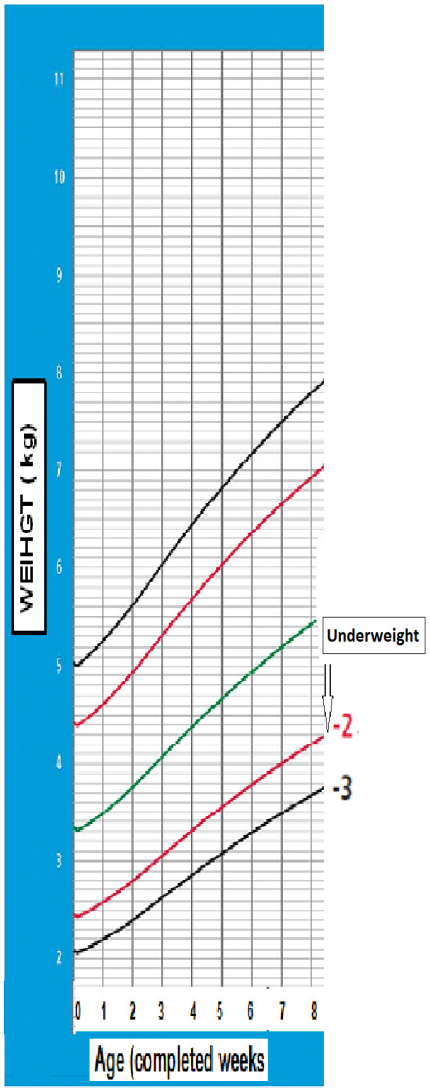
*Note whether the mother is HIV infected, uninfected, or unknown. Compare the mother's answers to the **FeedingRecommendations** for the child's age.*

- Do you breastfeed your child? Yes____ No ____
  If Yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes___ No___
- Does the child take any other food or fluids? Yes___ No ___
  If Yes, what food or fluids? _____ How many times in 24 hours? ___ times.
  How much is given at each feed?_____ What do you use to feed the child? Cup___ Bottle___
  Other_____
- If on replacement milk: What replacement milk are you giving?_____
  How many times in 24 hours? _____ times How much is given at each feed?_____
  How is the milk prepared?_____ How are you cleaning the utensils?_____
- If very low weight for age: How large are servings? _____
  Does the child receive his own serving? Yes____ No ____ Who feeds the child and how? _____
- During the illness, has the child's feeding changed? Yes ____ No ____ If Yes, how? _____

Remember to refer any child who has a danger sign and no other severe classification
Return for follow-up in:______________________ Advise mother when to return immediately Give any immunizations needed today:_________
Feeding advise:

