Summary of Major Changes in the 2021 version of the IMNCI Materials

This revised version (2021 edition) of the ***Integrated Management of Newborn and Childhood Illness*** training material has incorporated the following changes over the 2015 version

Sick Young Infant <2 months section

Essential newborn care actions

- Temperature measurement is included in step 9 of ENC.

Check for very severe disease

- Former (2015) one pink classification (Very Severe Disease) is subdivided into two pink classifications (Critical Illness and VSD) and a third yellow classification (Pneumonia).
- The former Low body temperature classification is removed as a separate classification.

Early childhood development (ECD)

- Developmental milestones assessment of young infant to identify any suspected developmental delay is included for the first time in 2021 CB.

Immunization:

- Birth dose Hep B vaccine is included in immunization schedule.

Sick Child 2 – 59 Months Section

General danger sign (GDS)

- GDS and Cough are separated and now in two pages in the CB

Cough or difficulty breathing

- Oxygen saturation ($SpO2<90\%$) is included as a sign of severe pneumonia (VSD).

Diarrhea

- Single dose Vitamin A therapeutic dose (instead of three doses in 2015) is recommended for treatment of persistent diarrhoea.

Fever

- Malaria classification is based on BF only. RDT based classification is for health posts only.
- Primaquine is included for treatment of malaria. Single dose for P falciparum and 14 days (radical cure) for P vivax malaria.

Ear problem

- IV/IM Ceftriaxone is included as first line pre referral treatment for Mastoiditis

Anemia

- Assessment and classification of anemia was merely based on subjective/clinical palmar pallor assessment. But in 2021 version, Hb/Hct measurement is included as a priority criterion for classifying anemia.

Malnutrition

- Many changes and updates are included in malnutrition part, major ones include
- In < 6 months old, two classifications (complicated SAM and Uncomplicated SAM) are merged into one pink SAM classification in 2021-IMNCI-CB.
- Severe wasting cut point is changed from MUAC of 11 to 11.5cm.
- Appetite test procedure and interpretation as passed/fail is changed.
- OTP discharge criteria is changed, target weight based discharge criteria is dropped.
- No need of giving supplementary high dose Vit A to child on RUTF, unless there is sign of Vit A deficiency or measles.
- Feeding assessment is moved to assess and classify part as a new classification table, from the former counsel the mother on food part. HIV section

TB

- The assessment questions and investigation of TB are organized in two step approach.
- Suspected MDR TB classification is dropped.
- Former TB classification is renamed as TB Disease, and TB Exposed child is renamed as TB Infection.

Early childhood development (ECD)

- Developmental milestones assessment of sick child to identify developmental delay is included for the first time in 2021 CB.

Immunization

- IPV at 14 wks old and MCV2 (Measles second dose) at 15 months old are included.

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

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

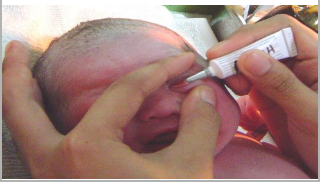
Cut the cord between the 1st and 2nd clamp/tie.

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

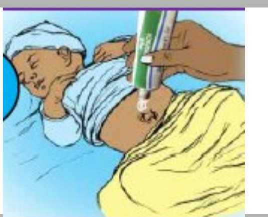
Keep all babies without complication, in skin to skin contact for one hour.

Step 5
Initiate breastfeeding immediately within 1 hour of life.

Step 6:
Apply Tetracycline eye ointment once on both eyes.



Step 7
Apply Chlorohexidine on the cord.



Step 8
Give Vitamin K, 1 mg IM on anterior mid lateral thigh. (If GA < 34 wks or Wt<1,500gm , 0.5 mg).

Step 9
Measure baby temperature, Weigh baby & classify - See BIRTH WT & GA Chart.

NOTES

a) If baby needs resuscitation cut the cord immediately. Otherwise, wait for 1- 3 minutes.

b) Place newborn identification band on the wrist or ankle.

c) Don't forget to record what is done to the newborn.

d) Give HepB-BD, BCG and OPV 0 before discharge.

e) Delay bathing of the baby for 24 hours after birth.

f) Advise mother to apply Chlorohexidine on the cord daily for 7 days and NEVER apply to the eyes.

g) If mother has respiratory infections (like flu, Covid), advise her to wear face mask and to wash her hands while caring the newborn,

h) Provide postnatal visits at 6 - 24 hours, 3 days, 7 days and immunization visit at 6 weeks.

CHECK THE NEWBORN FOR BIRTH ASPHYXIA

ASSESS | CLASSIFY | IDENTIFY TREATMENT

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? (No crying is considered as no breathing)
  - Is baby gasping?
  - Is baby breathing poorly (<30 breaths/minute)?
  - Is baby breathing normally (crying or ≥30 breaths/minute)?

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 baby starts breathing regularly, continue giving essential newborn care** ▸ **If baby remains weak or is having irregular breathing after 20 minutes of resuscitation; refer urgently to hospital while continuing to resuscitate on the way** ▸ If baby shows no response (no spontaneous breathing) after 20 minutes, stop resuscitation ▸ Monitor baby and mother continuously for 6 hours ▸ 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 HepB-BD, BCG and OPV 0 ▸ Advise mother when to return immediately ▸ Follow after 6 hrs (in the facility), 3 days and 7 days and 6 weeks

CHECK THE NEWBORN FOR BIRTH WEIGHT AND GESTATIONAL AGE (< 7 days old)

ASSESS | **CLASSIFY** | **IDENTIFY TREATMENT**

Assess, Look

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

Classify ALL Newborn Babies

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 lateral thigh, if not already given** ▶ **Refer URGENTLY with mother to hospital with KMC position**
• Weight 1,500 - 2,500 gm OR • Gestational age 32-37 weeks	**LOW BIRTH WEIGHT AND/OR PRETERM**	▶ KMC if <2,000gm (in the HF or Hospital) ▶ Counsel on optimal breastfeeding ▶ Counsel mother on prevention of infection ▶ Give Vitamin K 1mg IM (if GA < 34 wks, 0.5 mg IM) on anterior mid lateral thigh if not already given ▶ 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? If yes:
  - Unable to feed? Or
  - Not feeding well
- Has the infant had convulsions?

Look, Listen, Feel:

- Count the breaths in one minute
  - Repeat the count if ≥ 60/min
- Look for severe chest indrawing

  } *YOUNG INFANT MUST BE CALM*
- See if the infant is not feeding
- See if the infant is convulsing now
- Look at the umbilicus.

  Is it red or draining pus?
- Measure axillary temperature
- Look for skin pustules
- Look at the young infant's movements. If the infant is sleeping, ask the mother to wake him/her
  - Infant move on his/her own
  - Infant move only when stimulated
  - Infant doesn't move even when stimulated

Classify all young infants

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Unable to feed, OR • History of convulsions/convulsing now, OR • No movement even when stimulated.	**CRITICAL ILLNESS**	► **Give first dose IM Ampicillin and Gentamicin** ► **Advise mother how to keep the infant warm on the way to the hospital** ► **Reinforce referral and admit/refer URGENTLY to hospital**[b]
• Not feeding well, OR • Movement only when stimulated, OR • Fast breathing (≥60 bpm) and infant is < 7 days old, OR • Severe chest indrawing, OR • Fever (≥37.5°C[a]), OR • Low body temperature (< 35.5°C[a]),	**VERY SEVERE DISEASE**	► **Give first dose IM Ampicillin and Gentamicin** ► **Treat to prevent low blood sugar** ► **Warm infant by skin-to-skin contact if temperature < 36.5°C while arranging referral** ► **Advise mother how to keep the infant warm on the way to the hospital** ► **Refer URGENTLY to hospital** [b]
• Fast breathing (≥60 bpm) and infant is ≥ 7 days old,	**PNEUMONIA**	► **Give Amoxicillin for 7 days** ► Advise mother when to return immediately ► Follow-up after 2 days of Amoxicillin
• No sign of Critical Illness, Very Severe Disease, Pneumonia	**SEVERE INFECTION UNLIKELY**	► If temperature is from 35.5°C – 36.4°C • warm the infant using skin-to-skin contact for one hour and reassess, • If same after an hour, advise mother on how to keep the infant warm at home. ► Advise mother to give home care for the infant ► Advise mother when to return immediately

and if local infection

SIGNS	CLASSIFY AS	TREATMENT
• Red umbilicus or draining pus, OR • Skin pustules	**LOCAL BACTERIAL INFECTION**	• **Give Amoxicillin for 5 days** • Teach mother to treat local infections at home • Advise mother when to return immediately • Follow-up after 2 days of Amoxicillin

a. These thresholds are based on axillary temperature. The thresholds for rectal temperature readings are approximately 0.5°C higher. In a young infant with fever, malaria should be considered based on other associated symptoms.

b. If referral is not possible, see "Where Referral is not Possible" part.

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 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 the mother to return immediately if the infant's palms or soles appear yellow. ► Advise mother when to return immediately ► Follow-up after 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	***Look and Feel:***
• For how long? • Is there blood in the stool?	• 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 Gentamicin** ► **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 Gentamicin** ► **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
- If mother is HIV positive, and infant has negative DNA PCR, ASK:
    - Is the infant breastfeeding now?

Classify by Test Result

SIGN	CLASSIFY AS	TREATMENT
• Young infant DNA PCR positive	**HIV INFECTED**	▶ Start Cotrimoxazole Prophylaxis from 6 weeks of age ▶ Assess feeding and counsel ▶ Assess for TB infection ▶ Refer /Link to ART clinic for immediate ART initiation and other care ▶ Ensure mother is tested and enrolled for HIV care, treatment and follow up
• Young infant HIV antibody positive , OR • Mother HIV positive, And Young infant DNA PCR unknown, OR • Mother HIV positive, And Young infant DNA PCR negative And Breastfeeding	**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 both mother and baby are enrolled in mother-baby cohort follow up at ANC/ PMTCT clinic ▶ Ensure provisions of other components of care
• Mother and Young infant not tested	**HIV STATUS UNKNOWN**	▶ Initiate HIV testing and counselling. ▶ Conduct HIV test for the mother and if positive, a virological test for the infant. ▶ Conduct virological test for the infant if mother is not available (Eg orphan)
• Mother or young infant HIV antibody negative OR • Mother HIV positive, And Infant DNA PCR negative And NOT breastfeeding	**HIV INFECTION UNLIKELY**	▶ Advise on home care of infant ▶ Assess feeding and counsel ▶ Advise the mother on HIV prevention

CHECK FOR FEEDING PROBLEM OR UNDERWEIGHT — BREASTFEEDING YOUNG INFANT

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 (WFA) [A]
- 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 • WFA < -2Z (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
• WFA ≥ -2Z 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

A. For determining WFA, use WFA charts (see page 88 & 89) annexed at the end of the chart booklet.
B. 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— NOT BREASTFEEDING INFANT

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? [a]
- 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 (WFA)
- Look for mouth ulcers or white patches in the mouth (oral thrush).

Classify FEEDING & UNDER-

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 • WFA < -2Z (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
• WFA ≥ -2Z 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

a. To determine correct preparation and amount of the replacement feeding, refer "Counsel the mother—Safe preparation of Formula Feeding" *(See page 55)*

CHECK THE DEVELOPMENT OF THE YOUNG INFANT, <2 MONTHS OLD

- If the infant has severe classification, don't do the assessment of development.
- **Ask and Verify**
  - Ask child's current age
  - Are there any risk factors that can affect how this child is developing
  - **Risk factors**:
  - Difficult birth or any neonatal admission, Prematurity or low birth weight, Malnutrition, Head circumference too large or too small, HIV or exposure to HIV and Serious infection or illness.
  - Environmental factors: Very young or elderly caregiver; abuse of drugs or alcohol; maternal depression, signs of violence or neglect; lack of caregiver responsiveness to the child; poverty.
  - How do you think your child is developing? Do you have any concern? Consider parental concerns when observing the child's development
- **Look**
  - For all infants less than two months; assess if the infant achieved the at birth development milestones

Classify

SIGN	CLASSIFY AS	TREATMENT
• Absence of one or more milestones from current age group	**SUSPECTED DEVELOPMENTAL DELAY**	▶ Praise caregiver on milestones achieved ▶ Counsel caregiver on play & communication, responsive caregiving activities to do at home ▶ Screen for other possible causes including malnutrition, TB disease ▶ Advise to return for follow up in 30 days
• All the important milestones for the current age group achieved	**NO DEVELOPMENTAL DELAY**	▶ Praise caregiver on milestones achieved ▶ Advice the care giver on the importance of responsive caregiving, ,talking to the child, reading, singing and play with the child on daily basis ▶ Encourage caregiver to exercise more challenging activities of the next age group ▶ Advise to continue with follow up consultations ▶ Share Key message for care giver

DEVELOPMENT MILESTONES:

At birth:

- Remains flexed in supine position
- Grasps with fingers and toe when touched on the palm or sole
- Prefers facial features (looks at faces)
- Suckles when touched on mouth with finger
- Follows light or moving object in line of vision and startle to sound

CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS

IMMUNIZATION SCHEDULE:

AGE	VACCINE			
Birth	HepB - BD [a]	BCG	OPV- 0 [b]	
6 weeks	Penta - 1	PCV-1	Rota –1	OPV– 1

a. Ideally, the birth dose of HepB should be given within 24 hrs of birth. It can still be given in the first 14 days, since its effectiveness diminishes with the passage of time it is good to give it as early as possible.

