



INTEGRATED MANAGEMENT OF NEWBORN & CHILDHOOD ILLNESSES (IMNCI)

A guide for healthcare workers

2018 EDITION

TABLE OF CONTENTS

SICK CHILD AGE 2 MO	NTHS UP TO 5 YEARS
Acknowledgements1	Treatment of Severe Malaria16
Foreword	Treat the Child for Low Blood Sugar
Toroword	Treat for Possible Asthma
Introduction to Integrated Management of Newborn &	Trock for a cooling a control of the
Childhood Illnesses (IMNCI) Chart Booklet3	Rehydration Therapy & Feeding for Diarrhoea
	Plan A: Treat Diarrhoea With No Dehydration18
ASSESS AND CLASSIFY THE SICK CHILD	Plan B: Treat Diarrhoea at Facility with ORS
Access Observed and Manufacturers	(Some Dehydration)18
Assess, Classify and Identify Treatment	Treat Shock19
Obselvior Conserl Barrer Circa	Plan C: Treat Severe Dehydration Quickly19
Check for General Danger Signs	Rehydration Therapy for Diarrhoea in Children With
Then Ask About Main Symptoms:	Acute Malnutrition19
Does The Child Have Cough Or Difficult Breathing?4 Does The Child Have Diarrhoea?	Give Multivitamin/Mineral supplement for
Does The Child Have Fever?6	Persistent Diarrhoea19
Classify Malaria6	
Classify Measles 6	HIV Care For Children
Does The Child Have An Ear Problem?7	What To Start: Children20
Check For Acute Malnutrition & Anaemia8	ART Treatment in Children With TB20
Check For HIV Exposure & Infection	Dosage For Cotrimoxazole Prophylaxis20
Check for Child's Developmental Milestones	Paediatric ARVs Dosages21
Assess for Interaction, Communication and Responsiveness 11	Simplified Weight Band Dosing Schedule for LPV/r21
Check Immunization, Vitamin A & Deworming Status	
Assess For Other Problems That The Child May Have	GIVE FOLLOW - UP CARE
Assess The Mother's / Caregiver's Health Needs	Pneumonia22
	Wheezing22
	Persistent Diarrhoea
TREAT THE CHILD	Dysentery22
Teach the Mother to Give Oral Drugs at Home	Uncomplicated Malaria23
Give Metronidazole13	Fever - No Malaria23
Give an Appropriate Oral Antibiotic	Eye or Mouth Complications of Measles23
Give an Oral Antimalarial14	Ear Infection23
Counsel The Mother or Caregiver on Management	Feeding Problem24
of Malaria For a Sick Child:14	Pallor24
Give Vitamin A14	Malnutrition24
Give Iron and Folate14	HIV Exposed & Infected Children24
Give Zinc Sulphate14	
Give Paracetamol for Fever or Ear Pain14	COUNSEL THE MOTHER/CAREGIVER
	Assess Child's Feeding25
Teach The Mother to Treat Local Infections at Home	Conduct The Appetite Test25
Treat Eye Infection with Tetracycline Eye Ointment15	About Feeding Problems26
Dry the Ear by Wicking15	About Feeding Options: HIV Exposed & Infected26
Treat Mouth Ulcers with Gentian Violet15	Feeding Recommendations27
Treat for Thrush with Nystatin15	Recommendations for Care for Child's Development28
Soothe the Throat, Relieve the Cough with a Safe Remedy 15	About Care for Development Problems29
	When To Return Immediately30
Give These Treatments In Health Facility Only	Give Good Home Care For Your Child30
Treatment of Very Severe Disease or Severe Pnuemonia 16	When To Return for Scheduled Visits31
Give an Intravenous/ Intramuscular Antibiotic16	About Her Own Health31
Treat for Convulsing Now16	

SICK YOUNG INFANT AGE **UP TO 2 MONTHS**

ASSESS AND CLASSIFY THE SICK YOUNG INFANT Assess, Classify and Identify Treatment Check for Very Severe Disease
TREAT THE YOUNG INFANT Resuscitation, IV/IM/Oral Antibiotics, Low Blood Sugar41 Convulsions, Where Referral is Refused or Not Feasible, Zinc Sulphate
COUNSEL THE MOTHER Teach Correct Positioning And Attachment For Breast Feeding
GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT Local Bacterial Infection
Recording Forms The Sick Child age 2 Months up to 5 Years

Acknowledgements

The Ministry of Health (MOH) is indebted to many institutions and individuals whose unwavering support and collaborative contribution made it possible the updating of the 2018 Edition of Integrated Management of Newborn & Childhood Illnesses (IMNCI) guidelines.

The review and revision was done through extensive consultations led by the Ministry of Health. I acknowledge with much appreciation the institutions that participated in the rigorous review of these guidelines. Special compliments to the Department of Preventive and Promotive Health Services, Division of Family Health, Neonatal Child and Adolescent Health Unit (NCAHU), Child Health ICC members, County Level Child Health Focal Persons, WHO – Kenya Country Office, UNICEF – Kenya Country Office, Clinton Health Access Initiative (CHAI), Nutrition International (NI), Kenya Medical Training College (KMTC), Program for Appropriate Technology in Health (PATH), Population Services Kenya (PSK), USAID Maternal Child Health Survival (MCSP), Kenya Medical Research Institute (KEMRI) and Kenya Paediatric Association (KPA).

In addition, I thank every member of the core team that worked diligently to provide technical and financial support towards the development of this document. Special gratitude to the Ministry of Health officials at NCAHU who coordinated and provided leadership to the whole process namely; Dr. Osman Warfa, Dr. Rachel Nyamai, Dr. Stewart Kabaka and Dr. Silas Agutu, Andolo Miheso, Elsa Odira, Allan Govoga, Martin Matingi, Lydia Karimurio, Benard Wambu, Grace Wasike, Charles Matanda, Jedida Obure and Hellen Karimi. I also take this opportunity to appreciate the efforts of Pamela Ochieng (NCK), Joyce Atandi (NU), Dr. Laura Oyiengo, Ruth Musyoki and Eunice Ambani (NASCOP), Dr. Immaculate Kathure (NLTD-P) and Mr. Samuel Kigen (NMCP). Special compliments to county child health focal persons namely, Jackson Cheruiyot and George Ndichu (Nakuru), Immaculate Njoroge and Gerald Mutiso (Kiambu), Eunice Kiilu (Machakos), Muritu Mbogo, Mildred Indeje and Agnes Obanda (Nairobi), Lillian Angwenyi (Kajiado), Elizabeth Chomba (Kwale), Enoch Koti Kot (Narok), Christine Kalema (Taita Taveta) and Absaloam Ingabo (Kakamega). Additionally, I greatly acknowledge members of organizations that provided significant support and contribution in the review process namely; Dr. Ambrose Agweyu (KEMRI), Jason Kiruja (KPA) Dr. Khadija Abdalla and Dr. Peter Okoth, Judith Raburu (UNICEF), Dr. Martin Chabi (WHO), Rosemary Kihoto and Betty Wariari (CHAI), Elijah Mbiti and Mary Kihara (NI), Dr. Angela Muriuki (Save The Children), Wanjiku Manguyu, Immaculate Salaon and Dr. Samwel Onditi (PATH), Francis Njuguna (KMTC), Diana Anyole (CoG), Dr. Nicholas Odero, Dr. Angeline Ithondeka , Dr. Catherine Mutinda (KPA), Dr. Ann Mburu (Aga Khan University).

Thank you all for the commendable efforts in making the updating of these guidelines possible. There is no doubt that by implementing IMNCI, we shall accelerate the reduction of child mortality using scalable, high impact and affordable interventions.

Dr. Mohamed A. Sheikh

Head, Division of Family Health

Ministry of Health

Foreword

Child deaths in Kenya remain unacceptably high with 52 out of 1,000 children born dying every year. Unfortunately, 70% of these deaths are attributed to preventable and treatable childhood illnesses such as diarrhoea, pneumonia (acute respiratory infections), malnutrition & anaemia, malaria, measles, HIV and tuberculosis. Additionally, a significant proportion of deaths in children under-five occur in the neonatal period due to infections such as sepsis, complications of pregnancy and childbirth such as birth asphyxia prematurity low birth weight and other congenital anomalies.

The Integrated Management of Newborn & Childhood Illnesses (IMNCI) strategy for delivering interventions that prevent and treat common causes of mortality in children was first introduced in the mid 1990s by WHO/UNICEF as part of Child Survival Strategy. IMNCI has demonstrated improved efficiency and quality of child health services. It recognizes that sick children often present more than one symptom at the same time. These symptoms contribute to many childhood deaths if not comprehensively assessed, classified and treated. As a result, all sick children should be managed using an integrated approach in order to tackle the major drivers of child mortality and thereby save lives.

The IMNCI strategy incorporates standard case management guidelines meant to improve skills of health care workers, as well as approaches for improving family and community health practices that ensure child survival, growth and development.

IMNCI calls for better integration of child health programming across different ministries and sectors at the national and county level. As such its implementation requires continuous strengthening of a number of elements of child health programs in planning and policy development, financing, health systems strengthening, skilled human resources at all levels of care, health promotion and community-based care.

Importantly, IMNCI guidelines remain responsive to current research and recommendations; hence it is an important tool for health care professionals. The information is presented in a simplified manner using the IMNCI 6 major steps namely; assessment, classification, identification of treatment, treating the sick child or young infant, counseling the mother and providing follow up care.

Through the dissemination of IMNCI 2018 updated guidelines, it is envisaged that the technical information herein will provide impetus towards county level implementation and compliance at all levels of care in Kenya.

Dr. Kioko Jackson K., MBS
DIRECTOR OF MEDICAL SERVICES

Ministry of Health

INTEGRATED MANAGEMENT OF NEWBORN AND CHILDHOOD ILLNESSES (IMNCI) CHART BOOKLET

Background

In Kenya , 52 out of every 1000 children born do not live to be five years of age (KDHS 2014) Of note, 70% of all deaths in children can be attributed to easily preventable and treatable diseases namely: Acute respiratory infections (mostly pneumonia), Diarrhoea, Measles, Malaria, Malnutrition & Anaemia, HIV and Tuberculosis. Often children succumb to a combination of these conditions - with most children presenting in health facilities with the combined signs and symptoms of more than one of theses diseases. Evidence for various assessments has shown that many of these children are not comprehensively assessed, treated and given the appropriate advice. Recognizing the need to improve on the care of these children, WHO and UNICEF developed the Integrated Management of Newborn and Childhood Illnesses (IMNCI) strategy which emphasizes on integrated case management of the most common childhood diseases. Kenya in the year 2000 adopted the IMNCI strategy which forms a critical part of the Kenya Essential Package for Health (KEPH).

What is IMNCI?

The Integrated Management of Newborn and Childhood Illnesses (IMNCI) case management approach offers simple and effective methods to comprehensively prevent and manage the leading causes of serious illnesses and mortality in children below five years. With IMNCI, sick children or young infants are not only treated for the signs and symptoms they present within a health facility, but are also assessed for the other disease conditions they may be suffering from.

IMNCI is based on the following principles:

- All sick children aged up to 5 years are examined for general danger signs and all young infants are
 examined for signs of very severe disease. These signs indicate the need for immediate referral or admission
 to hospital.
- Children and infants are then assessed for main symptoms. For the older children, the symptoms include cough, difficulty breathing, diarrhoea, fever, TB, HIV, ear infections, anaemia, measles and malnutrition.
- A combination of individual signs then lead to the child's or young infant's classification within one or more symptom groups.
- Essential drugs are then used to treat the children or young infants. Lastly counseling of caregivers regarding home care, appropriate feeding and fluids and when to return to facility - immediately or follow-up, is done.

IMNCI 6 major steps



Where can IMNCI be applied?

The IMNCI approach is designed for use in clinical settings at all levels of health care in Kenya where children under 5 years are managed. These are dispensaries, health centres, sub-county hospitals, county hospitals and national referral hospitals including, faith based and private health facilities.

What is the IMNCI Chart booklet?

Kenya's IMNCI guidelines are packaged in this chart booklet. The chart booklet provides a simplified step-by-step guide to a healthcare worker on case management of children below 5 years of age visiting health facilities. The chart booklet summarizes and describes the 6 step IMNCI process illustrated above.

Benefits of Using the IMNCI Approach

By using the IMNCI chart booklet and implementing the guidelines the health workers will be able to implement on the key elements of IMNCI:

Assessment

The assess column in the chart booklet describes how to take history and do a physical exam

- Routinely assess for general danger signs (or possible bacterial infection in a young infant) a general
 danger sign indicates that a child has a serious and life threatening condition that requires urgent attention
- Assess for common illnesses in children or young infant's by asking questions about common conditions, examining the child or young infant and checking the need for other routine services such as immunization and nutrition.
- Look for other health problems.

Classification

The classify (signs and classify) column of the chart lists clinical signs of illnesses and their classification. "Classify" in the chart means the health worker has to make a decision on the severity of the illness. Healthcare workers will be able to classify children or young infants illnesses using the colour- coded triage system. The classifications contained in the booklet are based on whether the diagnosed illness are:

Col	lour	Classification						
Pi	nk	Severe Classification needing admission or pre-referral treatment and referral						
Yel	low	= A classification needing specific medical treatment and advice						
Gre	een	= Not serious and in most cases no drugs are needed. Simple advice on home management given						

Identify Treatment

The identify treatment column helps the healthcare workers to quickly and accurately identify treatments for the classifications selected. If a child or young infant has more than one classification, the healthcare worker must look at more than one table to find the appropriate treatments.

Treat

The treat column shows how to administer the treatment identified for the classifications. Treat means giving the treatment in the facility, prescribing drugs or other treatments to be given at home and also teaching the mother/caregiver how to administer treatment at home.

The following rules should be adhered to.

- If a child or young infant requires admission or referral (pink classification), it is important the essential treatment is offered to the child or young infant before admission or referral.
- If the child or young infant requires specific treatment (yellow classification), develop a treatment plan, administer drugs to be given at the facility and advise on treatment at home and counsel the mother/ caregiver accordingly.
- If no serious conditions have been found (green classification), advise the mother/caregiver on care of child at home.

Counsel

If follow up care is indicated, teach the mother/caregiver when to return to the clinic. Also teach the mother/caregiver how to recognize signs indicating that the child or young infant should be brought back to the facility immediately.

Follow up

Some children or young infants need to be seen more than once for a current episode of illness. Identify such children or young infants and when they are brought back, offer appropriate follow up care as indicated in the IMNCI guidelines and also reassess the child or young infant for any new problems.