Weight-for-age BOYS

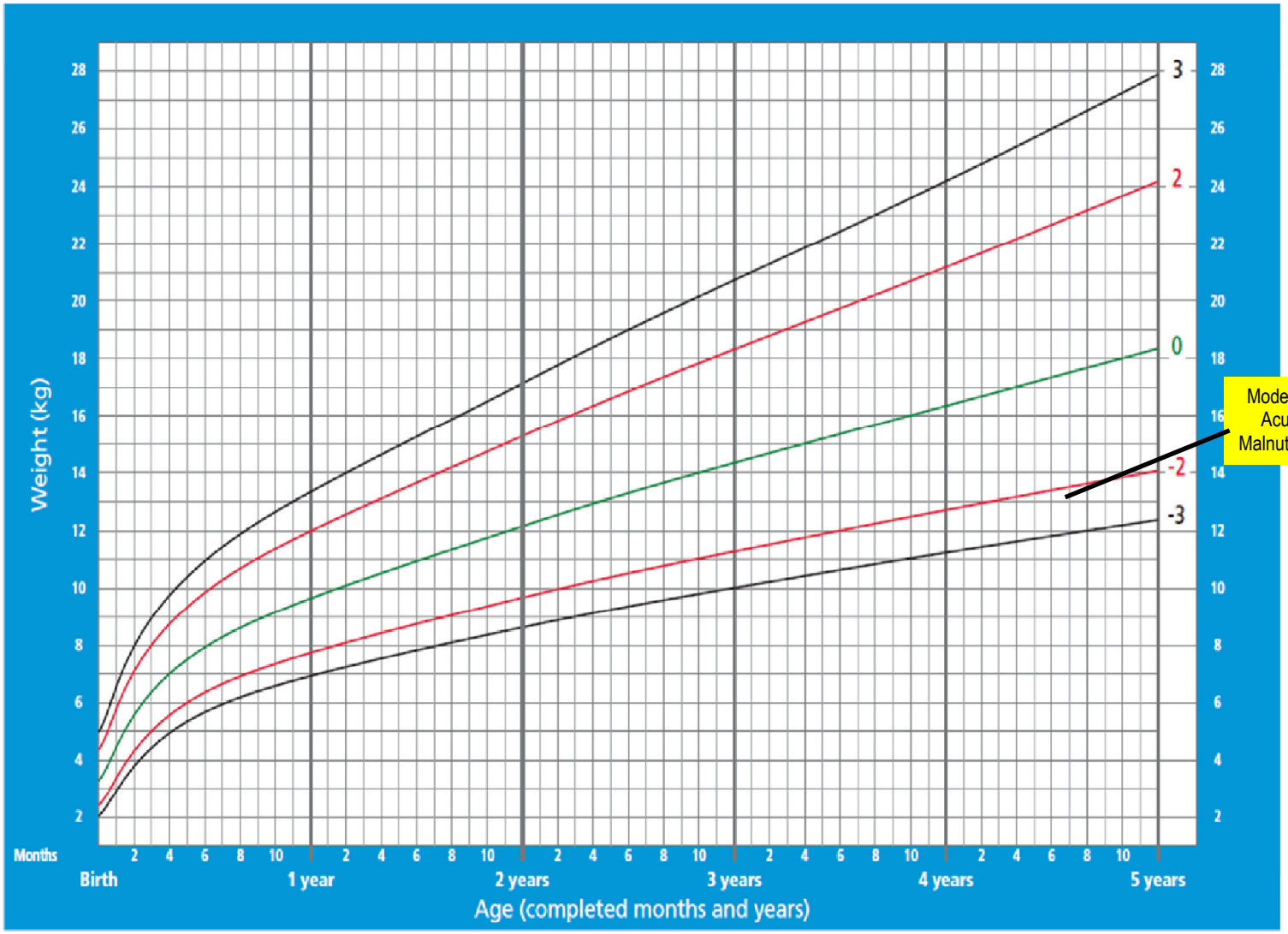
Birth to **2** months (z-scores)



Weight-for-age BOYS

Birth to 5 years (z-scores)