b. 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 59

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:

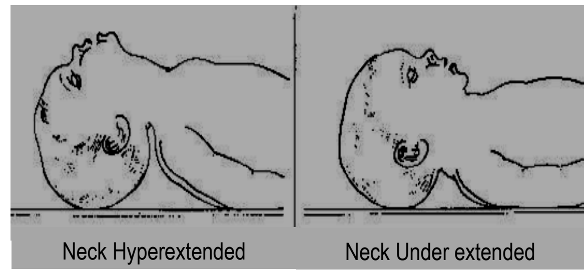
- Excessive vaginal bleeding
- Foul smelling vaginal discharge
- Severe abdominal pain
- Fever
- Excessive tiredness or breathlessness
- Swelling of the hands and face
- Severe headache or blurred vision
- Convulsion or impaired consciousness

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

NEWBORN RESUSCITATION — follow HBB Action Plan

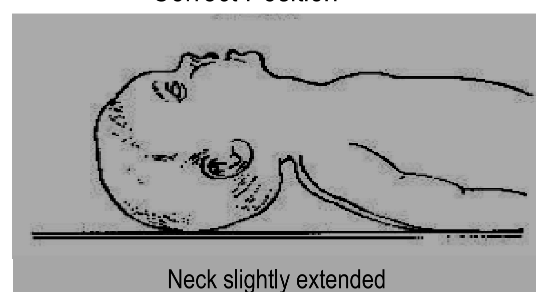
Clear Airway	▸ Clear the airway by wiping out the mouth with gauze or syringe bulb ▸ Suction the baby's mouth first then nose gently ▸ Reassess the baby's breathing
Position	▸ Place the baby on his/her back with the neck slightly extended
Ventilate	▸ Use baby bag and mask to ventilate at 40 breaths per 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 ▸ If the baby has not responded (no breathing at all) after 20 minutes, stop resuscitation.
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



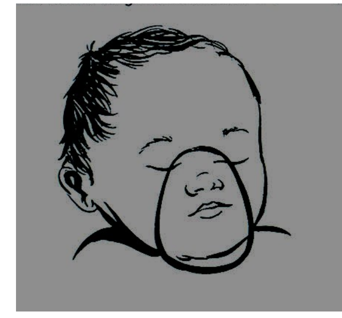
Neck Hyperextended — Neck Under extended

Correct Position

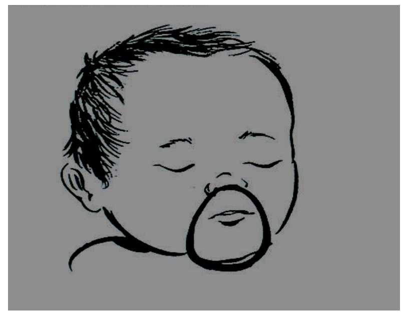


Neck slightly extended

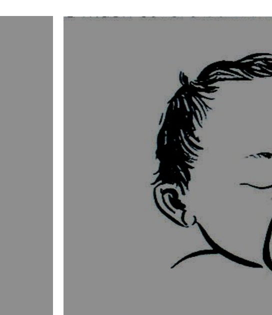
Incorrect: Bigger Mask



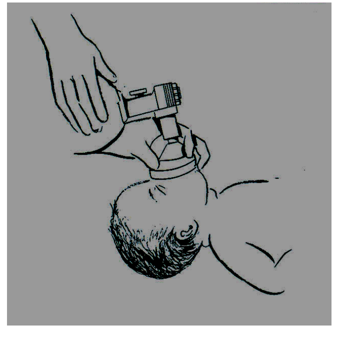
Incorrect: Smaller Mask



Correct: Proper Mask

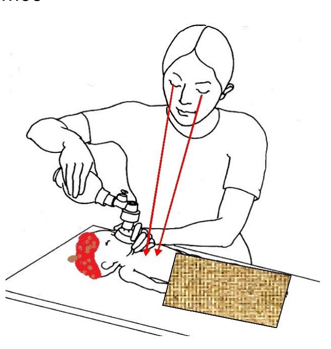


Bag & Mask Resuscitation

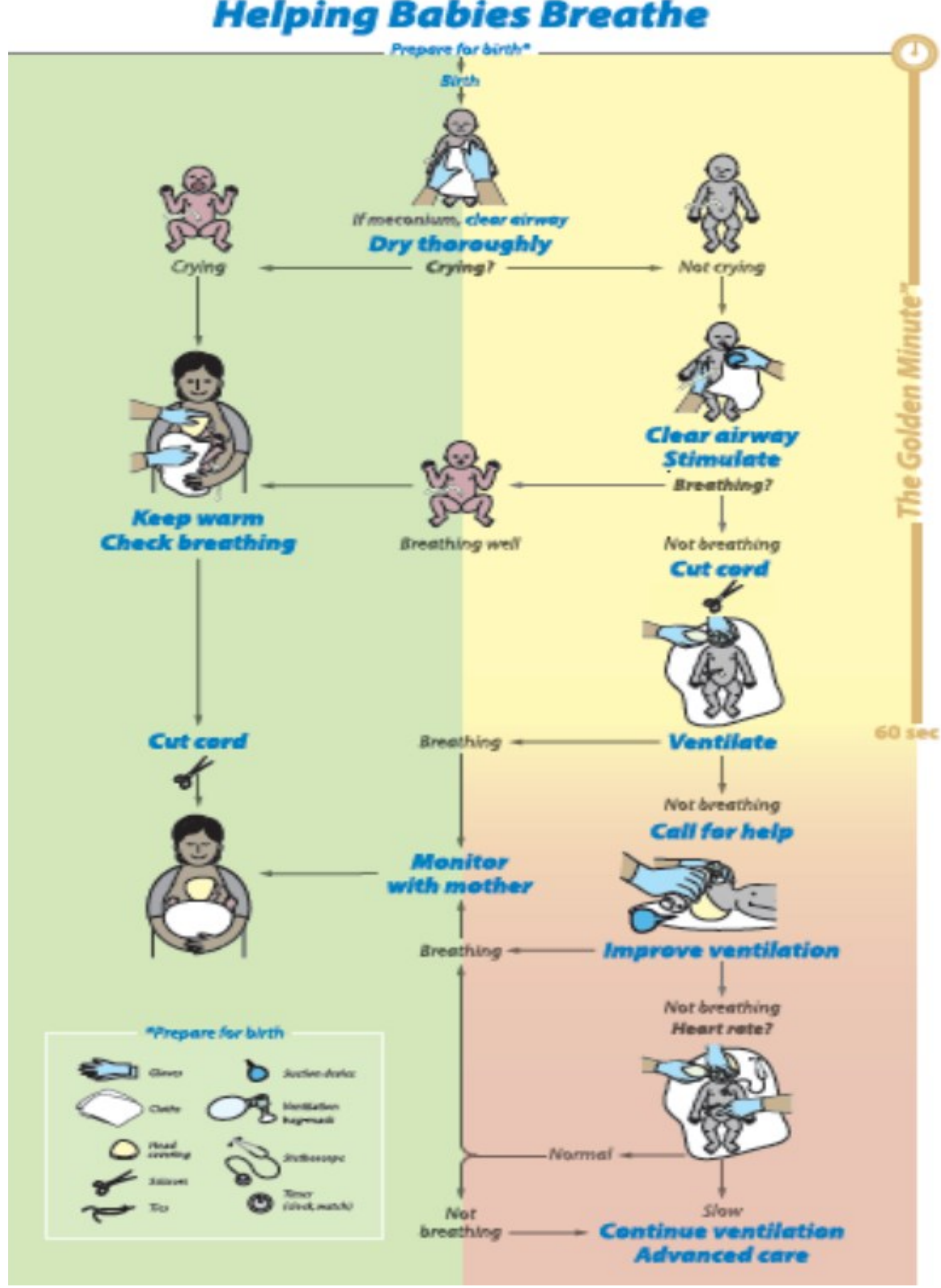


How to Ventilate

- 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.

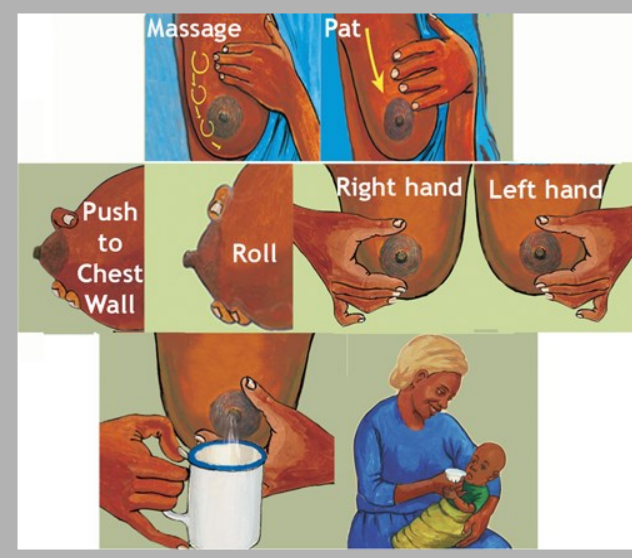
TIPS for storing and using stored breast milk

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.

- ► Counsel 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 (Local BI), for 7 days (Pneumonia)		
	DISPERSIBLE TABLET (DT) 250 mg	**DISPERSIBLE TABLET (DT)** 125mg	**SYRUP** 125 mg in 5 ml
Birth up to 1 month (< 4kg)	1/2	1	5 ml
1 month up to 2 months (4-6kg)	1	2	10 ml

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

- ***For Critical Ilness and Very Severe Disease***
- **Give first dose of Ampicillin and Gentamicin intramuscular**

Weight	Ampicillin Dose: 50 mg per kg to vial of 250mg Add 1.3 ml sterile water = 250mg/1.5 ml	GENTAMICIN	
		Strength 10mg/ml (20mg in 2ml)	Strength 40mg/ml (80mg in 2ml)
1.5 - <2.5 kg	0.8 ml	0.8 ml	0.2 ml
2.5 - <4 kg	1.2 ml	1.6 ml	0.4 ml
4.0 - <6 kg	1.5 ml	2.4 ml	0.6 ml

- Referral is the best option for a young infant classified with VERY SEVERE DISEASE.
- If referral is not possible, give Ampicillin /Benzyl Penicillin and Gentamicin for at least 7 days. Give Ampicillin/Benzyl Penicillin every 12 hours plus Gentamicin every 24 hours. If very preterm, Gentamicin 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 full strength Gentian Violet (GV) (0.5%) twice daily for 5 days

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 four times 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 after:
• LBW/PRETERM • PNEUMONIA • LOCAL BACTERIAL INFECTION • 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,*

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 HepB-BD, OPV & BCG if not given before

➢ *PNEUMONIA,*

After 2 days

- Reassess for Very Severe Disease
- Ask if the infant is improving or not

Treatment:

➢ If the infant becomes worse or any new sign of VERY SEVERE DISEASE appears while on treatment, refer urgently to hospital.

➢ If the infant is improving, continue giving oral amoxicillin twice daily until 7 days.

➢ Counsel the mother when to return immediately.

➢ *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, HepB-BD & 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, HepB-BD & 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 or persistent 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°C)
- Hypothermia (cold to touch or axillary temperature <35.5°C)
- 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 breast-feed?
- ► 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 a, b

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Unable to drink or breastfeed, OR • Vomits everything, OR • Had Convulsions, OR • Lethargic, OR • Unconscious, OR • Convulsing now	**VERY SEVERE DISEASE**	► **Give diazepam if convulsing now** ► **Quickly complete the assessment** ► **Give appropriate pre-referral treatment immediately, based on other severe classifications** ► **Treat to prevent low blood sugar** ► **Keep the child warm** ► **Refer URGENTLY.**

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

b. A child with no general danger sign can have other severe signs and severe (pink) classifications, so complete your assessment carefully. If you get no general danger sign at this stage, you shouldn't assume that the child is healthy or without sickness. Continue your assessment carefully.

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

ASSESS **CLASSIFY** **IDENTIFY TREATMENT**

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing? IF YES,

ASK:

- For how long?

LOOK, LISTEN, FEEL:

- Count breaths in one minute
- Look for chest-indrawing
- Look and listen for stridor
- Look and listen for wheezing
- Measure oxygen saturation [a]

CHILD MUST BE CALM

Classify COUGH or DIFFICULT BREATHING

If wheezing with fast breathing or with chest-indrawing:

- Give rapid acting inhaled bronchodilator for up to 3 times, 15 — 20 minutes apart.
- Count breaths and look for chest indrawing again, and then classify.

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

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign OR • Stridor in calm child, OR • Oxygen saturation <90%	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	► **Give first dose of IV/IM Ampicillin and Gentamicin** ► **Refer URGENTLY to hospital** [b]
• 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 [c] ► 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 ► Advise mother when to return immediately ► Follow-up after 2 days antibiotic treatment
No signs of: • Very severe disease AND • Pneumonia	**COUGH OR COLD**	► If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days [c] ► Soothe the throat and relieve the cough with a safe remedy ► If coughing for > 14 days assess for TB. ► Advise mother when to return immediately ► Follow-up in 5 days if not improving

a. Pulse oximeters are used to measure oxygen saturation.

b. If referral is not possible, manage the child as described in "Where referral isn't possible" part of this chart booklet or as in Ethiopian pocket book for hospital care for children.

c. If inhaled bronchodilator is not available, oral salbutamol may be tried but not recommended for treatment of severe acute wheeze. In addition, refer Page 72 for how to treat wheeze.