The guidelines also aim to empower healthcare workers to:

- Correctly interview caregivers.
- Provide counseling for appropriate preventative and treatment measures.
- Correctly counsel the mother about her own health.

Who can apply the IMNCI approach?

 The IMNCI process can be applied to any healthcare worker working in settings where children or young infants below five years are managed. These should include: Doctors, Clinical Officers and Nurses.

What should you do when you receive the IMNCI chart booklet at your facility?

- The Ministry of Health has distributed the IMNCI chart booklet to all health facilities in Kenya. Upon receiving
 a copy at your facility, all health workers should familiarize themselves with the guidelines and begin
 immediate implementation/use. NB: the hard copy of the chart booklet should remain at the health
 facility at all times.
- A mobile application of the IMNCI guidelines has been developed by the Ministry of Health (MOH) and is available for free to all healthcare workers. For instructions on how to download, please visit **www.health.go.ke** or contact the Newborn Child and Adolescent Health Unit (NCAHU) at the MOH.

ASSESS AND CLASSIFY THE SICK CHILD (AGE 2 MONTHS UP TO 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 follow-up instructions on TREAT THE CHILD chart.
 - If initial visit, assess the child as follows:

USE ALL BOXES THAT MATCH THE CHILD'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS.

SIGNS

TREATMENT (Urgent pre-referral treatments are in bold print.)

CHECK FOR GENERAL DANGER SIGNS

ASK:

- Is the child able to drink or breastfeed?
- Does the child vomit everything?
- Has the child had convulsions in this illness?

LOOK:

- See if the child is lethargic or unconscious
- Is the child convulsing now? If yes treat immediately. (see pg.16)

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

URGENT ATTENTION

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK

For how long?

· Count the breaths in one minute. Use respiratory rate timers where

available

LOOK, LISTEN, FEEL

Look for chest in-drawing*

- · Look and listen for stridor**
- · Look and listen for wheeze***
- · Check for central cyanosis
- Check for oxygen saturation using pulse oximetry where available.
 - Check AVPU****
 - · If wheezing with either chest indrawing or fast breathing: Assess for possible Asthma (see pq17)
 - If wheezing assess for possible TB disease

CHILD MUST BE CALM

Classify COUGH or DIFFICULT **BREATHING**

If the child is:

Fast breathing is: 2 months up 50 breaths per to 12 months minute or more

12 months up to 5 years

40 breaths per minute or more

- Any general danger sign **VERY SEVERE DISEASE**
- Give diazepam if convulsing now (see pg 16)
- Quickly complete the assessment
- Give any pre-referral treatment immediately Treat to prevent low blood sugar (see pg 17)
- Keep the child warm.
- Refer URGENTLY.
- Screen for possible TB disease and check for HIV

Any OR	general danger sign	SE
•	Oxygen saturation	PNE
	less than 90%	OR

- VERE VERY Stridor in calm child.
 - **UMONIA SEVERE**

DISEASE

NO

PNEUMONIA:

COUGH OR

COLD

CLASSIFY AS

- If oxygen saturation is less than 90%, start oxygen therapy and refer or admit.
- Give first dose of Benzyl Penicillin & Gentamicin (see pg 16)
- Treat for and to prevent low blood sugar. (see pg 17)
- Keep the child warm.
 - Treat wheeze if present, admit or refer urgently to hospital (see pg 17).
 - Screen for possible TB disease and check for HIV

Chest indrawing in calm child

- OR Fast breathing

Central Cyanosis

AVPU = V. P or U

- AND
- No signs of severe pneumonia

No signs of pneumonia

or very severe disease.

- **PNEUMONIA**
 - Give Amoxicillin Dispersible Tablet. (see pg 13) Give Vitamin A. (see pg 14)
 - Treat wheeze if present (see pg 17).
 - If wheezing, follow-up in 2 days (see pg 22)
 - Soothe the throat and relieve the cough with a safe remedy. Screen for possible TB disease and check for HIV.

 - Review in 2 days, if not possible, admit OR refer children with chest indrawing (see pg 22)
 - Advise mother when to return immediately.
 - Treat wheeze if present (see pg 17)
 - If wheezing, follow-up in 2 days (see pg 22)
 - Soothe the throat and relieve the cough with a safe remedy (see pg 15).
 - Follow-up in 5 days if not improving.
 - Screen for possible TB disease and check for HIV.
- Advise mother when to return immediately

^{*}Chest in-drawing is present if the lower chest wall moves in during inspiration.

^{**}Stridor - a harsh sound heard during inspiration.

^{***}Wheeze - a musical sound heard during expiration.

IDENTIFY TREATMENT

- A second bolus may be given if required before proceeding to step 2 of PLAN C (see pg 19)

ASSESS

Does the child have diarrhoea?

IF YES. ASK:

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

LOOK, LISTEN, FEEL:

- Look at the child's general conditions. Check:
 - · Weak/ absent pulse
 - Not alert: AVPU*<A
 - · Cold hands +Temp gradient
- · Capillary refill >3 sec

Is the child:

- · Lethargic or unconscious?
- · Restless and irritable?
- Look for sunken eves
- 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 (longer than 2 seconds)?
 - · Slowly?
 - · Immediately?

Note: Remember to classify all children with diarrhoea for dehydration.



NB*If referral is not possible, manage the child as described in Integrated Management of Childhood and Basic Paediatric Protocols.

*AVPU - Alert, responsive to Voice, responsive to Pain, Unresponsive This is a basic assessment of conciousness.

for DEHYDRATION

All four of:

PLUS

signs:

Weak/absent pulse

Cold hands + Temp

Capillary refill > 3 sec

sunken eyes and very

slow/slow skin pinch.

Two or more of the following

Two or more of the following

Drinks eagerly, thirstily

Skin pinch goes back slowly.

Not enough signs to classify as

some or severe dehydration.

Dehydration present: (hypovolaemic shock,

dehydration).

No dehydration.

severe dehydration, some

· Restless, irritable

Sunken eves

AVPU* < A

Classify

DIARRHOEA

and if diarrhoea 14 days or more

and if blood in stool

•	Lethargic or unconscious (AVPU* < A).		the an
	Sunken eyes		•
	Not able to drink or drinking	SEVERE	•
	noorly	DEHYDRATION	

- Skin pinch goes back very slowly

SOME

DEHYDRATION

NO

DEHYDRATION

SEVERE

PERSISTENT

DIARRHOEA

HYPOVOLAEMIC

SHOCK

FROM

DIARRHOEA/

DEHYDRATION

CLASSIFY

If child also has another severe classification:

Admit or refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise e mother to continue breast feeding. Assess for severe acute malnutrition. Assess for severe If child has no other severe classification:

TREAT FOR SHOCK. Give Ringer's Lactate 20mls/kg (see pg 19)

Treat for and to prevent low blood sugar (see pg 17)

Screen for possible TB disease and check for HIV.

Assess for severe acute malnutrition (see pg 8)

Assess for severe anaemia (see pg 8)

NB: If HB<5g/dl transfuse urgently

Admit or refer urgently to hospital

- If acute malnutrition present (see pg 19).
- Give fluid for severe dehydration. (Plan C) (See pg 19)
- Give vitamin A (See pg 14)
- Give ORS and Zinc Sulphate (See pg 14 and 18)
- If child is 2 years or older and there is cholera in your area, give Erythromycin for cholera. (See pg 13).
- Screen for possible TB disease and check for HIV

If child also has a severe classification:

Admit or refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breast feeding.

If the child has no severe classification:

- Give fluid and food for some dehydration (Plan B) (See pg 18)
- Give vitamin A (See pg 14)
- Give ORS and Zinc Sulphate (See pg 14 and 18) Follow-up in 2 days if not improving (See pg 32)
- Screen for possible TB disease and check for HIV
- Advise mother when to return immediately

If child also has a severe classification:

Admit or refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breast feeding.

- If the child has no severe classification:
- Give fluid and food to treat diarrhoea at home (Plan A) (See pg 18)
- Give vitamin A (See pg 14)
- Give ORS and Zinc Sulphate (See pg 14 and 18)
- Follow-up in 5 days if not improving.
- Screen for possible TB disease and check for HIV.
- Advise mother when to return immediately
- Treat hypovolaemic shock and any other form of dehydration before referral unless the child has another severe classification.
- Give Vitamin A. (See pg 14)
- Give ORS and Zinc Sulphate (See pg 14 and 18)
- Give Multivitamin / Mineral supplements (See pg 19)
- Admit or refer URGENTLY to hospital with mother giving frequent sips of ORS on the way.
- Screen for possible TB disease and check for HIV.
- Advise the mother on feeding a child who has
- PERSISTENT DIARRHOEA. (see pg 30) Give vitamin A (See pg 14)
- Give ORS and Zinc Sulphate (See pg 14 & 18) PERSISTENT Give Multivitamin / Mineral supplements (See pg 19) DIARRHOEA
 - Check for HIV infection (See pg 9) Follow-up in 5 days (see pg 22)
 - Screen for possible TB disease and check for HIV.
- Blood in the stool Treat with Ciproflaxacin (See pg 13) Give Vitamin A. (See pg 14) Give ORS and Zinc Sulphate (See pg 14 and 18)

DYSENTERY

- Follow-up in 2 days (see pg 22)
 - Screen for possible TB disease and check for HIV.

Does the child have fever?

(by history or feels hot or temperature 37.5°C* or above)

IF YES:

Has the child travelled to a high risk (Malaria endemic, seasonal transmission or epidemic prone) area in the last 1

Decide Malaria Risk: high or low risk.

THEN ASK:

- · For how long?
- If more than 7 days, has fever been present every day?
- Has the child had signs of mea- Look for signs of MEASLES: sles within the last 3 months?

High Malaria risk:

Do a malaria test

- Endemic Zone
- Epidemic prone areas

Low malaria risk:

o Do a malaria test if no obvious cause of fever

NOTE: If you can't test,

LOOK AND FEEL:

- · Look or feel for stiff neck.
- · Look for runny nose.

- · Generalized rash and one of these: cough, runny nose, or red eyes.
- · Look for any other cause of fever...

TEST POSITIVE

- · P.falciparum PRESENT
- Seasonal Transmission Zone
 Pvivax PRESENT

TEST NEGATIVE

 P.falciparum or P.vivax absent

don't withhold treatment



If MEASLES

now or within the last 3 months, Classify

CLASSIFY

FEVER: HIGH OR

LOW MALARIA RISK

Check for Complications of MEASLES

If the child has signs of measles now or within the

- last 3 months Look for mouth ulcers, are they deep or extensive?
 - · Look for pus draining from the eye
 - · Look for clouding of the cornea

CLASSIFY

IDENTIFY TREATMENT

Any general danger sign or Stiff neck. AND Confirm malaria with a test.	VERY SEVERE FEBRILE DISEASE OR SEVERE MALARIA	Give first dose of Artesunate for severe malaria (see pg 16) Give first dose of Ceftriaxone (see pg 16) Treat the child to prevent low blood sugar (see pg 17) Give one dose of paracetamol in clinic for high fever (≥38.5 °C) (see pg 14) Admit or Refer URGENTLY to hospital Screen for possible TB disease and check for HIV.
Malaria test POSITIVE**	UNCOMPLI- CATED MALARIA	Give Artemether + Lumefantrine (AL) (see pg 16) Give one dose of paracetamol in clinic for high fever (≥38.5 °C) (see pg 14) Give Vitamin A (see pg 14) Follow up in 3 days if fever persists (see pg 23) If fever is present every day > 7 days assess further or refer Screen for possible TB disease and check for HIV Advise when to return immediately.
Malaria test NEGATIVE	FEVER: NO MALARIA	Give one dose of paracetamol in clinic for high fever (≥38.5 °C) Assess for other possible causes of fever Follow up in 3 days if fever persists (see pg 23) If fever is present every day for more than 7 days assess further or refer (see pg 23) Screen for possible TB disease and check for HIV Advise mother when to return immediately.

Generalized rash of measles and One of: cough, runny nose or red eyes	SUSPECTED MEASLES	Give Vitamin A (See page 14) Notify, take blood sample for confirmation Screen for possible TB disease and check for HIV Advise mother when to return immediately.				
Any general danger sign or Clouding of comea or Deep or extensive mouth ulcers.	SEVERE COMPLICATIONS OF MEASLES	 Give Vitamin A (see pg 14) Give first dose of Ceftriaxone Antibiotic (See page 16) If clouding of the cornea or pus draining from the eye, apply tetracyclic eye ointment. (See page 15) Notify, take blood sample for confirmation OR refer Admit or refer URGENTLY to hospital Screen for possible TB disease and check for HIV. 				
 Pus draining from the eye or Mouth ulcers. 	EYE OR MOUTH COMPLICATIONS OF MEASLES****	Give Vitamin A (See page 14) If pus draining from the eye, treat eye infection with tetracycline eye ointment. (See page 15) If mouth ulcers, treat with nystatin (see pg 15) Follow-up in 2 days (see pg 23) If child has no indication for referral, notify and draw blood sample for confirmation of measles Screen for possible TB disease and check for HIV.				
No pus draining from the eye or mouth ulcers.	NO EYE OR MOUTH COMPLICATIONS OF MEASLES	Give Vitamin A if not received in the last 1 month (see pg 14) If child has no indication for referral, draw blood and send for confirmation Screen for possible TB disease immediately after the measles infection and check for HIV.				

^{*} These temperatures are based on axillary temperature. Rectal temperature readings are approximately 0.5°C higher.
** If no malaria test available: High risk-classify as MALARIA; Low malaria risk AND NO obvious cause of fever-classify as MALARIA
** Look for local tenderness, refusal to use a limb, hot tender welling, ret lender skin or botis, lower abdominal pain or pain on passing urine

^{****} Other important complications of measles - pneumonia, stridor, diarrhoea, ear infection, and malnutrition - are classified in other tables.

CLASSIFY

IDENTIFY TREATMENT

Does the child have an ear problem?

IF YES:

LOOK AND FEEL:

behind the ear.

- · Is there ear pain?
- Is there ear discharge? If Feel for tender swelling yes, for how long?
- Look for pus draining from the ear.