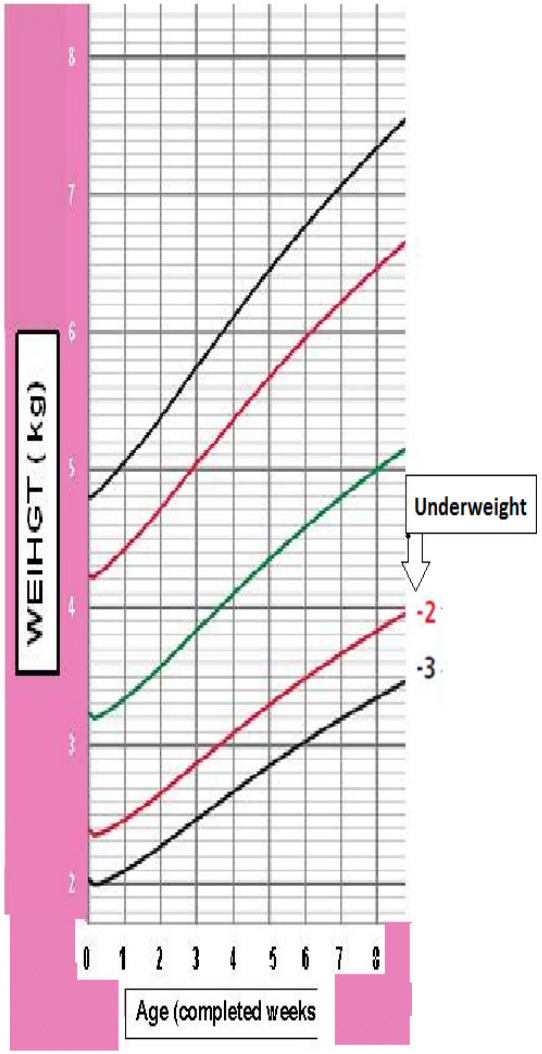
World Health Organization



WHO Child Growth Standards

Weight-for-age GIRLS

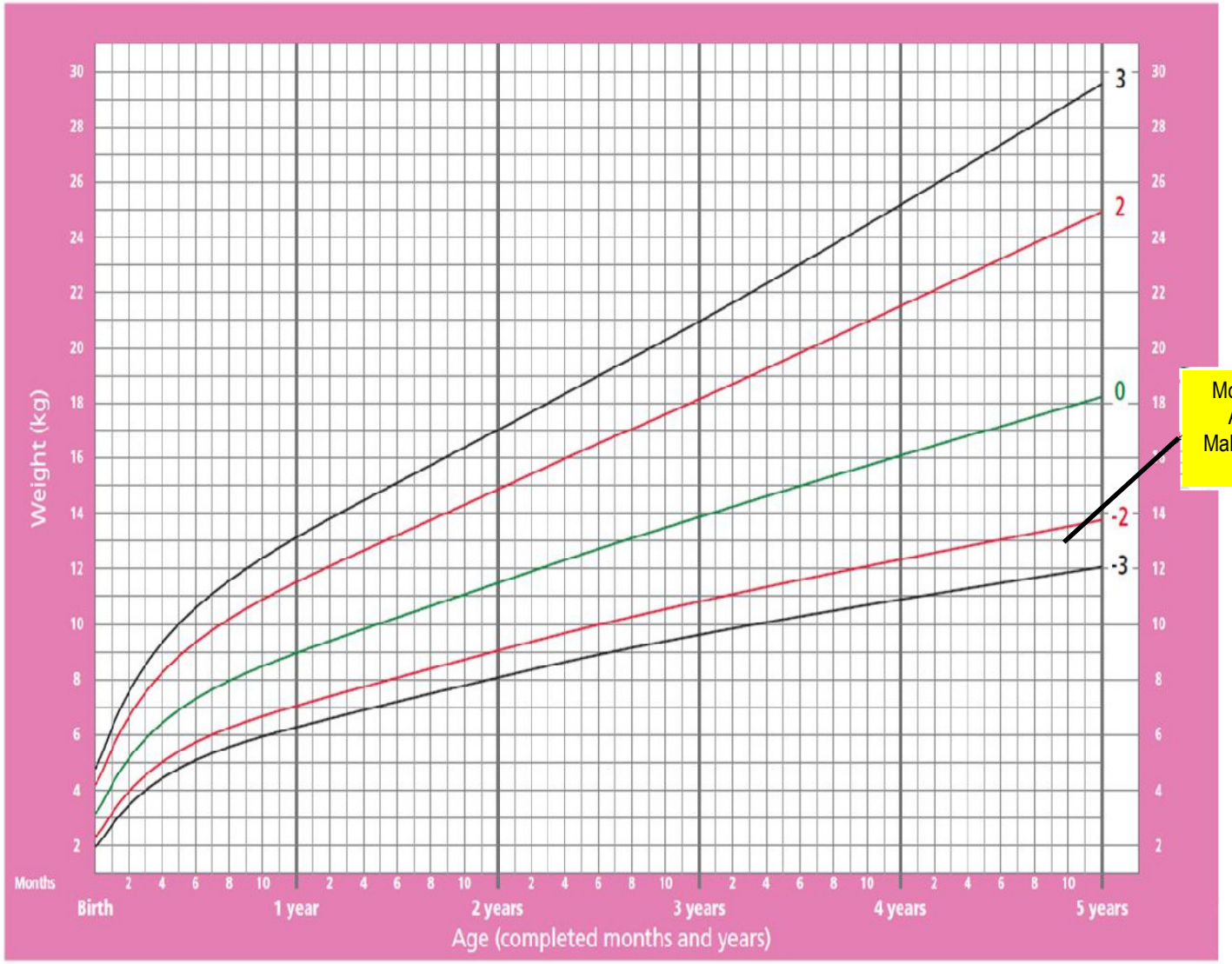
Birth to 8 weeks (z-scores)



Weight-for-age GIRLS

Birth to 5 years (z-scores)