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

For Dehydration

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
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

SIGNS	CLASSIFY AS	TREATMENT
• 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

SIGNS	CLASSIFY AS	TREATMENT
• Blood in the stool	**DYSENTERY**	► **Treat for 3 days with Ciprofloxacin** ► Advise mother when to return immediately ► Follow-up after 2 days of antibiotic treatment

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

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,
If malaria risk is High/Low or history of travel to a malarious area,
AND there is no Severe Classification [b]

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?

LOOK AND FEEL:

- Look or feel for stiff neck.
- Look or feel for bulging fontanels (< 1 year of age)
- Look for any obvious other bacterial causes of fever [c]
- Look for runny nose.
- Look for signs of MEASLES
  - Generalized rash, AND one of these:
  - cough, runny nose or red eyes.

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

- 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.

Malaria Risk (High/Low)

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 IV/IM Artesunate for severe malaria** ▶ **Give first dose of IV/IM Ampicillin and Gentamicin** ▶ **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, OR • If BF not available, fever with no other obvious cause	**MALARIA**	▶ **Treat with Artemeter-Lumefantrine (AL) and Primaquine for P. falcip. or mixed or no confirmatory test done** ▶ **Treat with Chloroquine and Primaquine 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 after 2 days of antimalarial if fever persists or if on Primaquine RC ▶ If fever is present every day for more than 7 days, refer for assessment
• Negative blood film, OR • Other obvious 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 after 2 days of antibiotics if fever persists ▶ If fever is present every day for more than 7 days, refer for assessment

No Malaria Risk and No travel to Malarious area

SIGNS	CLASSIFY	TREATMENT
• 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 Gentamicin** ▶ **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 after 2 days of medication if fever persists ▶ If fever is present every day for more than 7 days refer for assessment

IF MEASLES now or within the last 3 months, Classify

SIGNS	CLASSIFY	TREATMENT
• Any general danger sign, OR • Clouding of cornea, or • Deep or extensive mouth ulcers , or • Other complications [d]	**SEVERE COMPLICATED MEASLES**	▶ ***Give Vitamin A, first dose*** ▶ ***Give first dose of IV/IM Ampicillin and Gentamicin*** ▶ ***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 after 2 days
• Measles now or within the last 3 months	**MEASLES**	▶ **Give Vitamin A, therapeutic dose** ▶ Advise mother when to return immediately

a *These temperatures are based on axillary temperature . Rectal temp readings are approximately 0.5 ⁰C higher.*

b *HCs & hospitals should use BF microscopy for malaria confirmation. RDTs are meant for HPs. But if in the rare case you use RDT result, interpret the RDT test result like BF result during classification.*

c *Look for local tenderness; pharingitis or tonsilitis, oral 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.*

d *Other important complication of measles-pneumonia, stridor, diarrhea, ear infection, and acute malnutrition–*

Does the Child Have an Ear Problem?

IF YES, ASK:	***LOOK, AND FEEL:***	***Classify EAR PROBLEM***
• Is there ear pain? • Is there ear discharge? If yes, for how long?	• Look for pus draining from the ear • Feel for tender swelling behind the ear	

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Tender swelling behind the ear	**MASTOIDITIS**	► ***Give first dose of Ceftriaxone IV/IM OR*** **Ampicillin and Gentamicin 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?
- If some or severe pallor **and** child ≥ 6 months [a], do blood test and measure Haemoglobin (Hb) or Haematocrit (Hct) [b, c, d]

Classify ANEMIA

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Hb < 7gm/dL, OR • Hct < 21%, OR • Severe palmar pallor	**SEVERE ANEMIA**	► ***Refer URGENTLY to hospital***
• Hb 7— <11 gm/dL, OR • Hct 21 — <33%, OR • 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 [e] ► Do blood film 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 ≥ 1 year old and has not had a dose in the previous six months ► Advise mother when to return immediately ► Follow-up in 14 days
• Hb ≥ 11gm/dL, OR • Hct ≥ 33%, OR • No palmar pallor	**NO ANEMIA**	► No additional treatment ► Counsel the mother on feeding recommendation

a. *For <6 months old infants, use palmar pallor only for classifying anemia; don't use Hb/Hct; because there is no WHO 's standardized cut off point for < 6 Months*

b. *If child has severe pallor and other severe classification, don't delay the referral for measuring Hb/Hct. But if child has severe pallor only, do Hb/Hct and confirm severe anemia before referral.*

c. *If Hb/Hct measurement don't go together with palmar pallor, rely on the Hb/Hct to classify anemia of the child.*

d. *In cases where both Hb and Hct are measured, and the two measurements don't go together for classification, again rely on Hb measurement to classify anemia.*

e. *If child has SAM and is receiving RUTF, **DO NOT give** iron because there is already adequate amount of iron in RUTF. If Iron should be given to the child, it has to be started after 14 days of SAM/RUTF treatment.*

CHECK FOR ACUTE MALNUTRTION, IN INFANTS < 6 MONTHS

LOOK AND FEEL

If child is < 6 months old:

- Look for pitting edema of both feet
- Measure weight, length and

  determine Weight For Length (WFL)

SIGNS	CLASSIFY AS	TREATMENT
• WFL <-3Z score, OR • Oedema of both feet	**SEVERE ACUTE MALNUTRITION**	▶ If HF has stabilization center, admit to SC. ▶ If the HF don't have SC, • Give first dose of Ampicillin and Gentamicin IM • Treat the child to prevent Low Blood Sugar • Advise mother on the need of referral • Refer Urgently to Hospital
• WFL ≥ -3Z to < -2Z score, AND • No oedema of both feet	**MODERATE ACUTE MALNUTRITION**	▶ Assess feeding and advise the mother on feeding ▶ Assess for TB infection ▶ 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

CHECK FOR ACUTE MALNUTRTION, IN CHILDREN 6 - 59 MONTHS

For children aged 6 months up to 5 years:

LOOK AND FEEL:

- Look for pitting oedema of both feet **(+, ++, +++)** [a]
- Measure and determine WFL/H Z-score (< -3, -3 to -2, ≥ -2), [b]
- Measure MUAC (<11.5cm, 11.5 to 12.5cm, ≥ 12.5cm)
- Vitamin A deficiency eye

If child has
- +/++ oedema, or WFL/H <-3Z or MUAC <11.5 cm; AND
- No severe wasting with oedema [c]

- Look for **any medical complications** listed below:
  - Any General Danger Sign
  - Any severe classification
  - Pneumonia
  - Dehydration [d]
  - Persistent diarrhea
  - Dysentery
  - Measles [now or with eye/mouth complications]
  - Fever ≥ 38.5ºC
  - Low body temperature (<35ºC axillary)
  - Dermatosis +++ [e]

If child has
- +/++ oedema, or WFL/H <-3Z or MUAC <11.5 cm; AND
- No severe wasting with oedema [b], AND
- No medical complication

SIGNS	CLASSIFY AS	TREATMENT
• WFL/H < -3Z or MUAC <11.5 cm or Oedema of both feet (+, ++), AND: • Medical complications, or • Failed Appetite test OR • +++ Oedema OR • Severe wasting with oedema (WFL/H < -3Z with oedema or MUAC <11.5 cm with oedema)	**COMPLICATED SEVERE ACUTE MALNUTRITION**	▶ **Admit to inpatient care (Stabilization Center) or Refer urgently to hospital** ▶ **Give 1st dose of Ampicillin and Gentamicin 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**
• WFL/H < -3Z or MUAC <11.5 cm or oedema of both feet (+, ++) AND • No medical complication, and • Pass appetite test	**UNCOMPLICATED SEVERE ACUTE MALNUTRITION**	▶ If OTP is available, admit child to OTP and follow standard OTP treatment and care, including: • Give RUTF for 7 days, • Give oral Amoxicillin for 5 days • Counsel on how to feed RUTF to the child • Advise when to return immediately • Assess for TB infection • Follow-up in 7 days ▶ If no OTP in the facility, refer child to OTP service ▶ If there is social problem at home, treat child as in patient
• WFL/H ≥ -3Z to < -2Z or MUAC 11.5 cm to <12.5 cm AND • No oedema of both feet	**MODERATE ACUTE MALNUTRITION**	▶ Admit or Refer to Supplementary Feeding Program and follow TSFP care protocol ▶ Asses for feeding and counsel the mother accordingly ▶ Assess for TB infection ▶ If feeding problem, follow up in 5 days ▶ Follow up in 30 days
• WFL/H ≥ -2Z or MUAC ≥ 12.5 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

a. Oedema grading: bilateral oedema below ankles (+); below the knees & the elbows (++); generalized oedema involving the upper arms & face (+++).

b. If WFL/H and MUAC measurements are discordant, use the worse measurement for classification of the child.

c. Child with WFH <-3 Z plus oedema, or with MUAC<11.5cm plus oedema.

d. Diagnosis of dehydration in SAM is mainly by using patient's history rather

e. 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.

Does Child Need Feeding Assessment? IF Yes,

If child is < 2 years old, or has Anemia or MAM; AND Has no severe classification - Do feeding assessment.

Ask

- Do you breastfeed your child? 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? 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 Moderate Acute Malnutrition:
  How large are servings? ___________________________
  Does the child receive his/her own serving? Yes______
  No_________
  Who feeds the child and how? ________________________
- During the illness, has the child's feeding changed (decreased)?
  Yes____ No___

Classify

FEEDING

SIGNS	CLASSIFY AS	TREATMENT
If any of the following signs: • Infrequent breastfeeding in the day, or • Not breastfeeding during the night, or • Semi-solid food not introduced at 6 month, or • Diluted milk or thin gruel is given, or • Complimentary food not enriched, or • Less amount of complimentary food, or • Infrequent complimentary food, • Bottle feeding, or • Giving inappropriate replacement milk or • Giving insufficient replacement feeds or • Mother mixing breast milk and replacement feeds or • Replacement milk prepared incorrectly or • Replacement milk prepared unhygienically or • Child refuses to eat or finish servings, or • Child shares meal with elders, or • No active feeding of child, or • During illness and after recovery, fluids and foods offered to child not increased • During illness, breast feeding decreased or discontinued	**FEEDING PROBLEM**	▶ Advise mother on appropriate age specific feeding recommendations, ▶ Advise mother on recommendations about child's specific feeding problem ▶ Follow-up of feeding problem in 5 days
• No signs of FEEDING PROBLEM	**NO FEEDING PROBLEM**	▶ Praise and encourage the mother for feeding the infant well

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 page 36) ► Ensure mother is tested & enrolled in HIV care & treatment ► Advise on home care ► Refer/Link to ART clinic for ART initiation and other components of care ► Ensure child has appropriate follow up
• 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 ► Assess for TB infection (Refer page 36) ► If child DNA PCR is unknown, test as soon as possible ► Ensure both mother and baby are enrolled in mother-baby cohort follow up at ANC/PMTCT clinic ► Ensure provisions of other components of care
• Mother and child not tested	**HIV STATUS UNKNOWN**	► Counsel the mother for HIV testing for herself & the child ► Test the child if mother is not available (Eg orphan) ► Advise the mother to give home care ► Assess feeding and counsel
• Mother negative, **OR** • Mother positive, and child DNA PCR negative, and not breastfeeding, **OR** • Mother HIV status unknown, and child antibody negative	**HIV INFECTION UNLIKELY**	► Advise on home care ► Assess feeding and counsel ► Advise on HIV prevention ► If mother HIV status is unknown, encourage mother to be tested

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/link to ART clinic for ARV initiation & other components of care ► Ensure mother is tested & enrolled in HIV care & treatment
• Mother positive, **AND** • Child antibody negative or unknown, and breastfeeding	**HIV EXPOSED**	► Give Cotrimoxazole prophylaxis ► Assess feeding and counsel ► Assess for TB infection (Refer page 36) ► If child antibody test is unknown, test as soon as possible ► If child antibody test is negative, repeat 6 wks after complete cessation of breastfeeding ► Ensure both mother and baby are enrolled in mother-baby cohort follow up at ANC/PMTCT clinic ► Ensure provisions of other components of care
• Mother and child not tested	**HIV STATUS UNKNOWN**	► Counsel the mother for HIV testing for herself and the child ► Test the child if mother is not available (Eg orphan) ► Advise the mother to give home care ► Assess feeding and counsel
• Mother negative and child not known	**HIV INFECTION UNLIKELY**	► Advise on home care ► Assess feeding and counsel ► Advise on HIV prevention ► If possible, do HIV antibody test for the sick child
• Child antibody negative at least 6 weeks after complete cessation of breastfeeding	**HIV UNINFECTED**	► Advise on home care ► Assess feeding and counsel ► Advise on HIV prevention

CHECK THE CHILD FOR TUBERCULOSIS

Ask TB symptoms: Does child have:

- > 14 days cough? [a]
- > 14 days fever and/or night sweats? [b]
- contact history with known BC-PTB (Bacteriologically Confirmed Pulmonary TB) patient? [C]

Look and feel for TB signs: Does child have

- loss of weight or failure to gain weight or MAM or SAM?
- swelling or discharging wound in the neck or armpit? [d]