Classify EAR PROBLEM

Tender swelling behind the ear.	MASTOIDITIS	Give first dose of Ceftriaxone Antibiotic. (See pg 16) Give first dose of paracetamol for pain (see pg 14) Refer URGENTLY to hospital or admit Check for HIV.
 Pus is seen draining from the ear or Discharge is reported for less than 14 days,or Ear pain. 	ACUTE EAR INFECTION	 Give Amoxicillin dispersible tablet for 5 days. (See pg 13) Give paracetamol for pain (see page 14) Dry the ear by wicking (See pg 15) Check for HIV infection Follow-up in 5 days (see pg 23)
Pus is seen draining from the ear or discharge is reported for 14 days or more.	CHRONIC EAR INFECTION	 Dry the ear by wicking (See pg 15) Check for HIV infection Follow-up in 5 days (see pg 23)
No ear pain and No pus seen or reported draining from the ear.	NO EAR INFECTION	No treatment.

CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

ASK: Is there history of TB contact?

LOOK AND FEEL:

- · Look for oedema of both feet.
- Determine the child's weight for Height/length (WFHL*) and plot on the IMNCI Chart booklet (see pages 55 & 56) to determine the z-score.
- Determine the growth pattern; Is the growth faltering? (Weight curve is flattening or dropping for at least 2 consecutive months?)
- · Measure MUAC**mm in a child 6 months or older
- IF WFH/L less than -3 z-score or MUAC less than 115mm then:

Check for any medical complication present:

- · Any general danger signs.
- · Any severe classification.
- Pneumonia with chest in-drawing.

If no medical complication present:

- Conduct appetite test. (see pg 25)
- Child is 6 months or older, offer RUTF to eat (see pg 25)
 Is the child
 - > Not able to finish RUTF portion
 - > Able to finish RUTF portion
- Child is less than 6 months, assess breast feeding (see pg 43)
 - > does the child have breast feeding problems?

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

CHECK FOR ANAEMIA

LOOK AND FEEL:

Look for palmar pallor. Is it:

- · Severe palmar pallor?
- Some palmar pallor?
- No palmar pallor?
- · Do haemoglobin level (HB) test.

Assess for sickle cell anaemia if common in your area.

CLASSIFY NUTRITIONAL STATUS

CLASSIFY ANAEMIA

CLASSIFY

IDENTIFY TREATMENT

Oedema of both feet, OR WFH/L less than -3 z scores OR MUAC Less than 11.5 cm and ANY one of the following: - medical complication present or not able to finish RUTF***or Breast feeding problem (<6 months)	SEVERE ACUTE MALNUTRITION WITH COMPLICATIONS FOR CHILDREN	Treat the child to prevent low blood sugar (see pg 17) Keep the child warm Give first dose of Benzyl Penicillin + Gentamicin (see pg 13) Give Vitamin A (see pg 14) Refer URGENTLY to hospital Admit or refer urgently to hospital if child has any other complications (Danger signs: Diarrhoea, Pneumonia, Fever, No appetite, etc) Immunize as per schedule (see pg 12) Screen for possible TB disease and check for HIV (see pg 13)
WFH/L less than -3 z scores OR MUAC Less than 11.5 cm AND AND Able to finish RUTF	SEVERE MALNUTRITION WITHOUT COMPLICATIONS	Give oral Amoxicillin DT for 5 days Give ready to use therapeutic food for child aged six months and above Screen for possible TB disease and check for HIV Follow up in 7 days (see pg 24) Assess the child's feeding and counsel the mother on the feeding recommendations (see pg 25 & 27) Immunize as per schedule (see pg 12) Advise mother when to return immediately.
WFH/L > -3 to < -2 z scores OR MUAC 11.5 to 12.4cm	MODERATE ACUTE MALNUTRITION	If growth is faltering for 2 consecutive months, give Vitamin A, assess further or refer to hospital Assess the child's feeding and counsel the mother on the feeding recommendations (see pg 25 & 26) Give Albendazole if child is 1 year or older and has not had a dose in the previous 6 months (See pg 12) If feeding problems, follow up in 14 days (see pg 24) Screen for possible TB disease and check for HIV Immunize as per schedule (see pg 12) Advise mother when to return immediately.
For all age groups: Static weight or losing weight 12- 2 to <-1 Z- Score If age 6 months up to 59 months MUAC 12.5 to 13.5cm	AT RISK OF ACUTE MALNUTRITION	If child is less than 2 years old, and has growth faltering, assess the child's feeding and counsel the mother on feeding according to the feeding recommendations Give Albendazole if child is 1 year or older and has not had a dose in the previous 6 months (See pg 12) Follow up in 14 days (see pg 24) If feeding problem, follow-up in 5 days (see pg 24) Screen for possible TB disease and check for HIV Immunize as per schedule (see pg 12) Advise mother when to return immediately.
WFH/L >- 1 z - scores OR MUAC > 13.5 cm	NO ACUTE MALNUTRITION	If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the feeding recommendations (see pg 25 & 27) If feeding problem, follow-up in 5 days (see pg 24) Give Albendazole if child is 12 months and has not had a dose in the previous 6 months (see pg 12) Immurize as per schedule (see pg 12) Screen for possible TB disease and check for HIV
Severe palmar pallor If HB<5g/dL	SEVERE ANAEMIA	Treat to prevent low blood sugar (see pg 17) Keep the child warm Admit or refer URGENTLY to hospital Screen for possible TB disease and check for HIV.
Some palmar pallor	ANAEMIA	Assess the child's feeding and counsel the mother on feeding (see pg 25 and 27) If growth is faltering for 2 consecutive months, assess further or refer to hospital Give Iron and Folate. (See pg 14) Give vitamin A (See pg 14) Give Albendazole if child is 1 year or older and has not had a dose in the last 6 months (See pg 12) Screen for TB disease and check for HIV Follow up in 14 days Immunize as per schedule (see pg 12) Advise mother when to return immediately.
No Palmar pallor	NO ANAEMIA	If child is less than 2 years old, assess the child's feeding and counsel the mother according to the feeding recommendations (see pg 25 and 27) If feeding problems, follow up in 5 days (see pg 24) Give Albendazole if child is 1 year or older and has not had a dose in the last 6 months (see pg 12) Immunize as per schedule (see pg 12) Screen for possible TB disease and check for HIV.

^{*}WFHL is Weight-for-Height or Weight-for-Length determined by using the WHO growth standards charts.

^{**}MUAC is Mid-Upper-Arm-circumference measured using MUAC tape in all children 6 months or older.

^{***}RUTF is Ready-to-use Therapeutic Food for conducting the appetite test and feeding children with severe acute malnutrition.

CLASSIFY

IDENTIFY TREATMENT

CHECK FOR HIV EXPOSURE AND INFECTION

ASK

- Ask for mother's HIV status to establish child's HIV exposure* Is it:
- Positive, Negative or Unknown (to establish child's HIV exposure)
- Ask if child has had any TB Contact

LOOK, FEEL AND DIAGNOSE:

Child <18 months

- If mother is HIV
 positive**, conduct DNA
 PCR for the baby at 6
 weeks or at first contact
 with the child
- If mother's HIV status is unknown, conduct an antibody test (rapid test) on mother to determine HIV exposure.

Child ≥18 months

 If mother's antibody test is POSITIVE, the child is exposed. Conduct an antibody test on the child.

Child whose mother is NOT available:

- Child < 18 months
 Do an antibody
 test on the child. If
 positive, do a DNA
 PCR test.
- Child ≥ 18 months
 Do an antibody test
 to determine the HIV
 status of the child
- NB: See Early Infant Diagnosis (EID) algorithm on pg 60

CLASSIFY HIV STATUS

Child < 18 more and DNA PCR POSITIVE Child ≥ 18 more and Antibody POSITIVE POSITIVE	nths	 Initiate ART, counsel and follow up existing infections Initiate or continue cotrimoxazole prophylaxis (see page 20) Assess child's feeding and provide appropriate counseling to the mother/caregiver (see pg 25 and 26) Offer routine follow up for growth, nutrition and development and HIV services Educate caregivers on adherence and its importance Screen for possible TB disease at every visit. For those who do not have TB disease, start Isoniazid prophylactic therapy (IPT). Screen for possible TB throughout IPT Immunize for measles at 6 months and 9 months and boost at 18 months (see pg 12) Follow up monthly as per the national ART guidelines and offer comprehensive management of HIV. Refer to appropriate national ART guidelines for comprehensive HIV care of the child (see pg 24)
Child<18 months If mother test is positive and child's DNA PC negative OR If mother is unavailable; ch antibody test is positive and DN PCR is negative	HIV EXPOSED	 Treat, counsel and follow up existing infections Initiate or continue Cotrimoxazole prophylaxis (see page 20) Give Zidovudine and Nevirapine prophylaxis as per the national PMTCT guidelines Assess child's feeding and provide appropriate counseling to the mother/caregiver (see pg 25 and 26) Offer routine follow up for growth, nutrition and development Repeat DNA PCR test at 6 months. If negative, repeat DNA PCR test again at 12 months. If negative, repeat antibody test at 18 months (see pg 59 EID algorithm) Continue with routine care for under 5 clinics Screen for possible TB at every visit Immunize for measles at 6 months and 9 months and boost at 18 months (see pg 12) Follow up monthly as per the national ART guidelines and offer comprehensive management of HIV. Refer to appropriate national ART guidelines for comprehensive care of the child (see pg 24)
Mother's HIV status is NEGATIVE OR Mother's HIV status is POSITIVE and child is 18 months with antibod test NEGATIVE 6 week after completion of breaffeeding	S HIV ≥ NEGATIVE	Manage presenting conditions according to IMNCI and other recommended national guidelines Advise the mother about feeding and about her own health

^{*} Refer to Guidelines on Use of Antiretroviral Drugs for Treating and Preventing HIV Infections in Kenya available at http://www.nascop.or.ke, ARVs dosing charts, infant and young child feeding guidelines

^{**} All HIV positive mothers should be initiated on ARVs and linked to psychosocial support. Refer 2016 PMTCT guidelines.

ASSESS CLASSIFY

IDENTIFY TREATMENT

CHECK FOR CHILD'S DEVELOPMENTAL MILESTONES

0-2 MONTHS

- Social smile (baby smiles back)
- Baby follows a colourful object dangled before their eyes

2-4 MONTHS

- Holds the head upright
- Follows the object or face with their eyes
- Turns the head or responds in any other way to sound
- · Smiles when you speak

4-6 MONTHS

- Rolls over
- Reaches for and grasps objects with hand
- Takes objects to her mouth
- Babbles (makes sounds)

6-9 MONTHS

- Sits without support
- Moves object from one hand to the other
- Repeats syllables (bababa, mamama)
- Plays peek-a-boo (hide and seek)

9-12 MONTHS

- · Takes steps with support
- Picks up small object or string with 2 fingers
- Says 2-3 words
- Imitates simple gestures (claps hands, bye)

12 - 18 MONTHS

- Walks without support
- Drinks from a cup
- Says 7-10 words
- Points to some body parts on request

18 - 24 MONTHS

- Kicks a ball
- Builds tower with 3 blocks or small boxes
- Points at pictures on request
- Speaks in short sentences

24 MONTHS AND OLDER

- Jumps
- Undresses and dresses themselves
- · Says first name, tells short story
- Interested in playing with other children

CLASSIFY FOR DEVELOPMENTAL MILESTONES

	bsence of one or more mile- tones from current age group) Absence of one or more mile- stones from earlier age group Regression of milestones	DEVELOPMENTAL MILESTONE/S DELAY	• R • S	counsel the caregiver appropriately lefer for psychomotor evaluation creen for mothers health needs and risk factors (see g 12) and other possible causes including Malnutri- on, TB disease and hyperthyroidism
•	Absence of one or more milestones from current age group	DEVELOPMENTAL MILESTONE/S ALERT	ChA	raise caregiver on milestones achieved counsel caregiver on play & communication activities to do at ome (refer to Care for Child Development card page 28) dvise to return for follow up in 30 days (see pg 31) creen for possible TB disease and other causes
•	All milestones for the current age group are present	DEVELOPMENTAL MILESTONE/S NORMAL	• E	raise caregiver on milestones achieved ncourage caregiver to give more challenging activities for ne next age group (refer to Care for Child Development card age 28) dvise to continue with follow up consultations

CLASSIFY

IDENTIFY TREATMENT

ASSESS FOR INTERACTION. COMMUNICATION AND RESPONSIVENESS

ASK

- How do you play with your child? (Ask the caregiver to demonstrate)
- How do you talk with your child? (Ask the caregiver to demonstrate)
- How do you get your child to smile? (Ask the caregiver to demonstrate)
- What makes you think your child is learning? (Ask for 6 months and older)

LOOK, LISTEN

(Health care provider looks and listens as the caregiver plays and communicates with the

- Is the caregiver aware of child's move-
- Does the caregiver play with child?
- Does the caregiver talk to child?
- Does the caregiver smile with the child?

CLASSIFY OFR INTERACTION. COMMUNICATION AND RESPON-SIVENESS

For All Children: General signs for all children

- · Does not move/play with the child, or controls child's movements
- · Is not able to comfort child, and child does not look to caregiver for comfort
- Scolds the child

AGE < 6 Months

- Does not play with baby
- Does not talk to baby
- Tries to force smile or is not responsive to

AGE: 6 Months & Older

- Does not play with child
- Does not talk, or talks harshly to child
- · Says child is slow to learn

- Ask caregiver to copy child's movements and to follow child's lead
- Help caregiver look into child's eyes while gently talking and holding child Help caregiver distract child from unwanted actions by giving alternative toys or

AGE < 6 Months

- Discuss ways in which to help baby see, hear, feel and move appropriate for
- Ask the caregiver to look into baby's eyes while talking to the baby
- Ask caregiver to make large gestures and cooing sounds and/or copy baby's sounds and gestures, and see baby's response

AGE: 6 Months & Older

- Ask caregiver to do play or communication activity, appropriate for age
- Help caregiver interpret what child is doing and thinking, while observing child's response and smile
- Counsel the caregiver on appropriate activity to do together with the child (see
- Encourage more activity with the child, check hearing and seeing.
- Refer child with difficulties

(See the counsel the mother card on recommendation for care for Child's Development pg 28.)

Follow up in 14 days (see page 31)

General signs for all children

- Caregiver moves towards the child, talks to or makes sounds with child
- Caregiver tries to force smile or is not
- Caregiver looks into child's eyes while
- Caregiver distracts child from unwanted actions with appropriate toys.

- responsive to child
- talking softly to them, gently touches child or holds them closely.

Moves the baby's arms and legs while

Gets baby's attention with shaker or other

Looks into baby's eyes while talking softly Responds to baby's sounds and gestures to

gently stroking the baby.