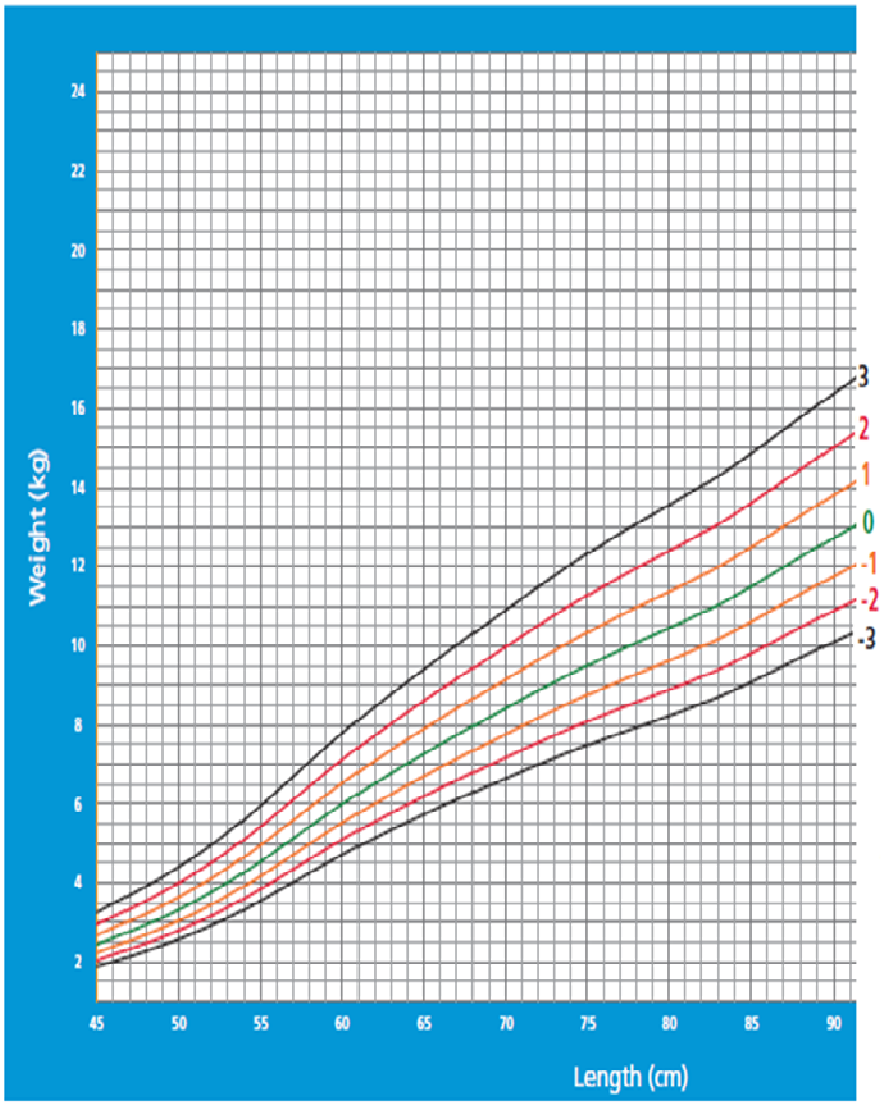
World Health Organization



WHO Child Growth Standards

Weight-for-length BOYS

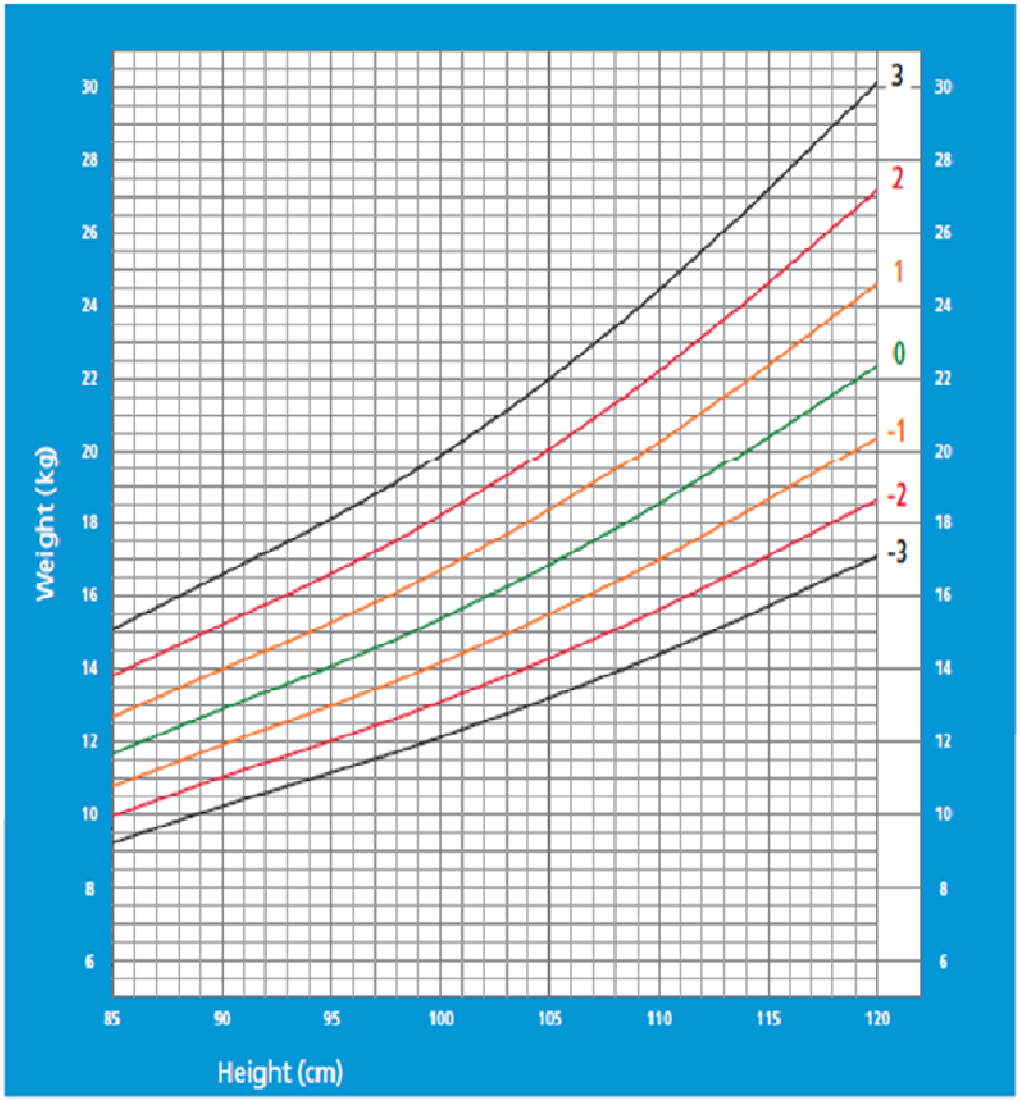
Birth to 2 years (z-scores)