If child **has no contact nor symptom/sign**, Classify as **No TB Infection** (Green)

If child **has any of the above contact or symptoms or signs**, do the following:

- Gene Xpert test for [e]
  - Sputum, collected from Gastric Aspiration (NG Tube) or
  - Sputum, collected from production or
  - Sample, collected from other sites
- Chest X-ray, if available
- Provider-initiated HIV testing and counselling

Classify

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• GeneXpert / AFB +ve [f] , OR • Chest X ray suggestive of TB [g] OR • Contact history with BC-PTB patient AND ≥ 1 TB symptoms, AND ≥ 1 TB signs [h] , OR • Known HIV+ child, AND Contact history with BC-PTB patient AND ≥ 1 TB symptoms or signs,	**TB DISEASE**	► Advise mother on the need to start TB treatment to the child ► Advise mother to bring any other contacts to TB clinic ► Ensure that mother is escorted and linked to TB clinic, for initiation of TB treatment and follow up
• Contact history with BC-PTB patient AND No TB symptoms and signs	**TB INFECTION**	► Advise mother on the need for TB prevention treatment ► Ensure that mother is escorted and linked to TB clinic, for TB prevention treatment and follow up.
• No Contact with known BC-PTB patient AND No TB signs/symptoms	**NO TB INFECTION**	► Continue and complete assessment and classification for other problems

a. Cough of any duration for HIV positives
b. Fever >38⁰C that continues for greater than two weeks after common causes are excluded.
c. Contact history with BC-PTB patient: a child in contact with a known newly diagnosed BC-PTB case (within the past one year) as a close contact or household member.
d. The swelling and discharging wound in the neck or armpit staying for a duration of more than one month, and it should not be due to injury of any kind.
e. If GeneXpert is not available in your facility, send/refer sample for Gene Xpert test. And in the mean time do AFB microscopy in your facility.
f. Gene Xpert –ve or AFB –ve result don't rule out TB disease. But –ve result has to be documented and reported accordingly.
g. X-ray is not commonly available in health centers and primary hospitals, but if it is available use it as one of the criteria for classification.
h. If the child has Contact history with BC-PTB patient AND has Only one TB symptoms or a sign, continue and complete assessment and classification for other problems; And advise the mother to bring the child for follow-up after 2 weeks to be Re- checked for Tuberculosis Status

CHECK THE DEVELOPMENT OF CHILD, 2 - <24 MONTHS OLD

- If child has severe classification, don't do the assessment of development.

Ask and Verify: Ask child's current age
- Are there any risk factors that can affect how this child is developing
- Risk factors:
  - Difficult birth or any neonatal admission, Prematurity or low birth weight, Malnutrition, Head circumference too large or too small, HIV or exposure to HIV and Serious infection or illness.
  - Environmental factors: Very young or elderly caregiver; abuse of drugs or alcohol; signs of violence or neglect; lack of caregiver responsiveness to the child; poverty.
- How do you think you child is developing? Do you have any concern? Consider parental concerns wen observing the child's development

Look
- Identify the milestones corresponding to the child's age.
- If the child's age is not on the CB, look at the milestone of earlier age. For eg. for an 8 months old child, use 6 months milestones.
- If the child was born premature and is younger than 30 months, subtract the period that was left until normal birth from the current age of the child. For e.g; an 8 months old baby born at 7 month of pregnancy would be counted as 6 months old
- Invite caregiver to do simple actions to show if the child has reached EACH milestone for her age. If the child is sleeping, shy or too sick, ask the mother if the child does this action at home
- If the child is not able to achieve one or more milestones for her age, check if the child has reached the milestones for the earlier age.

Classify

SIGN	CLASSIFY AS	TREATMENT
• Absence of one or more milestones from current age group AND Absence of one or more Milestones from earlier age group, OR • Regression of milestones signs	**CONFIRMED DEVELOPMENTAL DELAY**	▶ Counsel caregiver on play & communication, Responsive caregiving activities to do at home ▶ Refer for psychomotor evaluation ▶ Screen for mothers health needs and risk Factors and other possible causes including Malnutrition, TB disease and hyperthyroidism ▶ Advise to continue with follow up consultations
• Absence of one or more milestones from current age but has reached all milestones for earlier age, OR • If there is risk factors, OR parental concern	**SUSPECTED DEVELOPMENTAL DELAY**	▶ Praise caregiver on milestones achieved ▶ Counsel caregiver on play & communication, Responsive caregiving activities to do at home ▶ Advise to return for follow up in 30 days ▶ Screen for other possible causes including malnutrition, TB disease
• All the important milestones for the current age group achieved	**NO DEVELOPMENTAL DELAY**	▶ Praise caregiver on milestones achieved ▶ Advice the care giver on the importance of responsive caregiving, ,talking to the child, reading, singing and play with the child on daily basis ▶ Encourage caregiver to exercise more challenging activities of the next age group ▶ Advise to continue with follow up consultations ▶ Share Key message for care giver

DEVELOPMENT MILESTONES:

At birth:
- Remains flexed in supine position
- Grasps with fingers and toe when touched on the palm or sole
- Prefers facial features (looks at faces)
- Suckles when touched on mouth with finger
- Follows light or moving object in line of vision and startle to sound

2 months
- Smiles when you speak to him/her (social smile)
- Coos (vocalizes one vowel)
- Reacts to sounds
- Brings hand to mouth

4 months
- Follows objects with eyes past midline
- Responds with sounds when you speak and Laughs out loud
- Holds object with one hand
- Lifts head and chest when put on tummy

6 months
- Reacts to his/her name
- Babbles with vowels (Ahaaaa, hooou)
- Grasps & puts objects in mouth and Looks for dropped objects
- Rolls over

9 months
- Plays peek a boo (uncover hidden objects)
- Babbles with consonants (mama, dada)
- Responds to sound of name
- Transfers object from one hand to the other
- Sits without support

12 months
- Points to objects
- Says mama, papa and additional 2 words
- Picks objects with 2 fingers and Release objects to other person on request
- stand and walks with support

15 months
- Express need using gesture or sound
- Says/Names familiar object (5 words)
- Put objects into a container
- Stand and walk without support

18 months
- Points to two or more parts of the body
- Start to speak in jargons, knows 10 or more words
- Builds tower of 4 cubes or boxes
- Drinks from a cup
- Walks without support

CHECK THE DEVELOPMENT OF CHILD, 24 - <60 MONTHS OLD

- If child has severe classification, don't do the assessment of development.

Ask and Verify: Ask child's current age

- Are there any risk factors that can affect how this child is developing
- Risk factors:
  - Difficult birth or any neonatal admission, Prematurity or low birth weight, Malnutrition, Head circumference too large or too small, HIV or exposure to HIV and Serious infection or illness.
  - Environmental factors: Very young or elderly caregiver; abuse of drugs or alcohol; signs of violence or neglect; lack of caregiver responsiveness to the child; poverty.
- How do you think you child is developing? Do you have any concern? Consider parental concerns wen observing the child's development

Look

- Identify the milestones corresponding to the child's age.
- If the child's age is not on the CB, look at the milestone of earlier age. For eg. for an 8 months old child, use 6 months milestones.
- If the child was born premature and is younger than 30 months, subtract the period that was left until normal birth from the current age of the child. For e.g; an 8 months old baby born at 7 month of pregnancy would be counted as 6 months old
- Invite caregiver to do simple actions to show if the child has reached EACH milestone for her age. If the child is sleeping, shy or too sick, ask the mother if the child does this action at home
- If the child is not able to achieve one or more milestones for her age, check if the child has reached the mile-

DEVELOPMENT MILESTONES:

18 months

- Points to two or more parts of the body
- Start to speak in jargons, knows 10 or more words
- Builds tower of 4 cubes or boxes
- Drinks from a cup
- Walks without support

24 months

- Points at 2 pictures on request
- Makes 2-word sentence
- Builds tower of 6 cubes or boxes
- Kicks a ball

36 months

- Plays with other children
- Says 3 words in a sentence
- Copies circle shape
- Runs
- Stands on one foot

48 months

- Says 4 words in a sentence, Counts to 4, knows age and sex
- Copies cross and square, identify longer of 2 lines
- Jumps with two feet
- Plays with many children, goes to toilet alone

59 months

- Names 4 colors
- Tells a simple story
- Copies triangle, Identify heavier of two weights
- Jumps with one foot
- Dresses and undresses

Classify

SIGN	CLASSIFY AS	TREATMENT
• Absence of one or more milestones from current age group AND Absence of one or more Milestones from earlier age group, OR • Regression of milestones signs	**CONFIRMED DEVELOPMENTAL DELAY**	▶ Counsel caregiver on play & communication, Responsive caregiving activities to do at home ▶ Refer for psychomotor evaluation ▶ Screen for mothers health needs and risk Factors and other possible causes including Malnutrition, TB disease and hyperthyroidism ▶ Advise to continue with follow up consultations
• Absence of one or more milestones from current age group	**SUSPECTED DEVELOPMENTAL DELAY**	▶ Praise caregiver on milestones achieved ▶ Counsel caregiver on play & communication, Responsive caregiving activities to do at home ▶ Advise to return for follow up in 30 days ▶ Screen for other possible causes including malnutrition, TB disease
• All the important milestones for the current age group achieved	**NO DEVELOPMENTAL DELAY**	▶ Praise caregiver on milestones achieved ▶ Advice the care giver on the importance of responsive caregiving, ,talking to the child, reading, singing and play with the child on daily basis ▶ Encourage caregiver to exercise more challenging activities of the next age group ▶ Advise to continue with follow up consultations ▶ Share Key message for care giver

CHECK THE CHILD'S IMMUNIZATION AND VITAMIN A STATUS

IMMUNIZATION SCHEDULE:	AGE	VACCINE
	Birth	HepB - BD [a], BCG and OPV - 0
	6 weeks	Penta -1 [b], PCV-1, Rota -1 and OPV - 1
	10 weeks	Penta -2, PCV-2, Rota –2 and OPV - 2
	14 weeks	Penta -3, PCV-3 , IPV and OPV - 3
	9 months	Measles 1 and Vitamin A [c] (if not given with in last 6 months)
	15 months	Measles 2 and 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 61

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.

a. Ideally, the birth dose of HepB should be given within 24 hrs of birth. It can still be given in the first 14 days, since its effectiveness diminishes with the passage of time it is good to give it as early as possible.
b. Pentavalent vaccine is also called as DPT-HepB-Hib.
c. Vitamin A can be given as supplement to the child starting at the age of 6 months old, with no need of waiting the 9 months scheduled vaccination.

TREAT

CHILD

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 weight or age.
- 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 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 Gentamicin 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 (< 8 Kg)	1/2	1/4
6 months up to 5 years (8—19 Kg)	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
		CAPSULE 250mg
2 months up to 4 months (4-6 kg)	See doses above	
4 months up to 12 months (6-10 kg)		
12 months up to 5 years (10-19 kg)		1

***Follow the latest national recommendation accordingly

FOR SEVERE ACUTE MALNUTRITION :
Give Amoxicillin for 5 days

WEIGHT	AMOXICILLIN Give 2 times daily for 5 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/her 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 - **Artemether-Lumefantrine (AL) + Primaquine (single dose)**
- First line for mixed infections (falciparum + vivax malaria) - **Artemether-Lumefantrine (AL) + Primaquine (Radical cure dose or 14 days)**
- First line for P. vivax - **CHLOROQUINE + Primaquine (14 days)**
- Second line antimalarial: **QUININE**

Artemether-Lumefantrine (AL)

- Tablet containing 120 mg Artemether and 20 mg Lumefantrine.

Weight (kg)	Age	Number of tablets per dose twice daily for 3 days
<15	< 3 years	1 (Yellow tabs)
15-25	3 - 7 years	2 (Blue tabs)

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 Syrup	 1/4 5 ml	 1/4 5 ml	 1/4 2.5 ml
7 – <11	4-11 month Tablet Syrup	 1/2 7.5 ml	 1/2 7.5 ml	 1/2 5 ml
11 – <15	1-<3 year Tablet Syrup	 1 12.5 ml	 1 12.5 ml	 1/2 7.5 ml
15 – 19	3-<5 year Tablet Syrup	 1 15 ml	 1 15 ml	 1 15 ml

Primaquine:

- Dose: 0.25 mg base/kg, daily
- Single dose for p falciparum; and 14 days (radical cure dose) for p vivax or mixed
- Don't give Primaquine for <6mths old infants, pregnant and breastfeeding mothers
- In radical cure dose, follow child for hemolysis (urine discoloration and anemia)

Weight (kg)	Age	7.5mg tablets
8 — 18	6mth - 5 years	1/2
19 — 24	5 – 8 years	1

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

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— Once daily.			
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 — <15kg)	1	¼	5 ml	2.5 ml	1	
3 years up to 5 years (15 -19 kg)	2 ½	½	10 ml	5 ml	2	1

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

➢ Give Vitamin A

- **For PERSISTENT DIARRHOEA, SEVERE PERSISTENT DIARRHOEA,**
  - Give single dose on day 1 if child didn't get Vitamin A in the last one month.
  - If child is on RUTF, don't give Vitamin A.
- **For MEASLES, MEASLES with EYE/MOUTH complications, or SEVERE COMPLICATED MEASLES:**
  - Give two doses on Day 1 and 2.
  - If child has Vitamin A deficiency eye signs, add a 3rd dose on Day 15.
- **For SEVERE ACUTE MALNUTRITION:**
  - Do not give Vitamin A to child with SAM in the OTP, as RUTF contains an adequate amount of Vitamin A.
  - If SAM and eye signs of Vitamin A deficiency (e.g., night blindness, Bitot's spots, corneal ulceration) - Give three doses of Vit A on Day 1, 2 and 15, irrespective of the type of therapeutic food they are receiving.
- **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- <14 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, refer when referral is not possible part.