GOOD INTERACTION AND /OR

COMMUNICATION AND **RESPONSIVENESS**

POOR

INTERACTION AND

COMMUNICATION

AND

RESPONSIVENESS

Praise caregiver and encourage to continue age appropriate play and communication (See the counsel the mother card on recommendation for care for Child's Development pg 28.)

AGE: 6 Months & older

get baby to smile

AGE< 6 Months

- Plays word games or with toys
- Looks into child's eyes and talks softly to
- Draws smile out from the child
- Says the child is learning well

CHECK THE CHILD'S IMMUNIZATION, VITAMIN A & DEWORMING STATUS

IMMUNIZATION

		Vaccines						
Age	BCG	Polio Vaccine (Bivalent Oral Polio Vaccine)	IPV	Diphtheria/ Pertussis/ Tetanus/Hepatitis B/ Haemophilus Influenzae type B (Pentavalent)	Pneumococcal PCV10	Rota Virus (ROTARIX)	Measles	Yellow Fever
Birth	BCG*	bOPV 0 (birth -2wks)						
6 weeks		bOPV 1		Pentavalent 1	PCV10 1	ROTA 1		
10 weeks		bOPV 2		Pentavalent 2	PCV10 2	ROTA 2		
14 weeks		bOPV 3	IPV1	Pentavalent 3	PCV 10 3			
6 months							Measles, rubella**	
9 months							Measles, rubella**	Yellow Fever***
18 months							Measles, rubella**	

TABLE:9

ASSESS FOR OTHER PROBLEMS THAT THE CHILD MAY HAVE

- · 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.

Give Albendazole

 Give Albendazole 200mg as a single dose for children 1 to 2 years and 400mg if child is 2 years or older.

VITAMIN A & DEWORMING

Age	Vitamin A	De-worming
6 months	Vitamin A	
12 months	Vitamin A	Deworming
18 months	Vitamin A	Deworming
24 months	Vitamin A	Deworming
30 months	Vitamin A	Deworming
36 months	Vitamin A	Deworming
42 months	Vitamin A	Deworming
48 months	Vitamin A	Deworming
54 months	Vitamin A	Deworming
60 months	Vitamin A	Deworming

TABLE:10

ASSESS THE MOTHER'S / CAREGIVER'S HEALTH NEEDS

- Nutritional status and anaemia, contraception
- Check the mother's HIV status
- Screen for cancer eg: breast and cervical
- Check the mother's psychosocial support needs
- Check hygienic practices
- Check/assess mental status and SGBV (Sexual Gender Based Violence)

^{*} Do not give BCG to a child with symptomatic HIV/AIDS. In child exposed to TB disease at birth, do not give BCG. Instead give child Isoniazid Prophylaxis for 6 months then administer BCG 2 weeks after completion of IPT

^{**}Measles Rubella vaccine at 6 months for HIV exposed/infected children. Repeat at 9 months and 18 months

^{***}Yellow fever should not be given to children with HIV/AIDS and is only offered in the following counties: Baringo and Elgeyo Marakwet in Rift Valley region.

(CARRY OUT THE TREATMENT STEPS IDENTIFIED ON THE ASSESS AND CLASSIFY CHART)

TEACH THE MOTHER/CAREGIVER TO GIVE ORAL DRUGS AT HOME

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

- » Determine the appropriate drugs and dosage for the child's age or weight.
- » Tell the mother/caregiver the reason for giving the drug to the child.
- » Demonstrate how to measure a dose.
- Watch the mother/caregiver practise measuring a dose by themselves.
- » Ask the mother/caregiver to give the first dose to their child.
- » Explain carefully how to give the drug, then label and package the drug.
- » If more than one drug will be given, collect, count and package each drug separately.
- » Explain that all the oral drug tablets or syrups must be used to finish the course of treatment, even if the child gets better.
- » Check the mother's/caregiver's understanding before they leave the clinic.

Give Metronidazole

if a child with dysentery has not improved on Ciprofloxacin by the second day, add Metronidazole

TABLE : 11

10 mg/kg	METRONIDAZOLE 10 mg/kg /dose, Give 3 times daily for 5 days				
AGE or WEIGHT	AGE or WEIGHT TABLET (200mg) SYRUPS (200 mg/5 ml				
12-24 months (10-12 kg)	1/2	2.5 ml			
24 -36 months (12-14kg)	3/4	3.75 ml			
36-59 months (14-19kg)	1	5 ml			

FIRST LINE ANTIBIOTIC FOR DYSENTERY: CIPROFLOXACIN

TABLE:12

	CIPROFLOXACIN Give two times daily for 3 days
AGE or WEIGHT	TABLET 250 mg
2 months up to 4 months (4 - 6 kg)	1/4
4 months up to 12 months (6 - 10 kg)	1/2
12 months up to 5 years (10 - 19 kg)	1

Give an Appropriate Oral Antibiotic

FOR PNEUMONIA OR ACUTE EAR INFECTION:

FIRST - LINE ANTIBIOTIC: AMOXICILLIN DISPERSIBLE TABLET
SECOND-LINE ANTIBIOTIC: BENZYL PENICILLIN (CRYSTALLINE PENICILLIN) & GENTAMICIN

TABLE:13

weight (kg)	for non-s & se	High dose Amoxicillin for non-severe pneumonia & severe infections 40-45mg/ kg/dose		(for mild inf	r mild infections) 15mg/ kg/dose 15mg/kg/dose		Amoxicillin12hrly (for mild infections) 25mg/ kg/dose		tions) 15mg/ kg/dose		Metronidazole 7.5mg/ kg/dose
	Svi	12 hrly Syrup Disp.					nrly	12 hrly	8 hrly		
	125mg/ 5mls	250mg 5ml	250mg tabs	mls 125mg/5ml	250mg tabs	mls 125mg/5ml	250mg caps or tabs	250mg tabs	200mg tabs		
3.0	5mls	2.5	1/2 tab	4	1/4	2.5	1/4				
4.0	7.5mls	3.75		4	1/4	2.5	1/4	1/4			
5.0	10mls	5	1	6	1/2	5	1/4	1/4	1/4		
6.0	10mls	5	l . '.	6	1/2	5	1/2	1/4	1/4		
7.0		7.5	tab	8	3/4	5	1/2	1/2	1/2		
8.0		7.5		8	3/4	5	1/2	1/2	1/2		
9.0		7.5		8		5	1/2	1/2	1/2		
10.0		10		12	1	5	1	1/2	1/2		
11.0		10	2	12	1	10	1	1	1/2		
12.0		10	tabs	12	1	10	1	1	1/2		
13.0		12.5	10	12	1	10	1	1	1/2		
14.0		12.5		12	1	10	1	1	1		
15.0		12.5		15	1	10	1	1	1		
16.0			3	15	1	10	1	1	1		
17.0			tabs	15	1	10	1	1	1		
18.0				15	1	10	1	1	1		
19.0				15	1	10	1	1	1		
20.0				15	2	10	1	1	1		

Note: Discard any unused Amoxicillin Dispersible Tablet once the blister pack is opened.

FIRST LINE FOR CHOLERA: - ERYTHROMYCIN. SECOND LINE FOR CHOLERA: - CEFTRIAXONE

	ERYTHROMYCIN (30-50mg/kg) Give four times daily for 3 days	
AGE or WEIGHT	TABLET 250 mg	SYRUP 125 mg/5ml
2 months up to 4 months (4 - <6 kg)	1/4	2.5ml
4 months up to 12 months (6 - <10 kg)	1/2	5.0ml
12 months up to 5 years (10 - 19 kg)	1	10ml

TREATMENT FOR UNCOMPLICATED MALARIA Give an Oral Antimalarial

FIRST- LINE ANTIMALARIAL: ARTEMETHER + LUMEFANTRINE (AL)
SECOND-LINE ANTIMALARIAL: DIHYDROARTEMISININ-PIPERAQUINE(DHA-PPQ)

TABLE:15

AGE or WEIGHT	GE or WEIGHT ARTEMETHER + LUMEFANTRINE TABLETS (Each tablet contains Artemether 20mg + Lumefantrine 120mg)			
WEIGHT Age in years		Dose of AL to be administered at 0hrs, 8hrs, 24 hrs, 36hrs, 48hrs and 60hrs.		
Below 15Kg	Below 3 years	20mg Artemether and 120mg Lumefantrine		
15 - 24Kg	3-7 years	40mg Artemether and 240mg Lumefantrine		

In child below 5kg, if appropriate weight for age, evaluation of other causes of fever including malaria should be undertaken. Where malaria is confirmed, the current recommended treatment is one tablet of AL given according to the schedule in table 15 under close supervision.

COUNSEL THE MOTHER OR CAREGIVER ON MANAGEMENT OF MALARIA FOR A SICK CHILD:

- Show all caregivers of young children how to prepare the dispersible tablet prior to administration.
 Ensure she/he understands how to administer the same to the child prior to leaving the facility.
- If vomiting occurs within 30 minutes after drug administration, the dose should be repeated. And if vomiting persists, the patient should return to the facility for review.
- Explain the dosing schedule, use probing questions to confirm the patient's understanding.
- Emphasize that all 6 doses must be taken over 3 days even if the patient feels better after a few doses. Follow up after 3 days of treatment.
- Advise patients to return immediately to the nearest health facility if the condition deteriorates at any time or if symptoms have not resolved after 3 days.

SECONDLINE: DIHYDROARTEMISININ 20MG + PIPERAQUINE 160MG

TABLE :16

Body Weight (Kg)	Dihydroartemisinin + piperaquine dose (mg) given daily for 3 days
5 to < 8	20 + 160
8 to <11	30 + 240
11 to < 17	40 + 320

Give Vitamin A

- Give two doses for treatment of Measles. Give first dose in clinic and give mother another dose to give at home the next day.
- · Give one dose for other disease conditions if the child has not had a dose in the previous one month.
- Give one dose as per Vitamin A schedule for prevention (see pg 8).
 To give Vitamin A, cut open the capsule and give drops.

TABLE :17

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

Give Iron and folate

• Give one dose at 6 mg/Kg of iron daily for 14 days.

NB Avoid iron in a child known to suffer from Sickle Cell Anaemia.

Avoid folate until 2 weeks after child has completed the dose of sulfa based drugs.

TABLE :18

AGE or WEIGHT	IRON/FOLATE TABLET Ferrous sulfate 200 mg + 250 mcg Folate (60mg elemental iron)	IRON TABLET (200mg)	FOLIC ACID TABLET (5mg)
2 up to 4 months (4 - 6 kg kg)	-	1/4	1/2
4 up to 12 months (6 - 10 kg)	-	1/4	1
12 months up to 3 years (10 - 14 kg)	1/2 tablet	1/2	1
3 years up to 5 years (14 - 19 kg)	1/2 tablet	1/2	1

Give Zinc Sulphate For a child with diarrhoea:

TABLE :19

AGE	Zinc Sulphate Give once daily for 10 days
AGE	DISPERSIBLE Tablet (20 mg)
0 months up to 6 months	1/2*
6 months up to 5 years	1

^{*}Dispose the other half tablet of Zinc Sulphate 20mg

Give Paracetamol for Fever or Ear Pain

Give paracetamol every 6 hours until fever or ear pain is gone (3 days for fever and 5 days for ear pain)

PARACETAMOL (10-15mg/kg body weight 6 to 8 hourly)					
AGE or WEIGHT TABLET (100 mg) TABLET (500 mg) SYRUP (125mg/5m					
2 months up to 3 years (4 - <14kg)	1	1/4	2.5ml		
3 years up to 5 years (14 - <19kg)	1½	1/2	7.5ml		

TEACH THE MOTHER/CAREGIVER TO TREAT LOCAL INFECTIONS AT HOME

- Explain to the mother/caregiver what the treatment is and why it should be given.
- Describe the treatment steps listed in the appropriate box.
- Watch the mother/caregiver as they give the first treatment in the clinic (except remedy for cough or sore throat).
- Tell them how often to give the treatment at home.
- If needed for treatment at home, give mother/caregiver the tube of tetracycline eye ointment or a small bottle of gentian violet.
- · Check the mother's/caregiver's understanding before they leave the clinic.

Treat Eye Infection with Tetracycline Eye Ointment

Clean both eyes 4 times daily.

- Wash hands.
- Ask the child to close their eyes.
- Use a clean cloth and water to gently wipe away pus.

Then apply tetracycline eye ointment in both eyes 4 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 there is no pus discharge (minimum 5 days).

Do not use other eye ointments or drops, or put anything else in the eye.

Dry the Ear by Wicking

- Dry the ear at least 3 times daily.
 - 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.
 - Tell the mother/caregiver not to place anything in the ear between wicking treatments.
 - Do not allow the child to go swimming or get any water in their ear

Treat Mouth Ulcers with Gentian Violet

- Treat the mouth ulcers twice daily.
 - · Wash hands.
 - Clean the child's mouth with clean soft cloth wrapped around the finger and wet with salt and water.
 - Paint the mouth with half-strength gentian violet.
 - Wash hands again.

Treat for Thrush with Nystatin

- Clean the mouth with clean soft cloth wrapped around the finger and wet with salt and water.
- Instill Nystatin 1 ml 4 times a day.
- If breast-fed advise mother to wash her breasts after feeds and apply the same medicine
 on the areola.
- If severe recurrent or pharyngeal thrush refer for HIV testing.

Soothe the Throat, Relieve the Cough with a Safe Remedy

- · Safe remedies to recommend:
 - Breast milk for exclusively breast-fed infant.
 - Warm water with Lemon tea, tea and honey (children > 6months).
- · Harmful remedies to discourage:
 - Codeine and ephedrine containing cough mixtures.

GIVE THESE TREATMENTS IN HEALTH FACILITY ONLY

TREATMENT OF VERY SEVERE DISEASE:

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

Give an intravenous/ intramuscular antibiotic FOR CHILDREN BEING REFERRED URGENTLY

Give first dose of Ceftriaxone and REFER IMMEDIATELY

WHERE REFERRAL IS NOT POSSIBLE OR DELAYED, CONTINUE WITH TREATMENT AS FOLLOWS:

- Treat to prevent hypoglycemia.
- Continue CEFTRIAXONE FOR 10 DAYS.
- · Give vitamin A.