Weight-for-height BOYS

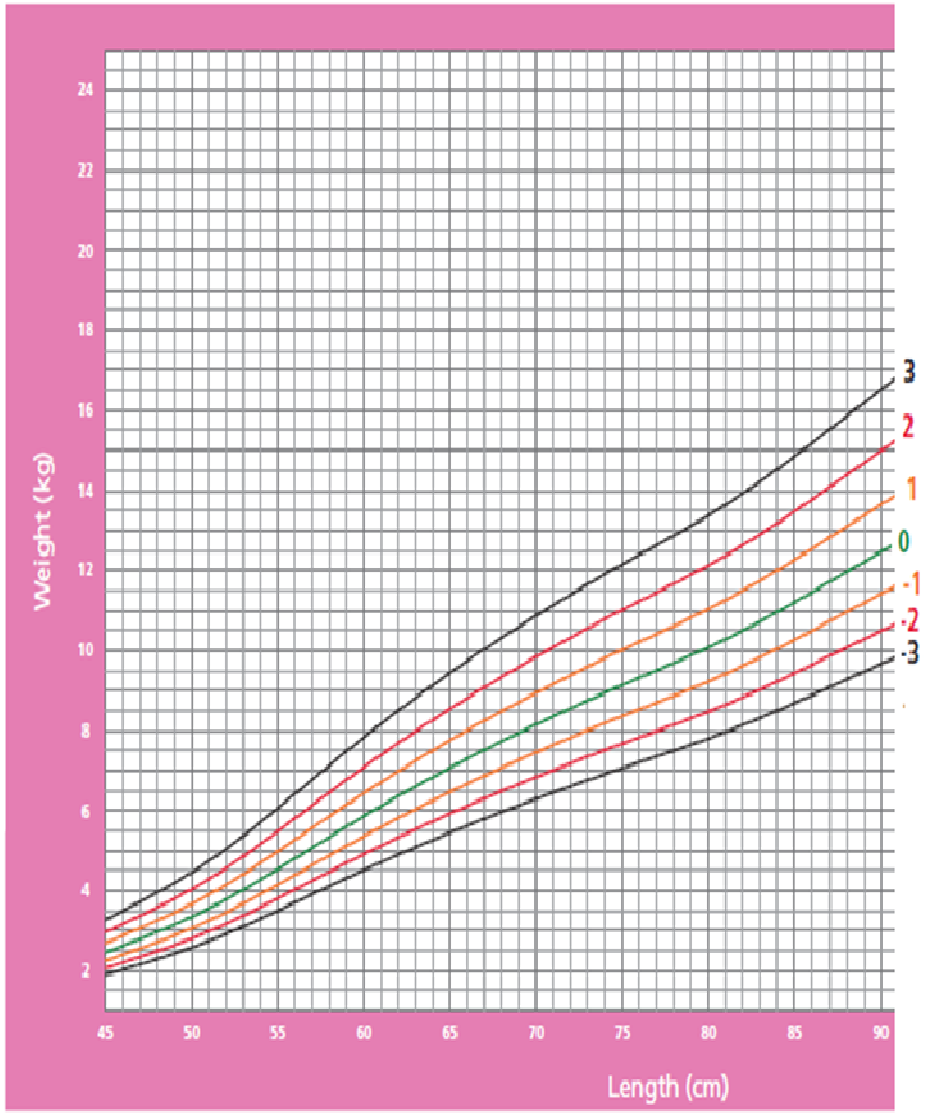
2 to 5 years (z-scores)