➢ Give an Intramuscular Antibiotic

FOR CHILDREN BEING REFERRED URGENTLY:

- For **SEVERE PNEUMONIA, VERY SEVERE FEBRILE DISEASE** or **SEVERE COMPLICATED MEASLES** - Give first dose of IV/IM Ampicillin & Gentamicin or
- For **MASTOIDITIS** - Give IM Ceftriaxone or IM/IV Ampicillin & Gentamicin and refer child urgently to hospital,

AGE or WEIGHT	**Ampicillin** 500 mg vial Dose: 50 mg/kg (Add 2.1 ml of sterile water , to make 500mg/2.5 ml OR 200mg/ml solution).	**Gentamicin** 40mg/ml 2ml vial	**Ceftriaxone** Dose: 50 mg/kg (Add 9.6 ml sterile water to vial containing 1 gm = 10 ml at 100 mg/ml)
2 up to 4 months (4 – <6 kg)	1 ml	0.5 - 1.0 ml	2.5 ml
4 up to 12 months (6 – <10 kg)	2 ml	1.1-1.8 ml	4 ml
1 up to 3 years (10 – <15 kg)	3 ml	1.9 - 2.7 ml	6 ml
3 up to 5 years (15 – <19 kg)	5 ml	2.8 - 3.5 ml	8 ml

➢ 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. Infuse slowly for intravenous administration (3-4 ml per minute)
- For children below 20kg of weight, give 3mg/kg per dose.
- 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 (AL).

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

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:

- Alternative pre-referral drug, where Artesunate is not available.
- Dose - 3.2 mg/kg IM

Quinine:

- For VERY SEVERE FEBRILE DISEASE (**only for High/Low malaria risk areas**), if Artesunate and Artemether is not available.

FOR CHILDREN BEING REFERRED :

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

IF REFERRAL IS NOT POSSIBLE:

- Give 1st dose of IM 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 to 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 child is not exclusively breastfed (≥ 6 months old), 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**:

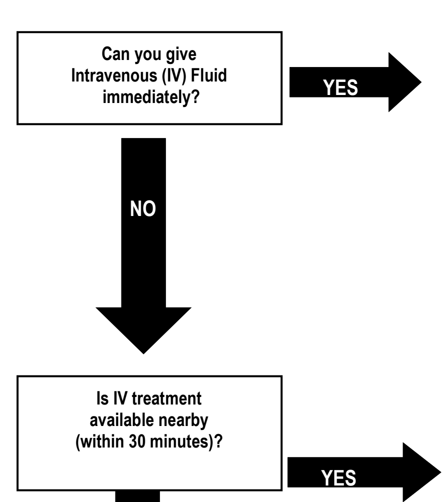
1. GIVE EXTRA FLUID
2. GIVE ZINC
3. CONTINUE FEEDING
4. WHEN TO RETURN
} **See Plan A for recommended fluid and See COUNSEL THE MOTHER chart**

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



- 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

- 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

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 MOTHER

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 <u>enriched</u>; porridge made of cereal and legume mixes, *shiro fitfiit, merek fitfit*, mashed potatoes and carrot, mashed gommen, eggs and fruits.
- **<u>Enrich</u>** <u>the food by adding some oil or butter every time</u>; 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 <u>enriched</u> 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

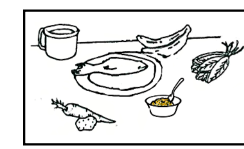
- Give adequate servings of freshly prepared <u>enriched</u> family foods, 3 meals a day.
- Also, twice daily, give nutritious food between meals, such as: egg, milk, fruits, kitta, dabo, ripe yellow fruits.
- Give your baby his/her own servings and actively feed the child.
- Give freshly prepared food 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

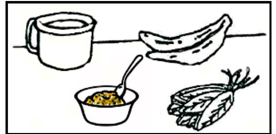
♦ **Give 1-2 cups (250 - 500 ml) of infant formula or boiled, then cooled, full cream milk. Give milk with a cup, not a bottle.**

- 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.

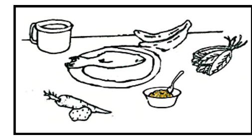


12 Months Up to 2 Years

♦ **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.

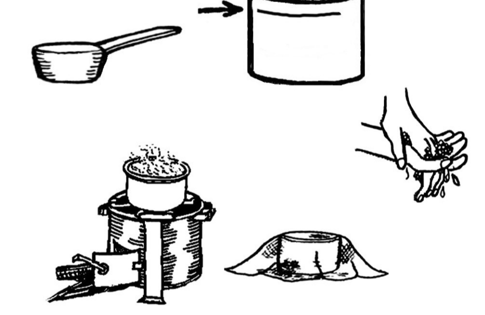
- **If the child has sore mouth or ulcers**

  - 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

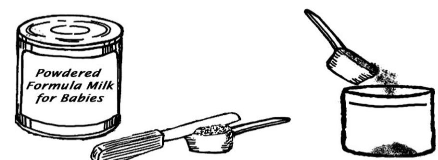
Safe Preparation of Formula Milk



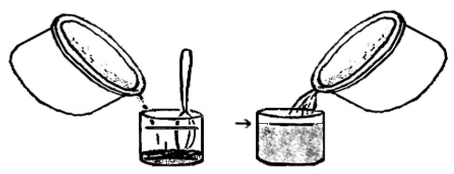
Always use a marked cup or glass and spoon to measure water and the scoop to measure the formula powder.

Wash your hands before preparing a feed.

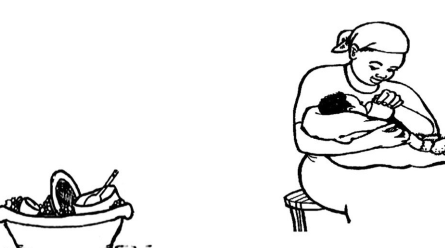
Bring the water to the boil and then let it cool. Keep it covered while it cools.



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/her 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/her 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 • DYSENTERY • MALARIA, if fever persists • FEVER, if fever persists • FEVER NO MALARIA, if fever persists • MEASLES WITH EYE OR MOUTH COMPLICATIONS	2 days
• SOME DEHYDRATION • 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 DEVELOPMENT OF YOUNG INFANT

Key Messages	BEFORE BIRTH	BIRTH UP TO 2 MONTHS
KEY MESSAGES TO SHARE WITH ALL CAREGIVERS 1. Children's brain develop fastest in the first 3 years of life. Letting children explore things around them and talking to them daily is what helps their brains develop. 2. Observe your children, try to understand them and respond to their signals, needs and interests. When your child does something /makes some gestures or sounds, respond to him/her, and as your child does something again you respond again. This is called responsive care, and is key to helping our children develop. 3. When we play and talk with children, we can help them develop their bodies, their language, their thinking, and build their relationships with others. Think how to make every moment count! 4. Daily routines and chores such as taking a bath, cooking, eating, washing and going to bed are great for playing and talking with young children.	Your Unborn Child Learns in Utero **PLAY:** Talk and read to your baby frequently. This way, she will know your voice well by the time she is born. With enough conversation directed her way, she can hear dad's voice also. Provide a calming touch. If the baby seems restless, soothe her by gently stroking/massaging your abdomen. **COMMUNICATE:** Create a pleasant environment. Although muffled by mom's womb, sounds from the outside do reach the baby. Avoid unpleasant noise when possible to create a relaxing ambiance for your baby.	Your baby learns from birth **PLAY:** Provide ways for your baby to see, hear, move arms and legs freely, and touch you. Gently soothe, stroke and hold your child. Skin to skin is good. **COMMUNICATE:** Look into baby's eyes and talk to your baby. When you are breast feeding is a good time. Even a newborn baby sees your face and hears your voice.

COUNSEL THE MOTHER - ABOUT DEVELOPMENT OF CHILD

2 MONTHS UP TO 6 MONTHS	6 MONTHS UP TO 9 MONTHS	9 MONTHS UP TO 12 MONTHS	12 MONTHS UP TO 2 YEARS	2 YEARS AND OLDER
PLAY: Provide ways for your child to see hear, feel, move freely and touch you. Slowly move colourful things for your child to see and reach for. Sample toys: shaker rattle, big ring on a string. **COMMUNICATE:** Smile and laugh with your child. Talk to your child. Get a conversation going by copying your child's sounds or gestures.	 **PLAY**: Give your child clean, safe household things to handle, bang, and drop. Sample toys: containers with lids, metal pot and spoon. **COMMUNICATE:** Respond to your child's sounds and interests. Call the child's name, and see your child respond.	 **PLAY**: Hide a child's favorite toy under a cloth or box. See if the child can find it. Play peek-a-boo. **COMMUNICATE:** Tell your child the names of things and people. Show your child how to say things with hands, like "bye bye" Sample toy: doll with face.	 **PLAY**: Give your child things to stack up and to put into containers and take out. Sample toys: Nesting and stacking objects, container and clothes clips. **COMMUNICATE:** Ask your child simple questions. Respond to your child's attempts to talk. Show and talk about nature, pictures and things.	 **PLAY**: Help your child count, name and compare things. Make simple toys for your child. Sample toys: objects of different colours and shapes to sort, stick or chalk board, puzzle. **COMMUNICATE:** Encourage your child to talk and answer your child's questions. Teach your child stories, songs and games. Talk about pictures or books. Sample toy: book with pictures.

- **Give your child affection and show your love**
- **Be aware of your child's interests and respond to them**
- **Praise your child for trying to learn new things**

COUNSEL THE MOTHER - ON DEVELOPMENTAL PROBLEMS

If the child is not being cared for as described in the above recommendations, counsel the Caregiver accordingly. In addition:

Discuss way to have the baby see, hear, feel and move appropriately for age.

If the child cannot be breast-fed, counsel the Caregiver to:

- Hold the child close when feeding, look at the child, and talk or sing to her/him.

If the Caregiver does not know what her/his child does to play or communicate:

- Inform her/him that children play and communicate from birth.
- Demonstrate for her/him how the child responds to activities.

If the Caregiver feels she/he does not have enough time to provide care for development, encourage her/him to:

- Combine care for development with other care for the child (feeding, bathing, dressing).
- Ask other family members to help provide care for development or help her/him with other tasks.

If the Caregiver has no toys for the child to play with, counsel the Caregiver to:

- Use any household objects that are clean and safe.
- Make simple toys.
- Play with the child, as the child will learn by playing with her/him and other people.

If the child is not responding, or seems "slow":

- Encourage the Caregiver to do extra care for development activities.
- Check to see whether the child is able to see and to hear.
- Refer the child with difficulties seeing or hearing to special services.
- Encourage the Caregiver and other family members to play and communicate with the child through touch and movement.

If the child is being raised by someone other than the mother, help the caretaker to:

- Identify at least one person who can care for the child regularly and give the child love and attention.
- Expect that, with love and special attention, the child can recover from the loss of a parent.

Advise the mother to return for follow-up:

- Assess as per the recommendations for care for development.

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 (TT) or tetanus-diphtheria toxoid (Td) vaccines if needed.
- Make sure she has access to:
  - Family planning
  - Counseling on STI 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: 2016GC or 2008 EC version): See the messages below:

1. **About Food**
   - ► Messages 27 - 29 & 31 - 43
   - ► And specifically about feeding during illness Messages: 44 & 45

2. **About Fluids**
   - ► Message 46

3. **When to return immediately**
   - ► Young infant - See messages 25
   - ► Child with Diarrhoea - Messages 47
   - ► Any sick child - Messages 48

4. **About Immunization:**
   - ► Message 30

FOLLOW UP

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, Oxygen saturation <90% 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***

  - If the child is < 12 months old, or was dehydrated on the first visit, or had measles within the last 3 months; refer the child to hospital.
  - Otherwise, do stool microscopy, check amoebiasis;
    If positive treat with Metronidazole;
    if negative 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/her 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.
- ➢ If child is on Primaquine radical cure dose, assess for signs of hemolysis (check urine color change, and do Hgb/HCT to check for Anemia). If signs of hemolysis, stop Primaquine.
- ➢ 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.
  - 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 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:
  - 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 anemia (Hgb/palmar pallor) after 2 months, refer for assessment

➢ UNCOMPLICATED SEVERE MALNUTRITION

After 7 days: - (Repeat every week)

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, weight loss, MUAC, oedema and anaemia
- Do appetite test
- Assess and classify if there is any new complaint (Use Assess & Classify Chart)

Treatment:

See/refer OTP Management in "Where Referral is not Possible" part of this chart booklet (Pages 80 to 83)

➢ Moderate Acute Malnutrition (MAM)

After 30 days:

- ► If child is admitted to TSFP, use and follow TSFP follow up protocol of National SAM Guideline 2019.
- ► 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 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. Or 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 follow the child monthly until child is feeding well and gaining weight regularly or no longer has MAM.