TABLE .21

Weight(kg)	Benzyl Penicillin (50,000 lu/kg)	Ampicillin or Flucloxacillin (50 mg/kg)	Gentamicin (7.5mg/kg)	Ceftriaxone (50mg/kg)	Metronidazole (7.5 mg/kg)
	IV/IM	IV/IM	IV/IM	IV/IM	IV
	6 hourly	8 Hourly	24 hourly	24 hourly for neonates** Meningitis / very severe sepsis, 50mg/kg BD not to exceed 4g/day	Not to exceed 4 g/day Age <1m: 12 Hourly Age ≥1m: 8 Hourly
3.0	150,000	150	20	150	20
4.0	200,000	200	30	200	30
5.0	250,000	250	35	250	35
6.0	300,000	300	45	300	45
7.0	350,000	350	50	350	50
8.0	400,000	400	60	400	60
9.0	450,000	450	65	450	65
10.0	500,000	500	75	500	75
11.0	550,000	550	80	550	80
12.0	600,000	600	90	600	90
13.0	650,000	650	95	650	95
14.0	700,000	700	105	700	105
15.0	750,000	750	110	750	110
16.0	800,000	800	120	800	120
17.0	850,000	850	125	850	125
18.0	900,000	900	135	900	135
19.0	950,000	950	140	950	140
20	1,000,000	1000	150	1,000	150

Treat for Convulsing now (Child over 1 month)

- Turn the child to the side and clear the airway
- Avoid putting things in his/her mouth while he/she is convulsing
- Give oxygen if available and refer
- Give 0.5 mg/kg Diazepam injection solution per rectum using a syringe without needle or using a catheter
- Check the blood sugar level if possible treat for low blood sugar. (pg 11)
- Repeat Diazepam 10 minutes later if still convulsing.

TREATMENT OF SEVERE MALARIA

Anti-Malarial drug doses and preparation (please check the IV or tablet preparation you are using, they may vary**)

FIRST LINE TREATMENT FOR SEVERE MALARIA: ARTESUNATE

Artesunate typically comes as a powder together with a 1ml vial of 5% bicarbonate that then needs to be further diluted with either normal saline or 5% dextrose- the amount to use depends on whether the drug is to be given IV or OM (see table below)

- DO NOT use water for injection to prepare artesunate for injection
- DO NOT give artesunate if the solution in the syringe is cloudy
- DO NOT give artesunate as a slow IV drip (infusion)
- YOU MUST use artesunate within 1 hour after it is prepared for injection

TABLE :22

Preparing IV/ IM Artesunate	IV	IM
Artesunate powder (mg)	60mg	60mg
Sodium Bicarbonate (mls, 5%)	1ml	1ml
Normal Saline or 5% Dextrose (mls)	5mls	2mls
Artesunate concentration (mg/ml)	10mg/ml	20mg/ml

ARTESUNATE is given IV/IM for a minimum of 24 hours. As soon as the child can eat drink (After 24 hours for artesunate) then change to a full course of artemisinin combination therapy (ACT) typically the 1st line oral anti-malarial, Artemether Lumefantrine.

QUININE FOR SEVERE MALARIA

For IV infusion typically 5 % or 10% dextrose is used.

- Use at least 1ml fluid for each 1mg of quinine to be given
- DO NOT infuse quinine at a rate of more than 5mg/kg/hour
 - Use 5% Dextrose or normal saline for infusion with 1ml of fluid for each 1mg of quinine.
 - The 20mg/kg loading dose therefore take 4 hours or longer
 - The 10mg/kg maintenance dose therefore takes 2 hours or longer

For IM Quinine

- Take 1ml of the 2mls in a 600mg Quinine sulphate IV viral and add 5mls water for injection- this makes a 50mg/ml
 colution.
- For a loading dose this will means giving 0.4mls/kg
- For the maintenance dosing this will mean giving 0.2mls/kg
- If you need to give more than 3mls (a child over 8kg for a loading dose or over 15 kg for maintenance doses then give the dose into two IM sites- do not give more than 3mls per injection site.

ARTEMETHER FOR SEVERE MALARIA

- Administer a loading dose of 3.2mg/kg IM stat then 1.6mg/kg IM daily until the patient is able to tolerate oral medications.
- Thereafter a complete course of AL is given,
- Admit or refer patients with the following:
 - Severe anaemia (HB level of <5g/dl or haematocrit of <15%
 - o Two or more convulsions within a 24-hr period.
- Hyperparasitaemia and are stable: these patients can be treated with AL, DHA-PPQ or oral quinine where ACT is not available. However, they need to be closely monitored.

Malaria treatment doses

TABLE :23

Weight ≤ 20Kg at 3mg/kg /dose and >20Kg at 2.4mg/kg/dose of Artesunate

Weight (kg)	Artesunate, 3mg/kg At 0, 12, and 24h then daily for max 7 days			2, and 24h then daily 20mg/kg then or max 7 days (10mg/kg		
	IV mls of 60mg in	Dose	im mls of 60mg in	IV infusion / IM		200mg tabs Quinine sulphate**
	6mls	in mg	3mls	Loading	8 hrly	8 hourly
3.0	0.9	9	0.45	60	30	1/4
4.0	1.2	12	0.6	80	40	1/4
5.0	1.5	15	0.8	100	50	1/4
6.0	1.8	18	0.9	120	60	1/2
7.0	2.1	21	1.1	140	70	1/2
8.0	2.4	24	1.2	160	80	1/2
9.0	2.7	27	1.4	180	90	1/2
10.0	3	30	1.5	200	100	3/4
11.0	3.3	33	1.6	220	110	3/4
12.0	3.6	36	1.8	240	120	3/4
13.0	3.9	39	12	260	130	3/4
14.0	4.2	42	2.1	280	140	3/4
15.0	4.5	45	2.3	300	150	1
16.0	4.8	48	2.4	320	160	1
17.0	5.1	51	2.6	340	170	1
18.0	5.4	54	2.7	360	180	1
19.0	5.7	57	2.9	380	190	1 1/4
20.0	6.0	60	3	400	200	1 1/4

**For oral Quinine 200 mg Quinine Sulphate - 200 mg Quinine Hydrochloride or Dihydrochloride but = 300 mg Quinine Bilsulphate. The table of doses below is ONLY correct for a 200 mg Quinine Sulphate tablet.

Treat the Child for 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 20-50 ml of milk or sugar water by nasogastric tube.

For Suspected low blood sugar*

Give 10% glucose** 5 ml/kg by nasogastric tube OR

Give same amount slowly intravenously if a line is available.

Keep warm.

Admit or refer urgently to hospital.

TABLE :24

RAPID ACTING BR	RONCHODILATOR
Salbutamol inhaler in a spacer (volume: 750 –1000 ml)	2 puffs repeated 5 times in 30 minutes
Subcutaneous epinephrine (adrenaline)(1: 1000=0.1 %)	0.01 ml per kg body weight
Nebulized salbutamol 5 mg /ml.	
Under 1 year	0.5 ml salbutamol in 2.0 ml sterile water.
1 year and above	1.0 ml salbutamol in 2.0 ml sterile water

^{*} Low blood sugar (hypoglycemia) may be suspected in any infant or child who is convulsing or has loss of consciousness for which there is no obvious cause; has a rectal temperature of below 35.5°C, is drowsy or sweating, is lethargic, floppy or jittery— particularly when less than 2 months old.

Treat For Possible Asthma

Wheeze + History of cough or difficulty breathing, (Likelihood of asthma much higher if age > 12m and recurrent wheeze)

Yes

Yes

Yes

Severe Asthma if child has any one of these

- Oxygen saturation <90%
- Central cyanosis
- · Inability to drink / breastfeed
- AVPU= "V", "P" or "U" or
- Inability talk/ complete sentences
- Pulse rate >200 bpm (0-3yrs) and >180 bpm (4-5yrs)

Immediate Management

Oxygen

ADMIT

Nebulize 2.5mg salbutamol or 6 puffs of inhaler with spacer and mask give every 20 minutes up to 3 doses if needed Prednisolone 2mg/kg*
Consider ipratropium bromide 250 mcg if poor response**
Antibiotics as for severe pneumonia

No

Mild or Moderate Asthma Wheeze PLUS

Lower chest wall indrawing **OR** fast breathing (RR ≥ 50 age 2 - 11 months RR ≥40 aged 12-59 months)

If mild symptoms allow home on salbutamol MDI give 2 puffs every 6 hours.

Counsel caregiver on signs of deterioration and schedule review within 48 hours

Salbutamol 2 puffs of inhaler (or 2.5mg nebulized) every 20 minutes upto 3 doses if needed Oxygen

Monitor closely for 1-2 hours

If lack of response to salbutamol, increasing respiratory rate, worsening saturation, any signs of severe asthma. Refer to Immediate Management above.

- Recurrence of asthma symptoms consider inhaled corticosteroid (ICS) therapy or adjust the doses if already on ICS. (Look out for other comorbidities)
- Demonstrate MDI and spacer use to the caregiver before discharge from the health facility. Preferably use spacer with face masks for <3 years for 4-5 years use facemask or mouthpiece.
- If child has unilateral wheeze and not responding to bronchodilators,
 TB disease is likely and should be evaluated
- · Advise on regular follow up.
- * Prednisolone administered for 3-5 days. Max dose of 20mg/day for < 2 years and 30mg/day for 2-5years.
- ** Repeat every 20 minutes for one hour if needed.

^{**}To constitute 10% glucose from 50% glucose: Mix I part of 50% glucose with 4 parts of water for injection.

REHYDRATION THERAPY & FEEDING FOR DIARRHOEA

(See FOOD advise on COUNSEL THE MOTHER chart) PLAN A, B, C excludes children with acute malnutrition.

Plan A: Treat diarrhoea with no dehydration

Counsel the mother/caregiver on the 4 Rules of Home Treatment: Give Extra Fluids, Give Zinc Sulphate, Continue Feeding, Advise when to Return

- 1. GIVE EXTRA FLUID (Give ORS and other Fluids- as much as the child will take)
- ADVISE THE MOTHER:
 - Breastfeed frequently and for longer at each feed.
- If the child is exclusively breast-fed, give ORS in addition to breast milk.
- If the child is not exclusively breast-fed, give one or more of the following: ORS solution, food-based fluids (such as soup, enriched uii, and yoqhurt drinks e.g. Mala), or safe water.
- Give fresh fruit juice or mashed bananas to provide potassium.
- Advise mothers/caregivers to continue giving ORS as instructed.
- TEACH THE MOTHER/CAREGIVER HOW TO MIX AND GIVE ORS. GIVE THE MOTHER/CAREGIVER 4 PACKETS OF ORS TO USE AT HOME.
- SHOW THE MOTHER /CAREGIVER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE:

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

Advise the mother/caregiver to:

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

2. GIVE ZINC SULPHATE & VITAMIN A

- TELL THE MOTHER/CAREGIVER HOW MUCH ZINC SULPHATE TO GIVE:
 - Up to 6 months 1/2 tablet per day for 10 days
 - 6 months or more, 1 tablet per day for 10 days
- SHOW THE MOTHER HOW TO GIVE ZINC SULPHATE:
 - Infants: dissolve the tablet in a small amount of expressed breast milk, ORS or safe water, in a small cup or spoon.
 - Older children: tablets can be chewed or dissolved in small amounts of ORS or safe water.

REMIND THE MOTHER/CAREGIVER TO GIVE THE ZINC SUPPLEMENTS FOR THE FULL 10 DAYS

3. CONTINUE FEEDING

4. WHEN TO RETURN

See COUNSEL THE MOTHER Chart

Plan B: Treat Diarrhoea at Facility with ORS (Some Dehydration)

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

1. DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS.

- The approximate amount of ORS required (in ml) should be calculated by multiplying the child's weight (in kg) with 75.
- Use the child's age only when you do not know the weight.
- · If the child wants more ORS than shown, give more.
- · For infants under 6 months who are not breast-fed, also give 100-200 ml clean water during this period.

TABLE :25

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

2. SHOW THE MOTHER/CAREGIVER HOW TO GIVE ORS SOLUTION.

- · Give frequent small sips from a cup (or a spoon every 1-2 minutes for a child under 2 years).
- Check from time to time to see if there are any problems. If the child vomits, wait 10 minutes then continue, but more slowly.
- · Continue breast feeding whenever the child wants.
- If the child's eyelids become puffy, stop ORS and give plain water or breast milk.
- · Give ORS according to plan A when the puffiness is gone.

3. AFTER 4 HOURS:

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

4. 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 sachets to complete rehydration under this plan. Also give her 4 ORS sachets to
- continue with Plan A. Explain the 4 Rules of Home Treatment:
- 1. GIVE EXTRA FLUID
- 2. GIVE ZINC SULPHATE & VITAMIN A
- 3. CONTINUE FEEDING
- 4. WHEN TO RETURN

See Plan A for recommended fluids and Zinc Sulphate and Vitamin A, and See COUNSEL THE MOTHER chart.

REHYDRATION THERAPY Treat Shock

nearby (within 30 minutes)?

NO

Are you trained to use a

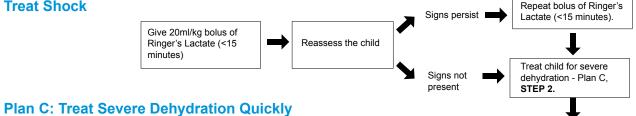
naso-gastric (NG) tube?

NO

Can the child drink?

NO

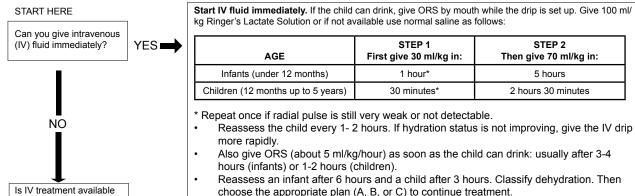
Refer URGENTLY to hospital for IV or NG treatment



YES -

YES 📥

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



Admit or 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.

- Start rehydration by NG 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.