World Health Organization



Weight-for-length GIRLS

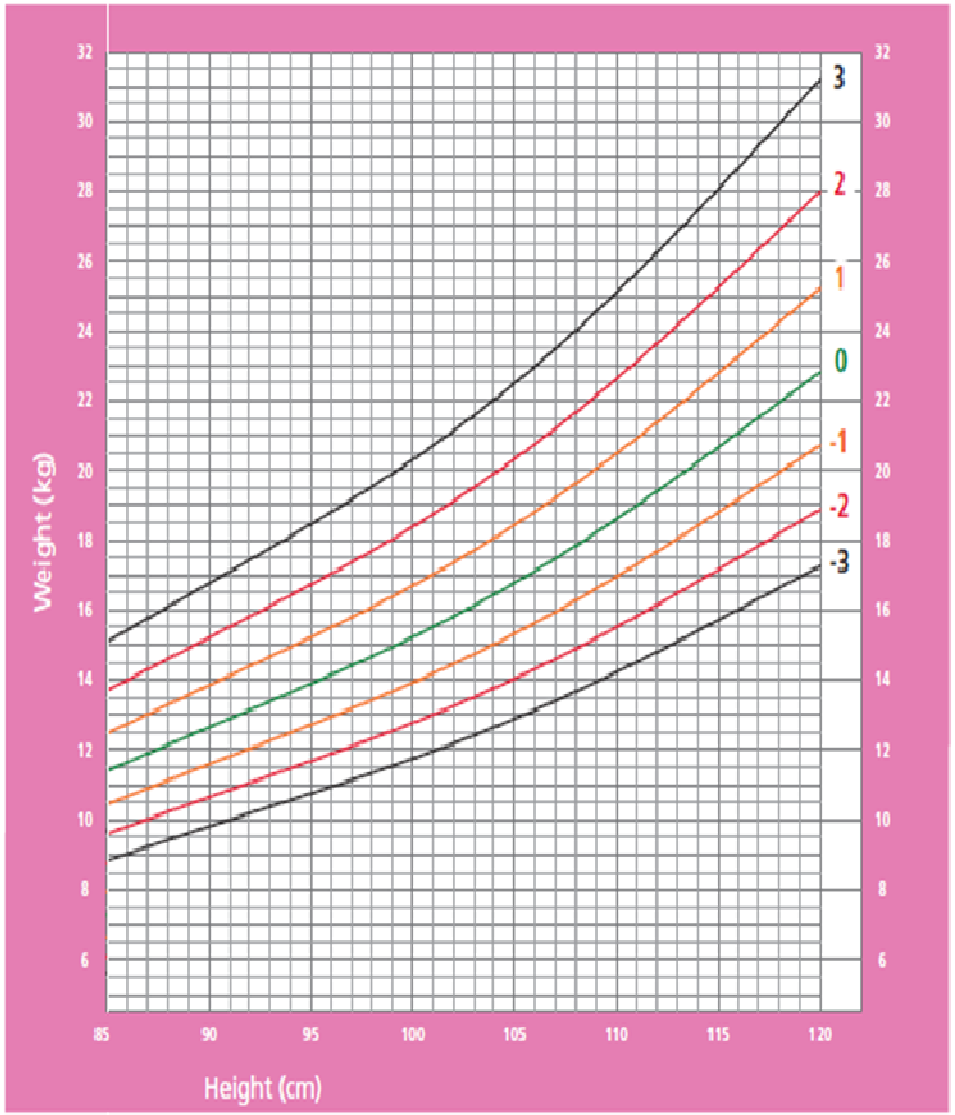
Birth to 2 years (z-scores)



Weight-for-Height GIRLS

2 to 5 years (z-scores)

World Health Organization



WHO Child Growth Standards