WHERE REFERAL IS NOT POSSIBLE AND ANNEXES

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 health facility where he may be seen several times a day. If not possible, arrange for visits at home.

This Part of the chart booklet describes treatment to be given for specific severe disease classifications when the very sick young infant or 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 or Registration Book. 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 YOUNG INFANT BIRTH UP TO 2 MONTHS

Essential Care for CRITICAL ILLNESS or VERY SEVERE DISEASE,

This young infant may have severe pneumonia, sepsis or meningitis.

1. Give appropriate antibiotics as below -

- If **CRITICAL ILLNESS**, treat for 21 days total.
  - Give IM Ampicillin or Benzyl Penicillin or Ceftriaxone (twice daily) and IM Gentamicin (once daily)
  - Give the Gentamicin only for a maximum of 14 days.
  - When the infant's condition improve substantially, substitute oral Amoxicillin for IM Ampicillin or IM Benzyl Penicillin or IM Ceftriaxone. But continue IM Gentamicin.
- If **VERY SEVERE DISEASE**, give Oral Amoxicillin (twice daily) and IM Gentamicin (once daily) for at least 7 days.
- If fast breathing only in < 7days neonate, give Oral Amoxicillin for 7 days, with a necessary reassessment on 3rd day.
- 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 55 & 56 of the chart booklet.

4. Treat the child to prevent low blood sugar -

See Treatment instructions for treating low blood sugar, **Page 46 & 78.**

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 Gentamicin. Treat with IM Ampicillin and Gentamicin until the child has improved. Then continue with oral Amoxicillin and IM Gentamicin. Treat the child for 10 days total.
     - If IM Ampicillin and Gentamicin is not available, give IM Benzyl Penicillin. If neither IM Ampicillin and Gentamicin 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 47 & 73.

2. **Give a bronchodilator -** If the child is wheezing give a bronchodilator if you have it (**See Treat Wheezing, Page 72**).*

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.

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* 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.

Steps to follow when treating a child with 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)

- Give a rapid acting bronchodilator
- Assess the child's condition 30 minutes later.
    a. If Respiratory distress OR Any Danger sign, treat for SEVERE PNEUMONIA or VERY SEVERE DISEASE and Refer.
    b. If NO Respiratory distress BUT Fast Breathing, then treat for Pneumonia and Give Oral Salbutamol.
    c. If NO Respiratory distress AND No Fast Breathing, then treat for Cough Or Cold, and give Oral Salbutamol.

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.*

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 Gentamicin ***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 Amoxicillin. 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 46 .

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
	12 months up to 5 years:	2.5 ml/kg/hour	60 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 68-69**).

3. **Treat the child to prevent low blood sugar -** See Treatment Instructions on **Page 45 & 77.**

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 Ceftriaxone, 50 mg/Kg every 12 hours, for 10 days;

If not, give IV/IM Benzyl Penicillin/Ampicillin and IV/IM Gentamicin. Treat for 10 days total. Switch to oral Amoxicillin after 3-5 days.

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

1. **Give iron by mouth (treat and follow child like Anemia)**
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/her thirst. Do ***not*** give IV or NG fluids.

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

1. **Manage the airway -**Turn the child on his/her 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 79.**
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 46 & 79.**

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 Gentamicin daily dosing schedule at a dose of 7.5mg/kg once daily; for newborns < 7 days old use 5 mg/kg of Gentamicin 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/her home or in the clinic to permit the frequent care necessary.

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...

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

<u>Avoid using undiluted 40mg/ml Gentamicin</u>. Add 6 ml sterile water to 2 ml vial containing 80 mg which gives you an 8 ml solution with a 10mg/ml Gentamicin 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 47 & 78.**

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	AMPICILLIN DOSE: 50 mg/Kg To vial containing 250mg, add 1.3ml sterile water = 250mg per 1.5ml Two times daily	BENZYL PENICILLINE DOSE: 70 000 units/Kg To vial containing 600mg or (1 000 000 units) Three times daily		GENTAMICIN 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	150mg/ml	300 mg/ml
1 Kg		0.2 ml	0.3 ml	0.75 ml	0.07 ml	0.03 ml
2 Kg	0.8 ml	0.3 ml	0.6 ml	1.5 ml	0.13 ml	0.07 ml
3 Kg	1.0 ml	0.5 ml	0.8 m	2.25 ml	0.2 ml	0.1 ml
4 Kg	1.2 ml	0.7 ml	1.1 ml	3 ml	0.3 ml	0.13 ml
5 Kg	1.5 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)	2.0 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)	2.6 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)	3.6 ml	2.0 ml	3.5 ml	9 ml	0.8 ml	0.4 ml
3 years up to 5 years (14-<19 Kg)	5.0 ml	3.0 ml	4.5 ml	12 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 old, if WFL/H < -3Z or MUAC is < 11.5 cms , or if oedema of both feet (+, ++) <u>and has no medical complications</u>** (i.e. general danger sign, severe classification, pneumonia, watery diarrhoea with dehydration, persistent diarrhoea, dysentery, measles, hypothermia (axillary temperature <35°C) or high fever (≥ 38.5°C), dermatosis +++), **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 and the child, where possible, should wash their hands.
4. Verify with the caregiver how long since the child ate or drank before the appetite test to ensure that a failed appetite test is not due to the child just having eaten.
5. The care taker should sit comfortably with the child on her lap and either offers the Ready to Use Therapeutic Food (RUTF) from the packet or put a small amount on her finger and give it to the child.
6. If the child refuses to eat, the caregiver should continue to gently encourage the child to eat. However, the child should not be forced.
7. Provide clean water for the child to drink while eating the RUTF.
8. Observe the child eating the RUTF **for 30 minutes** and decide if the child passes or fails the test.

RUTF Appetite Test Results

- **Pass :** child **<u>eats some</u>** of the RUTF within 30 minutes.
- **Fail:** child **<u>refuses to eat</u>** the RUTF after 30 minutes.

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.

OUTPATIENT MANAGEMENT OF UNCOMPLICATED SAM

Children (≥ 6 months) with 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 Kcal/92 gm sachet)	
Weight of Child (Kgs)	**Sachets per day**	**Sachet per week**
3.5 to 3.9	1½	11
4.0 to 5.4	2	14
5.5 to 6.9	2½	18
7.0 to 8.4	3	21
8.5 to 9.4	3½	25
9.5 to 10.4	4	28
10.5 to 11.9	4½	32
≥ 12	5	35

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. Do not mix RUTF with liquids as this might cause bacterial growth.
7. Use soap for child’s hand and face before feeding, if possible
8. Keep food clean and covered
9. Sick children get cold quickly, always keep the child covered and warm
10. With diarrhoea, never stop feeding. Give extra food and clean water (or breast milk)

NB – Check the mothers understanding using appropriate checking questions.

OTP MANAGEMENT OF UNCOMPLICATED SAM

1. Oral antibiotics – Give **Amoxycillin** two times per day for 5 days (for dosage see drug table).

2. Vitamin A - Do not give an additional high dose of vitamin A to children with SAM in the OTP as RUTF contains an adequate amount of vitamin A.
However, vitamin A should be given immediately and referred to SC if:

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

3. Give single dose Mebendazole/Albendazole at the 2nd outpatient visit (after 7 days), for children ≥ 2 years old.

4. Give Measles vaccine on the 4th week of treatment for all children aged ≥ 9 months 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 degree of oedema (every visit).
B) Do appetite test (every visit)
C) Height/length and WFL/H (at HC level, measure on admission, once a month and on discharge)
D) Check weight loss (patients who lose weight or have weight fluctuations should receive a home visit and/or further medical examination)
E) Do a complete reassessment according to the assess chart (if child 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. If admitted with bilateral pitting oedema, discharge as cured when:	**B. If admitted based on MUAC, discharge as cured when:**	**C. If admitted based on WFH/WFL, discharge cured when:**
• No bilateral pitting oedema for 2 consecutive visits AND • MUAC ≥ 12.5 cm or WFH/WFL ≥ -2 z-score AND • Clinically well and alert	• MUAC ≥ 12.5 cm AND • No bilateral pitting oedema AND • Clinically well and alert	• WFH/WFL ≥ -2 z-score AND • No bilateral pitting oedema AND • Clinically well and alert.

OTP MANAGEMENT OF UNCOMPLICATED SAM

OTP Exit Categories:

Category	Definition
Cured	Has reached the discharge criteria for SAM treatment per the above table.
Died	Dies while receiving treatment in the OTP.
Defaulted	Absent for **two consecutive visits**. Default should be confirmed.
Non-responder	Does not reach the SAM discharge criteria **after 16 weeks (4 months)** in treatment.
Transferred-out	Condition has deteriorated or not responding to treatment according to action protocol and referred for treatment in the SC, or moved out to receive OTP in another facility.

7. Transfer of OTP patients to in-patient care -

During weekly follow up, if child develops any of the following, s/he should be referred to the in-patient or SC as transfer outs.

- failed appetite test, or
- deteriorating nutritional status, and/or
- a medical complication

In addition, non-responders should also be referred to SC.

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*.

In-patient treatment should be given in accordance with the Ethiopian “National Guideline for Management of Acute Malnutrition, FMOH, 2019”.

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

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

ASK: infant's problems? ____ Initial visit? ___ Follow-up Visit? ___

ASSESS (Circle all signs present) CLASSIFY

CHECK FOR BIRTH ASPHYXIA (immediately after birth)

Not breathing / Not crying at all
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? If yes:
  - Unable to feed
  - Not feeding well
- 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)
· Look for skin pustules.
· Look at young infant's movements.
  moves only when stimulated?
  Does 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. Infant
  move only when stimulated?
  Does not move even when stimulated?
  Is 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___
· Infant receive any other foods or drinks? Yes ___ No ___ If Yes, how often?_____ times
· What do you use to feed the child? Bottle?

· 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

Ÿ Is there any difficulty feeding?
Ÿ What milk are you giving?_________________
Ÿ How many times during the day and night?
Ÿ How much is given at each feed?
Ÿ 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
Ÿ Are you giving any breast milk at all?
Ÿ What foods or fluids in addition to the replacement feeding is given?
Ÿ How is the milk being given? Cup or bottle?
Ÿ 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).

THEN CHECK THE CHILD'S DEVELOPMENT -
Any birth mile stone - Absent

CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS . Circle vaccines needed today. Tick (√) already given vaccines

____	______	______	______	________	______	______
OPV 0	BCG	HepB BD	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 Initial visit ? _____ Follow-up visit? ____

ASK: What are the child's problems? ____

ASSESS (Circle all signs present, tick or fill dashes/spaces)		**CLASSIFY**	**TREAT**
CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING History of CONVULSIONS	CONVULSING NOW LETHARGIC OR UNCONSCIOUS		
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes _____ No_____			
For how long? ______ Days	Count breaths ______ breaths/minute. Fast breathing? Look for Chest indrawing, Stridor, .Wheeze Oxygen saturation _________ %.		
DOES THE CHILD HAVE DIARRHOEA? Yes _____ No____			
For how long? _________ Days Is there blood in the stool?	Child's general condition. Lethargic or unconscious? Restless and irritable? Look for sunken eyes. Offer the child fluid. Not able to drink or drinking poorly? Drinking eagerly, thirsty? Skin Pinch goes back: Very slowly? Slowly?		
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature ≥37.5^{0}C) Yes___ No____			
Decide MALARIA risk: High/Low, No, - If "No" risk, Has child traveled to malarious area in the last 30 days? Duration of fever? _____ Days - If >7 days, fever present every day? 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: Positive, Negative, Not Done If Positive: P falciparum, P vivax, Mixed		
If the child has measles now or within the last 3 months:	Look for mouth ulcers: If Yes, 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. Feel for tender swelling behind the ear.		
THEN CHECK FOR ANEMIA	Look for palmar pallor: Severe pallor? Some pallor? Hgb: ______ gm/dL HCT: ______ %		
THEN CHECK FOR MALNUTRITION **For all children**: Oedema of both feet: **+**, **++**, **+++** Determine WFH: **< -3 Z**, **-3 Z to <-2 Z**, **≥ -2 Z** **For children aged ≥ 6 months (Lt/Ht 65 -110cm)** - If WFH not done, MUAC : **<11.5cm**, **11.5 -12.5cm**, **≥ 12.5 cm** - If child has oedema, or WFH **<-3 Z** or MUAC **<11.5 cm**; - Look for medical complications, - Look for Dermatosis: **+**, **++**, **+++** - Assess appetite (as per the criteria), **Passed Failed**			

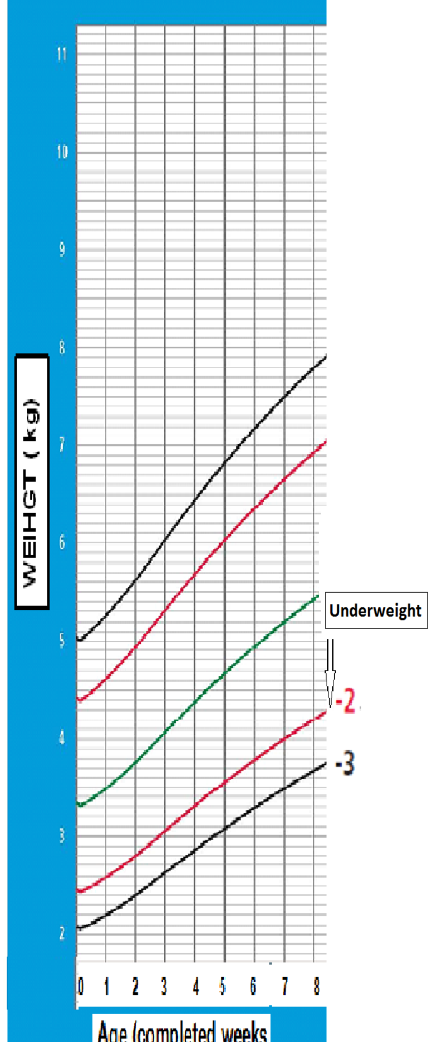
MANAGEMENT OF THE SICK CHILD AGE **2 MONTHS UP TO 5 YEARS**