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

Rehydration therapy for diarrhoea in children with acute malnutrition ONLY rehydrate until the weight deficit (measured or estimated) is corrected and then STOP. Do not give extra fluid to prevent recurrence. Unconscious /IN SHOCK Conscious -Not in shock ReSoMal 10ml/kg half hour for the first Don't give fluids unless 2 hours the child is in SHOCK 5-10ml/kg hourly, for the next Treat hypoglycemia 10-12 hours as tolerated Keep warm If a child cannot take orally, use Refer URGENTLY an NG tube. Note: Alternate feeding with fluids hourly

TABLE :26

Give Multivitamin/Mineral supplement for persistent diarrhoea

Give daily for two weeks

Age/Weight	Multivitamin/Mineral Syrup
2 months-6 months (4 - 8 kg)	2.5 ml
6 months-2 years (8 - 12 kg)	5.0 ml
2 years-5 years (12 - 19 kg)	7.5 ml

TREAT THE CHILD HIV CARE FOR CHILDREN

WHAT TO START: CHILDREN

TABLE :27

AGE/WEIGHT	REGIMEN	REMARKS
<2 weeks	AZT/3TC +NVP	As per 2016 ART guidelines
>2 weeks - <3years	ABC/3TC + LPV/r	Once a child attains 25kg switch from LPV/r to ATV/r
3 years – 14 years	ABC/3TC + EFV	Children with contraindication to EFV can use LPV/r or ATV/r as recommended above
	ABC/3TC + DTG	For children >35kg DTG is preferred instead of EFV
>15 years	TDF/3TC/DTG	Use FDC for better adherence

DOSAGE OF COTRIMOXAZOLE PROPHYLAXIS

TABLE :29

WEIGHT (KG)*	SUSPENSION 240MG PER 5ML	SINGLE STRENGTH TABLET 480MG (SS)	DOUBLE STRENGTH TABLET 960MG (DS)
1-4	2.5ml	1/4 SS tab	-
5-8	5ml	½ SS tab	1/4 DS tab
9-16	10ml	1 SS tab	½ DS tab
17-30	15ml	2 SS tab	1 DS
>30 (Adults and adolescents)	-	2SS	1DS

^{*}Dose by body weight is 24-30 mg/kg once daily of the trimethoprim-sulphamethaxazole – combination drug.

ART Treatment in children with TB

AGE/WEIGHT	FIRST LINE TB/HIV CO-INFECTION
< 2 Weeks	Start TB treatment immediately, start ART (Usually after 2 weeks of age) once tolerating TB drugs
> 2 Weeks and <35kgs	ABC/3TC/LPVr/RTV If not able to tolerate super boosted LPVr/RTV then use ABC/3TC + RAL for duration of TB treatment After completion of TB treatment revert back to the recommended 1st line regime ABC/3TC +LPVr
	If on ABC/3TC/EFV regimen – continue If on NVP based regimen, change to EFV
>35 kgs body weight and < 15 years age	ABC/3TC/DTG continue with the regimen AND double the dose for DTG If on PI based regimen switch the patients to DTG, hence doubling the dose

- Oral thrush management

 use miconazole gel
- · Cotrimoxazole use is still recommended
- · Most infants and children initiated on treatment take time before immune recovery occurs
- Children on LPV/r continue with boosted ritonavir
- RAL for those unable to tolerate super boosted LPV/r

TREAT THE CHILD HIV CARE FOR CHILDREN

PAEDIATRIC ARVs DOSAGES

TABLE :30

WEIGHT RANGE	FIXED DOSE COMBINATION	ONS		
(KG)	ABACAVIR + ZIDOVUDINE + LAMIVUDINE LAMIVUDINE		EFAVIRENCE (EVF)	LAMIVUDINE ZIDOVUDINE
	TWICE DAILY	TWICE DAILY	ONCE DAILY	TWICE DAILY
	120 mg ABC +60mg 3TC	60mg ZDV + 30mg 3TC	200mg Tab	200mgs Tab
3 - 5.9	0.5 tab	1 tab	-	-
6 - 9.9	1 tab	1.5 tabs	-	-
10 - 13.9	1 tab	2 tabs	1 tab	1.5 tabs
14 - 19.9	1.5 tabs	2.5 tabs	1.5 tabs	1tab in AM & 0.5 in PM
20 - 24.9	2 tabs	3 tabs	1.5 tabs	1tab in AM & 0.5 in PM
25 - 34.9	300mgs + 150mgs	300+150mgs	2 tabs	1 tab

PAEDIATRIC ARVs DOSAGES - LOPINAVIR/RITONAVIR

TABLE :31

FORMULATION	AGE CATEGORY	RATIONALE
Liquid (80/20mg)	2 weeks-9 months of age	Easy to swallow for the infant
Pellets (40/10mg)	9 months- 4 years of age	Easy to administer as they can take soft food like porridge
Tablets (100/25mg)	5 years and older children	Able to swallow the whole tablets Pellets are too many for this age

Refer to Guidelines on Use of Antiretroviral Drugs for Treating and Preventing HIV Infections in Kenya available at http://www.nascop.or.ke

Simplified Weight Band Dosing Schedule for LPV/r

Weight Band (Kg)	LPV/r 80mg/20mg per ml oral liquid		Number of LPV/r oral pellets 40mg/10mg capsules		Number of LPV/r 10mg/25 mg Oral tablets	
	AM	PM	АМ	РМ	AM	PM
3-4.9kg	1ml	1ml	2	2	NR	NR
5-5.9kg	1ml	1ml	2	2	NR	NR
6-9.9.kg	1.5ml	1.5ml	3	3	NR	NR
10-13.9kg	2ml	2ml	4	4	2	2
14-19.9kg	2.5ml	2.5ml	5	5	2	2
20-24.9kg	3ml	3ml	6	6	2	2
25-29.9kg*	NR	NR	7	7	3	3
30-34.9kg*	NR	NR	8	8	3	3
≥35kg*	NR	NR	10	10	4	4

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 fully and treat 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.

Ask:

- Is the child breathing slower?
- Is there less fever?
- Is the child eating better?

Treatment:

- If any general danger sign, give a dose of second-line antibiotic, then admit or refer URGENTLY to hospital.
- If chest indrawing, breathing rate, fever and eating have not improved, change to the second-line antibiotic and ADMIT or REFER (If this child had measles within the last 3 months or is known or confirmed HIV infection, refer).
- If breathing slower, less fever, or eating better, complete the 5 days of antibiotic.

WHEEZING

After 2 days:

Check the child for general danger signs or chest indrawing.

Assess the child for cough or difficult breathing.

Ask:

- Is the child breathing slower?
- Is the child still wheezing?
- Is the child eating better?

Child under 1 year:

- If wheezing and any of the following;
 - General danger sign or stridor in a calm child or chest in-drawing, fast breathing, poor feeding;
 Give intravascular/intramuscular antibiotic. Then admit or refer URGENTLY to hospital.
- If no wheezing, breathing slower and eating better; continue the treatment for 5 days

Child over 1 year;

- If wheezing and any of the following;
 - General danger sign or stridor in a calm child or chest in-drawing, fast breathing, poor feeding;
 Give intravascular/intramuscular antibiotic. Then admit or refer URGENTLY to hospital.
- If breathing rate and eating have not improved; change to second line antibiotic and ADMIT OR REFER urgently to hospital.
- If still wheezing; continue oral bronchodilator.
- If breathing slower, no wheezing and eating better, continue the treatment for 5 days
- If child has unilateral wheeze and not responding to bronchodilators, TB disease is likely and should be evaluated.

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, but give one extra meal every day for 1
 month. Ask her to continue giving Zinc sulphate for total of 10 days.
- NB: Attention to diet is an essential part of the management of a child with persistent diarrhoea.

DYSENTERY

After 2 days:

Assess the child for diarrhoea. > See ASSESS & CLASSIFY chart (see pg 5)

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 according to classification.
- If number of stools, amount of blood in stools, fever, abdominal pain, or eating is worse:
 Admit or Refer to hospital.
- If the condition is the same : add Metronidazole to the treatment.

 Give it for 5 days. Advise the mother to continue ciprofloxacin and zinc and to return in 2 days.

Exceptions - if the child:

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

Admit or Refer URGENTLY to hospital.

If fewer stools, less blood in the stools, less fever, less abdominal pain, and eating better, continue giving Ciprofloxacin and zinc sulphate until finished.

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 fully and treat the new problem as on the ASSESS AND CLASSIFY chart.

UNCOMPLICATED MALARIA

If fever persists after 3 days, or recurs within 14 days:

Do a full reassessment of the child. >See ASSESS & CLASSIFY chart. Assess for other causes of fever. (see pg 6)

Treatment:

- If the child has any general danger sign or stiff neck, treat as VERY SEVERE FEBRILE DISEASE.
- If the child has any cause of fever other than malaria, provide treatment.
- If malaria is the only apparent cause of fever and confirmed by microscopy: Give oral DIHYDROARTEMISININ-PIPERAQUINE (DHA-PPQ). Give paracetamol. If child is under 5 kg and was given DHA-PPQ assess further.
- Advice mother to return again in 3 days if the fever persists If fever has been present every day for 7 days, refer for assessment.

FEVER - NO MALARIA

If fever persists after 3 days:

Do a full reassessment of the child. > See ASSESS & CLASSIFY chart (see pg 6) 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 the child has any cause of fever other than malaria, provide appropriate treatment.
- If malaria is the only apparent cause of fever:
 - Treat with the first-line oral antimalarial. Give paracetamol. Advise the mother to return again in 3 days if the fever persists.
 - If fever has been present every day for 7 days, refer for assessment.
- If child has persistent fever, cough and reduced playfulness despite other treatment, evaluate for TB

EYE OR MOUTH COMPLICATIONS OF MEASLES

After 2 days:

Look for red eyes and pus draining from the eyes.

Look at mouth ulcers.

Smell the mouth.

Treatment for Eye Infection:

- If pus is draining from the eye, ask the mother/caregiver 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/ caregiver correct treatment.
- If the pus is gone but redness remains, continue the treatment.
- If **no pus or redness**, stop the treatment.

Treatment for Mouth Ulcers:

- If mouth ulcers are worse, or there is a very foul smell from the mouth, refer to hospital.
- If mouth ulcers are the same or better, continue using half-strength gentian violet or Nystatin for a total of 5 days.

Treatment for thrush:

- If thrush is worse check that treatment is being given correctly.
- If the child has problems with swallowing, refer to hospital.
- If thrush is the same or better, and the child is feeding well, continue Nystatin for a total of 7 days.
- If thrush is no better or is worse consider symptomatic HIV infection.

EAR INFECTION

After 5 days:

Reassess for ear problem. > See ASSESS & CLASSIFY chart (see pg 7)

Measure the child's temperature.

Treatment:

- If there is tender swelling behind the ear or high fever (38.5°C or above), admit or refer URGENTLY to hospital.
- Acute ear infection: if ear pain continues or discharge persists, treat with 5 more days of the same antibiotic. 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. Review in 2 weeks.
- If ear discharge continues for more than 2 months: Admit or refer to hospital.
- 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 till treatment is completed.

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 fully and treat the new problem as on the ASSESS AND CLASSIFY chart.

FEEDING PROBLEM

After 5 days:

Reassess feeding. See questions at the top of the COUNSEL THE MOTHER (see pg 25 and 27). Ask about any feeding problems found on the initial visit.

- Counsel the mother/caregiver about any new or continuing feeding problems. If you counsel the mother/ cargiver to make significant changes in feeding, ask her to bring the child back again after 5 days.
- If the child is very low weight for age, ask the mother to return 14 days after the initial visit to measure the child's weight gain.

PALLOR

After 14 days:

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

MALNUTRITION

After 14 days:

If the child is gaining weight, encourage the mother to continue with feeding. Counsel the mother about any feeding problem.

SEVERE MALNUTRITION WITHOUT COMPLICATIONS After 7 days or during regular follow-up:

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

Treatment

- If the child has SEVERE MALNUTRITION WITH COMPLICATIONS (WFH/L less than -3 z-scores or MUAC is less than 11.5mm or oedema of both feet AND has developed a medical complication or oedema, or fails the appetite test), refer URGENTLY to hospital.
- If the child has SEVERE MALNUTRITION WITHOUT COMPLICATIONS (WFH/L less than -3 z-scores or MUAC is less than 11.5 mm or oedema of both feet but NO medical complication and passes the appetite test) counsel the mother and encourage her to continue with appropriate RUTF feeding. Ask mother to return in 7 days.
- If the child has MODERATE ACUTE MALNUTRITION (WFH/L between -3 and -2 z-scores or MUAC between 11.5 and 12.5 mm), advise the mother to continue RUTF. Counsel the mother.

MODERATE ACUTE MALNUTRITION After 14 days:

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

Treatment:

- If the child is no longer classified as MODERATE ACUTE MALNUTRITION, praise the mother and encourage her to continue.
- If the child is still classified as MODERATE ACUTE MALNUTRITION, counsel the mother about any feeding problem found. Ask the mother to return again in 14 days. Continue to see the child every 2 weeks until the child is feeding well and gaining weight regularly or his or her WFH/L is -2 z-scores or more or MUAC is 12.5 or more.
- Assess all children with failure to thrive or growth faltering for possible TB disease.

Exception:

If you do not think that feeding will improve, or if the child has lost weight or his or her MUAC has diminished, refer the child.

HIV EXPOSED & INFECTED CHILDREN

HIV INFECTED CHILD

After 1 month:

- Assess the child's general condition. Do a full assessment (see page 4-11)
- Treat the child for any condition found.
- Ask for any feeding problems, counsel the mother about any new or continuing feeding problems.
- Advise the mother/caregiver to bring the child back if any new illness develops or she is worried.
- Counsel the mother/caregiver on any other problems and ensure community support is being given. Refer for further psychosocial/ counseling if necessary.
- · Continue with routine follow-up for growth and development, nutrition, immunization, vitamin A, deworming.
- Assess adherence to ART and Cotrimoxazole and advice accordingly.
- Offer or refer child for comprehensive HIV management and care (including ART) as per the national ART guidelines.
- · Plan for defaulter tracking system; identification and tracking of children
- Follow up monthly

HIV EXPOSED CHILD (<18 months): For children tested DNA PCR Negative

After 1 month:

- Assess the child's general condition. Do a full re-assessment (see page 4-11)
- Ask for any feeding problems or poor appetite, counsel the mother about any new or continuing feeding problems.
- · Treat the child for any condition found.
- · Give Cotrimoxazole prophylaxis from 6 weeks and emphasize the importance of compliance.
- Start or continue with ARV prophylaxis for a total of 12 weeks.
- Screen for possible TB Disease.
- Continue with routine follow-up for growth and development, nutrition, immunization, vitamin A, deworming.
- Follow-up schedule of HIV Exposed infant monthly up to 24 months.
- Refer to Early Infant Diagnosis (EID) algorithm for confirmation of HIV status (see pg 59)
- Refer to the HIV exposed infant follow-up card and register for further follow-up instructions.

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

ALSO ADVISE THE MOTHER
WHEN TO RETURN IMMEDIATELY.
(SEE COUNSEL THE MOTHER PAGE 30.)

COUNSEL THE MOTHER

ASSESS CHILD'S FEEDING

Assess feeding if child is Less Than 2 Years Old, Has MODERATE ACUTE MALNUTRITION, AT RISK OF ACUTE SEVERE MALNUTRITION, ANAEMIA, CONFIRMED HIV INFECTION, or is HIV EXPOSED.

Ask questions about the child's usual feeding and feeding during this illness. Compare the mother/caregiver's answers to the Feeding Recommendations for the child's age. (see pg 28)

ASK - How are you feeding your child?
If the child is receiving any breast milk, ASK:
How many times during the day?
Do you also breastfeed during the night? yesno
Does the child take any other food or fluids? yes no
What food or fluids?
How many times per day?
What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION or if a child with CONFIRMED HIV INFECTION fails to gain weight
or loses weight between monthly measurements, ASK:
How large are servings?
Does the child receive their own serving? yes no
Who feeds the child and how?
What foods are available in the home?
During this illness, has the child's feeding changed? yes no
If yes, how?
In addition, for HIV EXPOSED child:
If mother and child are on ARV treatment or prophylaxis and child breast feeding, ASK:
Do you take ARV drugs? yesno
Do you take all doses, miss doses, do not take medication?
Does the child take ARV drugs (If the policy is to take ARV prophylaxis until 1 week after breast feeding has
stopped)? yesno
Does he or she take all doses, missed doses, does not take medication? yes no

CONDUCT THE APPETITE TEST

- All children aged 6 months or more with SEVERE ACUTE MALNUTRITION (oedema of both feet or WFH/L less than -3 z-score or MUAC less than 11.5 cm) and no medical complication should be assessed for appetite.
- By far the most important criterion to decide if a patient should be sent to in- or out- patient management is the Appetite Test.
- A poor appetite means that the child has a significant infection or a major metabolic abnormality such as liver dysfunction, electrolyte imbalance, cell membrane damage or damaged biochemical pathways. These are the patients at immediate risk of death.

HOW TO DO THE APPETITE TEST?

- The appetite test should be conducted in a separate quiet area.
- Explain to the mother/caregiver the purpose of the appetite test and how it will be carried out.
- The mother/caregiver, where possible, should wash her/his hands.
- The mother/caregiver should sit comfortably with the child on her/his lap and either offer the RUTF from the packet or put a small amount on her/his finger and give it to the child.
- The mother/caregiver should offer the child the RUTF gently, encouraging the child all the time. If the child refuses then the mother/caregiver should continue to quietly encourage the child and take time over the test
- The test usually takes a short time but may take up to one hour. The child must not be forced to take the RUTF.
- The child needs to be offered plenty of water to drink from a cup as he/she is taking the RUTF.

The result of the appetite test

PASS:

• A child that takes at least the amount shown in the table below passes the appetite test.

FAIL:

- A child that does not take at least the amount of RUTF shown in the table below should be referred for in-patient care
- Even if the caregiver/health worker thinks the child is not taking the RUTF because s/he doesn't like the taste
 or is frightened, the child still needs to be referred to in-patient care for at least a short time. If it is later found
 that the child actually takes sufficient RUTF to pass the test then they can be immediately transferred to the
 out-patient treatment.

The following table gives the MINIMUM amount of RUTF that should be taken.

Minimum amount of Plumpy'nut / RUTF per kg of body weight required to pass the Appetite Test

TABLE :33

Plumpy'nut / RUTF		
Body Weight (kg)	Sachets	
Less than 4 kg	1/8 to 1/4	
4 - 6.9	¼ to ⅓	
7 - 9.9	⅓ to ½	
10 - 14.9	½ to ¾	
15 - 29	¾ to 1	
Over 30 kg	>1	

Important considerations:

- The appetite test should always be performed carefully.
- If there is any doubt or if patients fail their appetite tests admit or refer for in-patient care

COUNSEL THE MOTHER

About Feeding Problems and Guidance on Infant Feeding in HIV context

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 breast feeding, assess breast feeding. (See YOUNG INFANT chart.)

As needed, show the mother correct positioning and attachment for breast feeding.

- · 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 breast-feeds 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.
 - Make sure that other milk is a locally appropriate breast milk substitute.
 - Make sure other milk is correctly and hygienically prepared and given in adequate amounts.
 - Make sure that left over feeds are not fed to the baby.
- · If the mother is using a bottle to feed the child:
 - Recommend reinstating breast feeding if possible
 - Recommend substituting a cup for bottle.
 - Show the mother how to feed the child with a cup.
 - Re emphasize hand washing & hygiene.
- · 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:
 - Clear a blocked nose if it interferes with feeding.
 - Breastfeed more frequently and for longer if possible.
 - For the child under 6 months who is not breast-fed, increase the number of milk feeds.
 - For a child already on complementary feeds, give soft, varied, appetizing, enriched favorite foods including milk to encourage the child to eat as much as possible.
 - Offer small frequent feeds.
 - Give snacks between meals and check regularly for oral thrush or ulcers.
 - Expect that appetite will improve as child gets better.
- · Follow-up any feeding problem in 5 days.

IF THE CHILD HAS SORE MOUTH OR ULCERS;

- Recommend soft foods that will not burn the mouth such as thick enriched porridge, eggs, mashed potatoes, bananas, pumpkin or avocado.
- Chop foods finely.
- Avoid salty, spicy; acidic foods that may irritate the child.
- Give cold nutritious drinks-they'll not make the child sick or sicker.

HYGIENE DURING FOOD PREPARATION:

Ensure:

- · Clean hands
- · Clean food
- · Clean utensils
- Clean storage

Guidance on Infant Feeding in HIV Context

- All HIV positive mothers should be given information on the government guidance on breast feeding in the context of HIV and counseled on benefits and challenges of breast feeding
- All HIV positive mothers should be encouraged and supported to exclusively breastfeed for the first six months of life, introducing appropriate complementary foods at six months and continue breast feeding up to 12 months of life.
- Breast feeding should only stop once a nutritionally adequate and safe diet without breast milk can be provided and supported.

Both mother and their infants should receive prophylaxis or ART in line with the Guidelines on Use of Antiretroviral Drugs For Treating and Preventing HIV Infection in Kenya, 2016 Edition

Feeding HIV Infected Infants

- Exclusive breast feeding is recommended for the first six months of life with continued breast feeding for 24 months and beyond.
- Maternal and infant ARVs should be administered as per recommendations in the Kenya ART guidelines 2016
- Appropriate complementary feeding should be introduced at six months with consideration of the energy needs as per the Kenyan National Guidelines on Nutrition and HIV 2014
- Stoppage of breast feeding for children should happen gradually within one month.

Feeding Infants Under Special Circumstances

- Special circumstances include maternal death, abandoned, severe maternal breast disease as determined by the clinician
- Refer to current MIYCN policy and breast milk substitute regulation and control act 2012

(Refer to National HIV Treatment and Infant and Young Child Feeding guidelines)

COUNSEL THE CAREGIVER

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 you 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 breast feeding.



1 WEEK UP TO 6 MONTHS

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



6 UP TO 9 MONTHS

- Breastfeed as often as your child wants.
- Also give thick porridge or well mashed foods, including animal-source foods and Vitamin A- rich fruits and vegetables.
- Start by giving 2 to 3 tablespoons of food.
 Gradually increase to 1/2 cups (1 cup = 250ml)
- Give 2 to 3 meals each day.
- Offer 1 or 2 snacks each day between meals when the child seems hungry.



9 UP TO 12 MONTHS

- Breastfeed as often as vour baby 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 = 250ml)
- 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 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 3/4 cup at each meal (1 cup = 250ml).
- Give 3 to 4 meals each
 day
- Offer 1 or 2 snacks between meals.
- Continue to feed your child slowly, patiently.
 Encourage -but do not force- your child to eat.



2 YEARS & OLDER

- Give a variety of family foods to your child, including animal- source foods and Vitamin A-rich fruits and vegetables.
- Give at least 1 cup at each meal (1 cup = 250ml).
- Give 3 to 4 meals each day.
- Offer 1 or 2 snacks between meals.
- If your child refuses food, offer "tastes" several times. Show that you like the food. Be patient.
- Talk with your child during a meal, and keep eye contact.

COUNSEL THE CAREGIVER

Recommendations for Care for Child's Development

BEFORE BIRTH

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 vour 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.

NEWBORN. **BIRTH UP TO 2 MONTHS**

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 vou are breast feeding is a good time. Even a newborn baby sees your face and hears your voice.

MONTHS

2 MONTHS UP TO 6

PLAY: Provide wavs 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.

6 MONTHS UP TO 9 MONTHS



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.

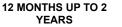
9 MONTHS UP TO 12 MONTHS



PLAY: Hide a child's favourite toy under a cloth or box. See if the child can find it. Play peek-a-boo.



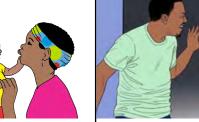
PLAY: Give your child things to stack up and to put into containers and take out. Sample toys: Nesting and stacking objects, container and clothes clips.





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.

2 YEARS AND OLDER



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



COMMUNICATE: Ask your child simple questions. Respond to vour child's attempts to talk. Show and talk about nature, pictures and things.



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 tov: 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 About Care for Development Problems





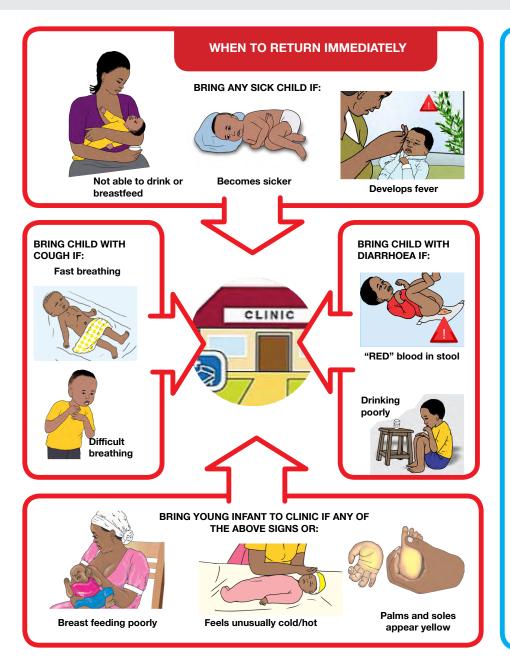




- If the child is not being cared for as described in the above recommendations, counsel the Caregiver accordingly.
 In addition:
- · Discuss way to have the baby see, hear, feel and move appropriately for age.
- If the child cannot be breast-fed, counsel the Caregiver to:
 - Hold the child close when 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 in 14 days:
 - Assess as per the recommendations for care for development.



COUNSEL THE MOTHER



GIVE GOOD HOME CARE FOR YOUR CHILD

FOR ANY SICK CHILD:

- If child is breast-fed, breastfeed more frequently and for longer at each feed,
- If child is taking breast milk substitutes, increase the amount of milk given,
- Increase other fluids. You may give soup, rice, water, yoghurt drinks or clean water. Give these fluids as much as the child will take. Give frequent small sips from a cup.
- If the child vomits, wait 10 minutes then continue - but more slowly.
- Continue providing extra feeding for up to 2 weeks.

EXCLUSIVELY BREASTFEED THE YOUNG INFANT

- Give only breast-feeds to the young infant.
- Breastfeed frequently, as often and for as long as the infant wants.



MAKE SURE THAT THE YOUNG INFANT IS KEPT WARM AT ALL TIMES

 In cool weather cover the infant's head and feet and dress the infant with extra clothing.

FOR CHILD WITH DIARRHOEA

- Breastfeed frequently and for longer at each feed.
- Give fluids:
 - ORS
 - Food based fluids, such as soup, rice water, yoghurt drinks
 - Clean water
- · Give Zinc supplement
- Continue giving extra fluid until the diarrhoea stops



COUNSEL THE MOTHER

When To Return for Scheduled Visits

TABLE :34

If the child has:	Return for follow- up in:
PNEUMONIA DYSENTERY SOME DEHYDRATION EYE OR MOUTH COMPLICATIONS OF MEASLES	2 DAYS
FEVER- NO MALARIA, IF FEVER PERSISTS UNCOMPLICATED MALARIA	3 DAYS
PERSISTENT DIARRHOEA NO DEHYDRATION ACUTE EAR INFECTION CHRONIC EAR INFECTION ANY OTHER ILLNESS, IF NOT IMPROVING	5 DAYS
SEVERE MALNUTRITION WITHOUT COMPLICATIONS	7 DAYS
MODERATE ACUTE MALNUTRITION NO ACUTE MALNUTRITION ANAEMIA POOR INTERACTION AND/OR COMMUNICATION AND RESPONSIVENESS	14 DAYS
DEVELOPMENTAL MILESTONE ALERT	30 DAYS
CONFIRMED HIV INFECTION HIV EXPOSED	MONTHLY



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), provide care for her or refer her for help.
- Advise her to express milk from breasts if separated from the baby for more than one day to maintain lactation and prevent breast engorgement.
- · Advise her to eat well to keep up her own strength and health.
- · Encourage male involvement in reproductive and child health care.
- Check her immunization status including the 5TTs
- · Check vitamin A status to be given if within 6 weeks of delivery.

· Make sure she has access to:

- Breast examination and Cervical Cancer Screening
- Family planning
- Counseling on STI and Reproductive Tract Infection (RTI) prevention

If the mother is HIV Positive

- Emphasize on importance of early testing for the child and enrollment into HIV care if child is positive
- Emphasize on the importance of adhering to HIV treatment for both mother and child
- Refer mother for HIV care and support if services not offered in facility
- Encourage parents to seek Voluntary Counseling and Testing (VCT).
- Re-emphasize the importance of safe sex and early treatment of STI/RTI and counsel regarding future pregnancies.

If baby is less than 2 months:

- Ask mother about her lochia
- Ask about perineal care
- Ask about C/S scar where applicable
- If PMTCT not done counsel and test
- If on ART or other medication counsel on compliance
- Remind her of post-partum schedule (Within 48hrs, 2-4weeks, 4-6 weeks)

ASSESS AND CLASSIFY THE SICK YOUNG INFANT AGE UP TO 2 MONTHS

SIGNS

ASSESS

CLASSIFY

IDENTIFY TREATMENT

ASK THE MOTHER WHAT THE YOUNG INFANT'S PROBLEMS ARE

Determine if this is an initial or follow-up visit for this problem.