Child's Name: ___________________________ Age______ months .... CONTINUED,

ASSESS (Circle all signs present, tick or fill dashes/spaces)		CLASSIFY	TREAT
DOES THE CHILD NEED FEEDING ASSESSMENT? Yes___ No ____ **If child is < 2 years , or has ANEMIA or has MAM: And No Severe Classification - S/he Needs Feeding Assessment.** 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? ____			
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 wks? Yes __, No __			
THEN CHECK FOR TUBERCULOSIS Cough of >14 days Fever and/or night sweats > 14 days Loss of weight or failure to gain weight Contact with known PTB patient	Look for Swelling or discharging wound MAM or SAM HIV status: Positive, Negative, Unknown, AFB/Gene Xpert: Positive, Negative, Not Done Chest X-ray : Suggestive, Not suggestive, Not Done		
THEN CHECK THE CHILD'S DEVELOPMENT Assess age appropriate developmental milestones Current age mile stones - Absent Earlier age milestones - Absent Regression of milestones			
CHECK THE CHILD'S IMMUNIZATION AND VITAMIN A STATUS Circle vaccines/Vitamin A needed today. And tick (√) already given vaccines ____ BCG ____ OPV 0 ____ HEpB BD ____ Penta1 ____ PCV1 ____ Rota1 ____ OPV 1 ____ Penta2 ____ PCV2 ____ Rota2 ____ OPV2 ____ Penta3 ____ PCV3 ____ IPV ____ OPV3 ____ Measles1 ____ Measles2 ____ Vitamin A			Return for next Immunization/Vitamin A dose on: ________________ (Date)

Weight-for-age BOYS

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



Weight-for-age BOYS

Birth to 5 years (z-scores)

Weight (kg)

28 26 24 22 20 18 16 14 12 10 8 6 4 2

3

2

0

Underweight

-2

-3

Months 2 4 6 8 10 2 4 6 8 10 2 4 6 8 10 2 4 6 8 10 2 4 6 8 10

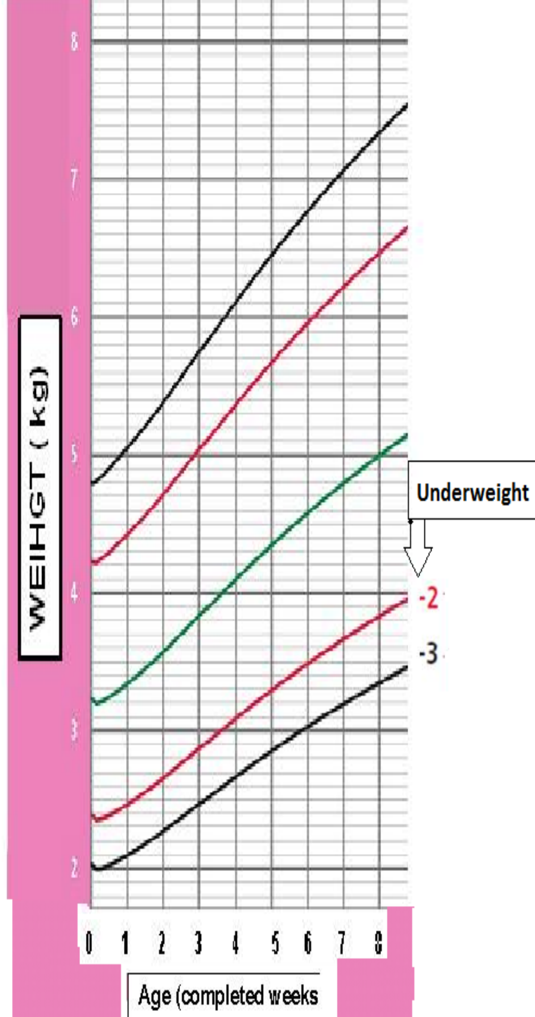
Birth 1 year 2 years 3 years 4 years 5 years

Age (completed months and years)

WHO Child Growth Standards

Weight-for-age GIRLS

Birth to 8 weeks (z-scores)



Weight-for-age GIRLS

Birth to 5 years (z-scores)

Weight (kg)

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2

3
2
0
-2
-3

Underweight

Months 2 4 6 8 10 2 4 6 8 10 2 4 6 8 10 2 4 6 8 10 2 4 6 8 10

Birth 1 year 2 years 3 years 4 years 5 years

Age (completed months and years)

WHO Child Growth Standards

Weight-for-length BOYS

Birth to 2 years (z-scores)

Weight (kg)

24
22
20
18
16
14
12
10
8
6
4
2

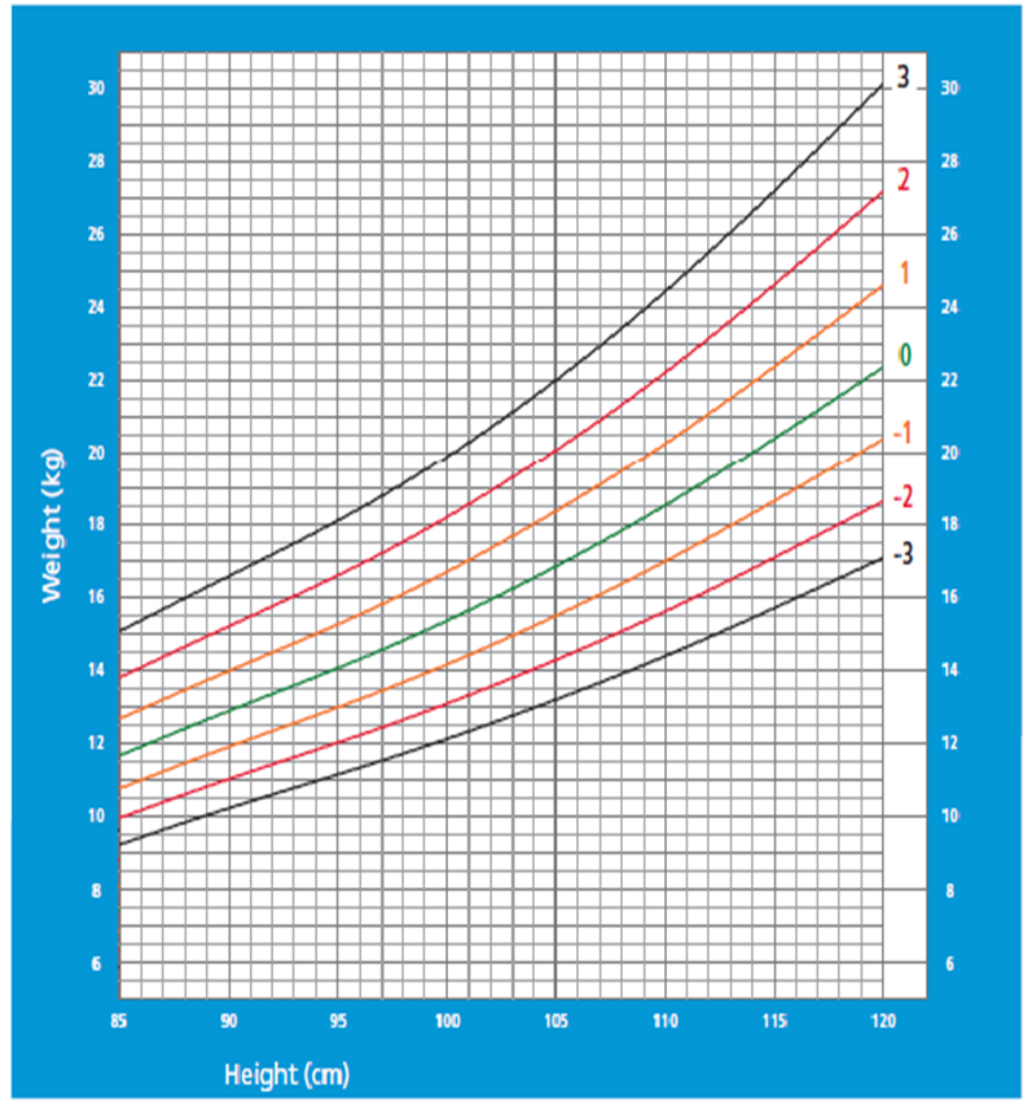
3
2
1
0
-1
-2
-3

45
50
55
60
65
70
75
80
85
90

Length (cm)

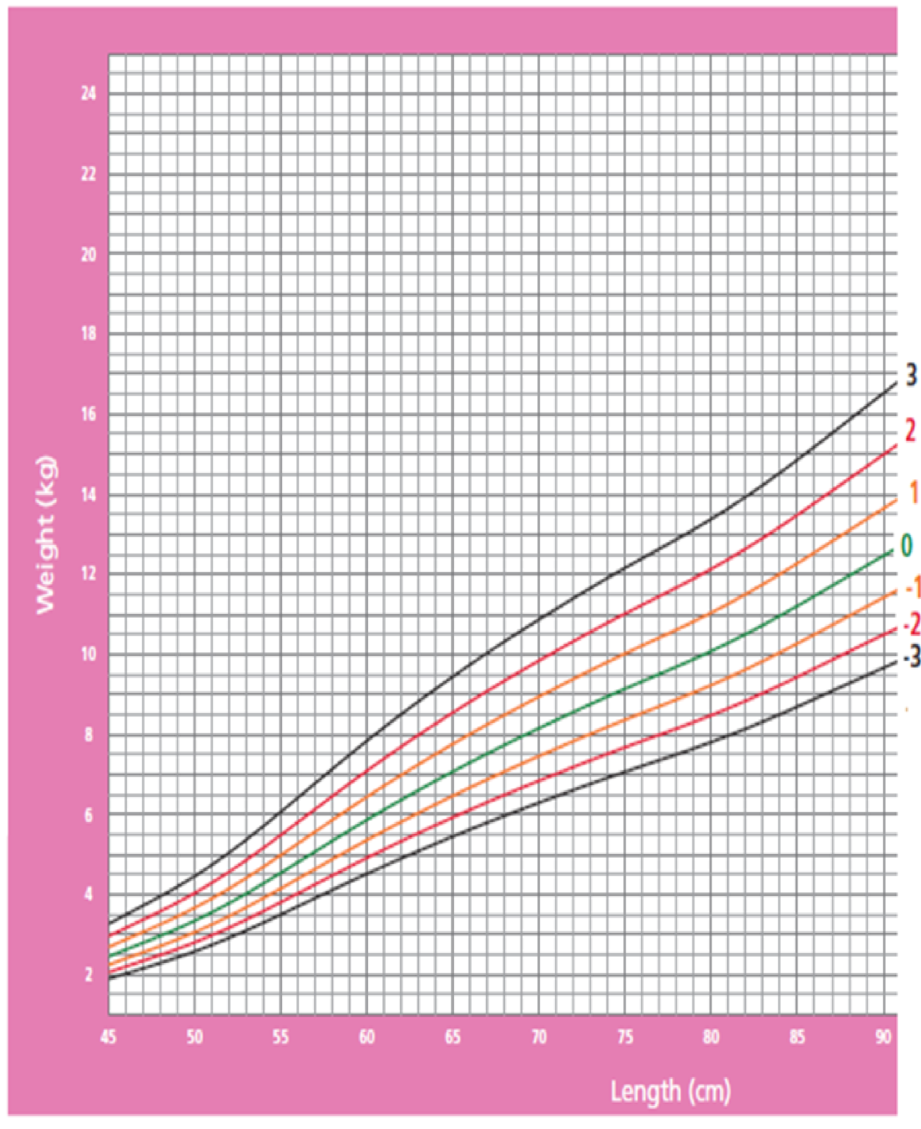
Weight-for-height BOYS

2 to 5 years (z-scores)



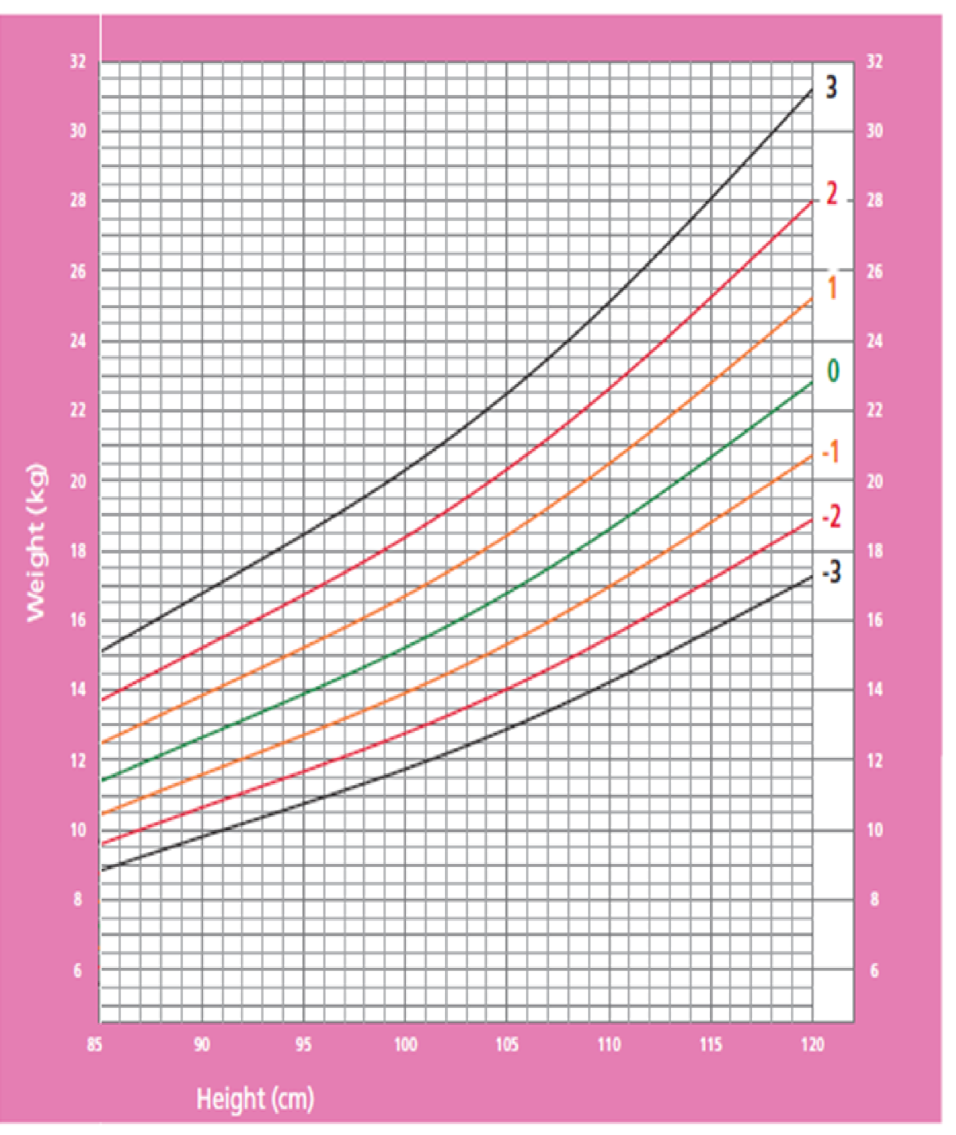
Weight-for-length GIRLS

Birth to 2 years (z-scores)



Weight-for-Height GIRLS

2 to 5 years (z-scores)



WHO Child Growth Standards

Weight-for-Length Reference card - Boys & Girls

(WHO 2006 Child Growth Standards)

Boys' weight (kg)				Length[a]	Girls' weight (kg)			
−3 SD	−2 SD	−1 SD	Median	(cm)	Median	−1 SD	−2 SD	−3 SD
1.9	2.0	2.2	2.4	45	2.5	2.3	2.1	1.9
2.0	2.2	2.4	2.6	46	2.6	2.4	2.2	2.0
2.1	2.3	2.5	2.8	47	2.8	2.6	2.4	2.2
2.3	2.5	2.7	2.9	48	3.0	2.7	2.5	2.3
2.4	2.6	2.9	3.1	49	3.2	2.9	2.6	2.4
2.6	2.8	3.0	3.3	50	3.4	3.1	2.8	2.6
2.7	3.0	3.2	3.5	51	3.6	3.3	3.0	2.8
2.9	3.2	3.5	3.8	52	3.8	3.5	3.2	2.9
3.1	3.4	3.7	4.0	53	4.0	3.7	3.4	3.1
3.3	3.6	3.9	4.3	54	4.3	3.9	3.6	3.3
3.6	3.8	4.2	4.5	55	4.5	4.2	3.8	3.5
3.8	4.1	4.4	4.8	56	4.8	4.4	4.0	3.7
4.0	4.3	4.7	5.1	57	5.1	4.6	4.3	3.9
4.3	4.6	5.0	5.4	58	5.4	4.9	4.5	4.1
4.5	4.8	5.3	5.7	59	5.6	5.1	4.7	4.3
4.7	5.1	5.5	6.0	60	5.9	5.4	4.9	4.5
4.9	5.3	5.8	6.3	61	6.1	5.6	5.1	4.7
5.1	5.6	6.0	6.5	62	6.4	5.8	5.3	4.9
5.3	5.8	6.2	6.8	63	6.6	6.0	5.5	5.1
5.5	6.0	6.5	7.0	64	6.9	6.3	5.7	5.3
5.7	6.2	6.7	7.3	65	7.1	6.5	5.9	5.5
5.9	6.4	6.9	7.5	66	7.3	6.7	6.1	5.6
6.1	6.6	7.1	7.7	67	7.5	6.9	6.3	5.8
6.3	6.8	7.3	8.0	68	7.7	7.1	6.5	6.0
6.5	7.0	7.6	8.2	69	8.0	7.3	6.7	6.1
6.6	7.2	7.8	8.4	70	8.2	7.5	6.9	6.3
6.8	7.4	8.0	8.6	71	8.4	7.7	7.0	6.5
7.0	7.6	8.2	8.9	72	8.6	7.8	7.2	6.6
7.2	7.7	8.4	9.1	73	8.8	8.0	7.4	6.8
7.3	7.9	8.6	9.3	74	9.0	8.2	7.5	6.9
7.5	8.1	8.8	9.5	75	9.1	8.4	7.7	7.1
7.6	8.3	8.9	9.7	76	9.3	8.5	7.8	7.2
7.8	8.4	9.1	9.9	77	9.5	8.7	8.0	7.4
7.9	8.6	9.3	10.1	78	9.7	8.9	8.2	7.5
8.1	8.7	9.5	10.3	79	9.9	9.1	8.3	7.7
8.2	8.9	9.6	10.4	80	10.1	9.2	8.5	7.8
8.4	9.1	9.8	10.6	81	10.3	9.4	8.7	8.0
8.5	9.2	10.0	10.8	82	10.5	9.6	8.8	8.1
8.7	9.4	10.2	11.0	83	10.7	9.8	9.0	8.3
8.9	9.6	10.4	11.3	84	11.0	10.1	9.2	8.5
9.1	9.8	10.6	11.5	85	11.2	10.3	9.4	8.7
9.3	10.0	10.8	11.7	86	11.5	10.5	9.7	8.9
9.5	10.2	11.1	12.0	87	11.7	10.7	9.9	9.1
9.7	10.5	11.3	12.2	88	12.0	11.0	10.1	9.3
9.9	10.7	11.5	12.5	89	12.2	11.2	10.3	9.5
10.1	10.9	11.8	12.7	90	12.5	11.4	10.5	9.7
10.3	11.1	12.0	13.0	91	12.7	11.7	10.7	9.9
10.5	11.3	12.2	13.2	92	13.0	11.9	10.9	10.1
10.7	11.5	12.4	13.4	93	13.2	12.1	11.1	10.2
10.8	11.7	12.6	13.7	94	13.5	12.3	11.3	10.4
11.0	11.9	12.8	13.9	95	13.7	12.6	11.5	10.6
11.2	12.1	13.1	14.1	96	14.0	12.8	11.7	10.8
11.4	12.3	13.3	14.4	97	14.2	13.0	12.0	11.0
11.6	12.5	13.5	14.6	98	14.5	13.3	12.2	11.2
11.8	12.7	13.7	14.9	99	14.8	13.5	12.4	11.4
12.0	12.9	14.0	15.2	100	15.0	13.7	12.6	11.6

a. Length is measured for children aged under 2 years or, if age is not known, below 87 cm.

When recumbent length cannot be measured: Recumbent length is on average 0.7 cm greater than standing height; although the difference is of no importance to individual children, when recumbent length cannot be measured, a correction may be made by adding 0.7 cm to the height if the child is aged under 2 years (or below 87 cm if age not known).

Weight-for-Height Reference Card - Boys and Girls

(WHO 2006 Child Growth Standards)

Boys' weight (kg) −3 SD	−2 SD	−1 SD	Median	Height[a] (cm)	Girls' weight (kg) Median	−1 SD	−2 SD	−3 SD
5.9	6.3	6.9	7.4	65	7.2	6.6	6.1	5.6
6.1	6.5	7.1	7.7	66	7.5	6.8	6.3	5.8
6.2	6.7	7.3	7.9	67	7.7	7.0	6.4	5.9
6.4	6.9	7.5	8.1	68	7.9	7.2	6.6	6.1
6.6	7.1	7.7	8.4	69	8.1	7.4	6.8	6.3
6.8	7.3	7.9	8.6	70	8.3	7.6	7.0	6.4
6.9	7.5	8.1	8.8	71	8.5	7.8	7.1	6.6
7.1	7.7	8.3	9.0	72	8.7	8.0	7.3	6.7
7.3	7.9	8.5	9.2	73	8.9	8.1	7.5	6.9
7.4	8.0	8.7	9.4	74	9.1	8.3	7.6	7.0
7.6	8.2	8.9	9.6	75	9.3	8.5	7.8	7.2
7.7	8.4	9.1	9.8	76	9.5	8.7	8.0	7.3
7.9	8.5	9.2	10.0	77	9.6	8.8	8.1	7.5
8.0	8.7	9.4	10.2	78	9.8	9.0	8.3	7.6
8.2	8.8	9.6	10.4	79	10.0	9.2	8.4	7.8
8.3	9.0	9.7	10.6	80	10.2	9.4	8.6	7.9
8.5	9.2	9.9	10.8	81	10.4	9.6	8.8	8.1
8.7	9.3	10.1	11.0	82	10.7	9.8	9.0	8.3
8.8	9.5	10.3	11.2	83	10.9	10.0	9.2	8.5
9.0	9.7	10.5	11.4	84	11.1	10.2	9.4	8.6
9.2	10.0	10.8	11.7	85	11.4	10.4	9.6	8.8
9.4	10.2	11.0	11.9	86	11.6	10.7	9.8	9.0
9.6	10.4	11.2	12.2	87	11.9	10.9	10.0	9.2
9.8	10.6	11.5	12.4	88	12.1	11.1	10.2	9.4
10.0	10.8	11.7	12.6	89	12.4	11.4	10.4	9.6
10.2	11.0	11.9	12.9	90	12.6	11.6	10.6	9.8
10.4	11.2	12.1	13.1	91	12.9	11.8	10.9	10.0
10.6	11.4	12.3	13.4	92	13.1	12.0	11.1	10.2
10.8	11.6	12.6	13.6	93	13.4	12.3	11.3	10.4
11.0	11.8	12.8	13.8	94	13.6	12.5	11.5	10.6
11.1	12.0	13.0	14.1	95	13.9	12.7	11.7	10.8
11.3	12.2	13.2	14.3	96	14.1	12.9	11.9	10.9
11.5	12.4	13.4	14.6	97	14.4	13.2	12.1	11.1
11.7	12.6	13.7	14.8	98	14.7	13.4	12.3	11.3
11.9	12.9	13.9	15.1	99	14.9	13.7	12.5	11.5
12.1	13.1	14.2	15.4	100	15.2	13.9	12.8	11.7
12.3	13.3	14.4	15.6	101	15.5	14.2	13.0	12.0
12.5	13.6	14.7	15.9	102	15.8	14.5	13.3	12.2
12.8	13.8	14.9	16.2	103	16.1	14.7	13.5	12.4
13.0	14.0	15.2	16.5	104	16.4	15.0	13.8	12.6
13.2	14.3	15.5	16.8	105	16.8	15.3	14.0	12.9
13.4	14.5	15.8	17.2	106	17.1	15.6	14.3	13.1
13.7	14.8	16.1	17.5	107	17.5	15.9	14.6	13.4
13.9	15.1	16.4	17.8	108	17.8	16.3	14.9	13.7
14.1	15.3	16.7	18.2	109	18.2	16.6	15.2	13.9
14.4	15.6	17.0	18.5	110	18.6	17.0	15.5	14.2
14.6	15.9	17.3	18.9	111	19.0	17.3	15.8	14.5
14.9	16.2	17.6	19.2	112	19.4	17.7	16.2	14.8
15.2	16.5	18.0	19.6	113	19.8	18.0	16.5	15.1
15.4	16.8	18.3	20.0	114	20.2	18.4	16.8	15.4
15.7	17.1	18.6	20.4	115	20.7	18.8	17.2	15.7
16.0	17.4	19.0	20.8	116	21.1	19.2	17.5	16.0
16.2	17.7	19.3	21.2	117	21.5	19.6	17.8	16.3
16.5	18.0	19.7	21.6	118	22.0	19.9	18.2	16.6
16.8	18.3	20.0	22.0	119	22.4	20.3	18.5	16.9
17.1	18.6	20.4	22.4	120	22.8	20.7	18.9	17.3

a. For children aged 2 years and above (or, if age not known, 87 cm or more), height is measured. When standing height cannot be measured: Recumbent length is on average 0.7 cm greater than standing height; although the difference is of no importance to individual children, when standing height cannot be measured, a correction may be made by subtracting 0.7 cm from the length if the child is aged 2 years or above or has a length of 87.0 cm or more