- If follow-up visit, use the follow-up instructions on the bottom of this chart.
- If initial visit, assess the young infant as follows:

CHECK FOR POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE

ASK

Has the infant had convulsions? Fits/twitching?

ASK and LOOK:

Is the infant not able to feed or breastfeed?

Is there blood in the stool?

LOOK, LISTEN, FEEL

Look for breathing: is the baby gasping or not breathing at all even when stimulated

YOUNG

INFANT

MUST BE

Classify

YOUNG

INFANTS

ALL

- Count the breaths in one minute.
 Repeat the count if elevated.
- Look for severe chest indrawing
- Look and listen for grunting or wheezing.
- Look for nasal flaring.
- Look for central cyanosis and pulse oximetry where available
- Look and feel for bulging anterior fontanelle.
- Look at the umbilicus. Is it red or draining pus? Look for severe abdominal distension. Measure axillary temperature (or feel for fever or low body temperature)
- · Look for skin pustules.
- · Look For high pitched cry.
- Look at the young infant's movements.
 - Does the infant move on his/her own?
 - Does the infant move even when stimulated but then stops?
 - Does the infant not move at all?
 - Is the infant restless and irritable?

USE ALL BOXES THAT MATCH THE CHILD'S SYMPTOMS AND PROBLEMS TO CLASSIFY THE ILLNESS.

TREATMENT

(Urgent pre-referral treatments are in bold print.)

Any of the following signs: Respiratory rate less than 20 breaths per minute or Convulsions or convulsing now or Not able to feed or breastfeed or Fast breathing (more than 60 breaths per minute) or Severe chest indrawing or Grunting or wheezing or Nasal flaring or Bulging anterior fontanelle or Pus draining from the ear or Fever (37.5 °C* or above or feels hot) or Very low body temperature (less than 35.5 °C* or Feels cold) or Movement only when stimulated or No movements at all. Blood in stool. Severe abdominal distension High pitched cry Oxygen saturation <90%	POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE	Immediately resuscitate using a bag and mask if the baby: (see pg 41) Is gasping or not breathing Has a respiratory rate less than 20 breaths per minute If convulsing now, give Phenobarbitone (See pg 42). Give first dose of Benzyl penicillin & Gentamicin (See pg 13). Treat to prevent low blood sugar (see pg 41) Admit or refer URGENTLY to hospital** Advise mother how to keep the infant warm on the way to the hospital. (see pg 40) Screen for possible TB disease and check for HIV If oxygen saturation is less than 90%, start oxygen therapy and refer or admit IF REFERRAL NOT POSSIBLE (see pg 37)
Red umbilicus or draining pus or Skin pustules. And non of the signs of very severe disease	LOCAL BACTERIAL INFECTION	Give Flucloxacillin Syrup (see pg 41) Teach the mother to treat local infections at home. (see pg 43) Advise mother to give home care for the young infant. Follow-up in 2 days (see pg 46) Screen for possible TB disease and check for HIV. Advise mother when to return immediately.
Temperature between 35.5 °C to 36.4 °C	LOW BODY TEMPERATURE	Re-warm the young infant and reassess after 1 hour. See page 39 on kangaroo warming Treat to prevent low blood sugar (see pg 41) Advise mother to give home care for the young infant Advise mother when to return immediately
None of the signs of Very Severe Disease or Local Bacterial Infection	VERY SEVERE DISEASE OR LOCAL BACTERIAL INFECTION UNLIKELY	Advise mother to give home care for the young infant (see pg 45) Screen for possible TB disease and check for HIV. Advise mother when to return immediately.
TARLE OF		

CLASSIFY AS

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

^{** &}quot;If referral is not possible, see Integrated Management of Newborn and Childhood Illnesses, Treat the Child

CLASSIFY

SEVERE

JAUNDICE

JAUNDICE

NO **JAUNDICE**

SQUINT

CONGENITAL CONDITION

or

EYE

INFECTION UNLIKELY

Any jaundice if age less than

Yellow eyes, palms and soles

Any visible yellowness in a

pre-term baby regardless of

Yellowness appearing after

Yellowness in the eyes & skin

Palms and Soles NOT yellow

24 hours or

at any age

when it appears

24 hours of age

IDENTIFY TREATMENT

Advise mother how to keep the infant warm on the way or the

Advise the mother to give home care for the young infant. (see pg 45)

Advise mother to return immediately if eyes, palms and soles appear

If young infant older than 14 days refer to hospital for assessment.

Advise mother to give home care for the young infant. (see pg 45)

Treat to prevent low blood sugar: (see pg 41)

Refer URGENTLY to hospital.

Screen for possible TB disease

Follow up in 1 day (see pg 46)

Hospital (see pg 40)

yellow (see pg 45)

CHECK FOR JAUNDICE

LOOK:

ASK:

Does the young infant have yellow discoloration of eyes, palms or soles? If yes, for how long?

- · Look for jaundice (yellow eyes or skin)
- Look at the young infants palms and soles. Are they vellow?

Classify

Jaundice

CLASSIFY

EYE INFECTIONS

TABLE :36

No jaundice

CROSSED EYES

CHECK FOR EYE INFECTIONS

IF YES:

· For how long?

LOOK AND FEEL: · Crossed eyes

- Excessive tearing
- Fear of light
- · Clouding of the cornea
- Squeezing of the eyes
- Red eyes
- · Whiteness in the pupil
- · Eye discharge, if yes for
- how long?
- · Eyes draining pus
- · Swollen eyes

CKO33ED ETE3		
White spot on the pupil and crossed eyes	CONGENITAL CANCER OF THE EYE	Admit or refer immediately to the hospital or appropriate unit within the
Clouding of the cornea and no signs of measles, fear of light and exessive tearing.	CONGENITAL GLAUCOMA	facility
Bilateral white spots on the pupil area.	CONGENITAL CATARACT	
Eyes swollen or draining pus	SEVERE EYE INFECTION	 Give first dose of Benzyl Penicillin and Gentamicin (see pg 41) Apply first dose of Tetracycline Eye Ointment (see pg 43) Treat to prevent low blood sugar (see pg 41) Admit or Refer URGENTLY to hospital/specialized unit. Advise mother how to keep infant warm on the way to hospital (see pg 40) Treat the mother and partner.
Eyes are red or have a discharge	EYE INFECTION	 Apply first dose of Tetracycline Eye Ointment (see pg 43) Teach mother to treat eye infection at home (see pg 43) Follow up in two days (see pg 46)

(see pg 45)

Advise mother to give home care for the child

No signs to classify for

congenital condition or eye

l <i>F</i>	٩t	3 I	L	=	:3

infection

33

CLASSIFY

IDENTIFY TREATMENT

THEN ASK: DOES THE YOUNG INFANT HAVE DIARRHOEA OR SIGNS OF DEHYDRATION?

IF YES ASK:

For how long?

 Does the child have diarrhoea?

- Is the child vomiting?
- Is the child able to feed?

Look at the young infant's general condition.

Infants Movements

- Does the infant move on his/her own?
- Does the infant move even when stimulated but then stops?
- Does the infant not move at all?
- · Is the infant restless and irritable?
- Look for sunken eyes.

Pinch the skin of the abdomen. Does it go back:

- · Very slowly (longer than 2 seconds)?
- Slowly?
- · Immediately?
- Assess the young infant's ability to feed
- Assess the young infant's urine output

Classify for DEHYDRATION

Two of the following signs: Movement only when stimulated or no movement at all. Sunken eyes Skin pinch goes back very slowly Child not passing urine. Child not able to feed.	SEVERE DEHYDRATION	If infant has no other severe classification: Give fluid for severe dehydration (Plan C) (see pg 19) OR If infant also has another severe classification: Admit/Refer URGENTLY to hospital with mother or caregiver giving frequent sips of ORS on the way (see pg 18) Advise mother to continue breast feeding. If child is not passing urine admit/refer urgently to hospital. If child is not able to feed, admit/refer urgently to hospital.
Two of the following signs: Restless and irritable Sunken eyes Skin pinch goes back slowly.	SOME DEHYDRATION	Give fluid and breast milk for some dehydration (Plan B) (see pg 18) Advise mother when to return immediately (see pg 45) Follow-up in 2 days if not improving (see pg 46) If infant also has VERY SEVERE CLASSIFICATION Admit/Refer URGENTLY to hospital** with the mother giving frequent sips of ORS on the way if child has diarrhoea. Advise mother to continue breast feeding
Not enough signs to classify as some or severe dehydration.	NO DEHYDRATION	 Give fluids to treat diarrhoea at home and continue breast feeding at home (Plan A) (see pg 18) Give ORS and Zinc sulphate if child has diarrhoea (see pg 18 and 42) Advise mother when to return immediately Follow-up in 2 days if not improving.

ASSESS

CHECK FOR HIV EXPOSURE AND INFECTION

ASK

Has the mother and/or young infant had an HIV test?

IF YES:

- · What is the mother's HIV status?:
 - Antibody test is POSITIVE
 - Antibody test is NEGATIVE

If mother is HIV positive and NO positive DNA PCR test in child ASK:

Is the mother on ART and young infant on ARV prophylaxis?

IF NO TEST: Mother and young infant status unknown Perform HIV test for the mother: If positive, perform DNA PCR test for the young infant

IF the mother is NOT available, do an antibody test on the child. If positive, do a DNA PCR test.

CLASSIFY HIV STATUS

CLASSIFY

IDENTIFY TREATMENT

	POSITIVE DNA PCR test in young infant	CONFIRMED HIV INFECTION	 Initiate ART, counsel and follow up existing infections Initiate Cotrimoxazole prophylaxis (see page 20) Assess child's feeding and provide appropriate counseling to the mother/ caregiver (see pg 25 and 26) Advise the mother on home care (see pg 14) Offer routine follow up for growth, nutrition and development Educate caregivers on adherence and its importance Screen for possible TB disease at every visit. For those who do not have TB disease, start Isoniazid prophylactic therapy (IPT). Screen for possible TB disease throughout IPT Immunize as per schedule (see pg 38) Follow up monthly as per the national ART guidelines and offer comprehensive management of HIV. Refer to appropriate national ART guidelines for comprehensive HIV care of the child (see pg 24)
)	Mother HIV positive and negative DNA PCR in young infant. OR Mother HIV positive, young infant not yet tested. OR Positive antibody test in young infant whose mother is not available	HIV EXPOSED	 Treat, counsel and follow up existing infections Initiate Cotrimoxazole prophylaxis (see page 20) Start or continue PMTCT* prophylaxis as per the national recommendations Assess child's feeding and provide appropriate counseling to the mother/care-giver (see pg 25 and 26) Advise the mother on home care (see pg 45) Offer routine follow up for growth, nutrition and development Screen for possible TB disease at every visit Immunize as per schedule (see pg 38) Follow up monthly as per the national ART guidelines and offer comprehensive management of HIV. Refer to appropriate national ART guidelines for comprehensive care of the child (see pg 24)
	Mother's antibody test is NEGATIVE	HIV NEGATIVE	Manage presenting conditions according to IMNCI and other recommended national guidelines Advise the mother about feeding and about her own health (see pg 31)

TABLE :39

^{*}Prevention of Mother To Child Transmission (PMTCT) ART prophylaxis

⁻ Initiate ART treatment for all pregnant and lactating women with HIV infection, and put their infant on ART prophylaxis as per the national guidelines

⁻ Refer to Guidelines on Use of Antiretroviral Drugs for Treating and Preventing HIV Infections in Kenya available at http://www.nascop.or.ke

ASSESS

CLASSIFY

IDENTIFY TREATMENT

CHECK FOR FEEDING PROBLEM LOW WEIGHT OR LOW BIRTH WEIGHT:

IF YES ASK:

· Is the infant breast-fed?

Yes No

If yes,

- How many times in 24 hours?
- During the day
- During the night
- If No. why?
- Does the infant usually receive any other foods or drinks?
 - Yes
 - No
 - · Screen for possible TB disease

LOOK, LISTEN, FEEL: Determine weight for age

(see pg 53 and 54)

- · Look for ulcers or white patches in the mouth (thrush).
- · Determine mother's HIV status:
- positive
- negative or
- unknown.
- Determine HIV exposed Infant's HIV status:
- positive
- negative or
- unknown.

If the infant has no indications for urgent referral to hospital from previous assessment:

- · Has the infant breast-fed 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 breastfeed for 4 minutes.

TO CHECK CORRECT

- POSITIONING, LOOK FOR: - Infant's head and body straight.
- Infant facing the mother's breast with nose opposite the nipple.
- Infants body close to the mother's body.
- Mother supporting infant's whole body

Is the child well positioned?

- · Well positioned.
- · Not well positioned

TO CHECK ATTACHMENT, LOOK FOR:

- Chin touching 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.)

- not well attached
- good attachment
- is, slow deep sucks, sometimes
 - not suckling effectively
 - suckling effectively

breast feeding.

Classify **FEEDING**

Not well attached to OR breast **OR** Not suckling effectively

- OR

and if baby less

than one week

ASSESS BREAST FEEDING:

- - · (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 able to attach?
- · Is the infant suckling effectively (that pausing)?

Clear a blocked nose if it interferes with

FEEDING PROBLEM LOW WEIGHT

- Breast-feeds less than 8

- in mouth) OR
- Features suggestive of

possible TB disease

inadequate feeding.

- times in 24 hours OR
- Receives other foods or drinks OR
- Low weight for age OR
- Thrush (white patches)
- Mouth ulcers
- Not low weight for age and no other signs of
- NO FEEDING PROBLEM OR LOW WEIGHT

- Advise the mother to breastfeed as often and for as long as the infant wants. day and night. If not well attached or not suckling effectively, teach and show correct
 - positioning and attachment (see pg 44)
 - If breast feeding less than 8 times in 24 hours advise to increase frequency of feeding.
- If receiving other foods or drinks, counsel mother or caregiver. Refer to current MIYCN policy and breast milk substitute regulation and control act 2012.
- If an HIV positive mother has chosen not to breastfeed, give feeding advice (see pg 26). Give Vitamin A (see pg 14)
- If thrush or mouth ulcers, teach the mother to treat thrush and mouth ulcers at home (see pg 43)
- If mother is positive for HIV, follow actions on recommendations from Nutrition
- If mother is not tested for HIV, test,
- Advise mother to give home care for the young infant (see pg 45)
- Follow any feeding problem, thrush or mouth ulcers in 2 days (see pg 47)
- Screen for possible TB disease during routine visits.
- Follow-up low weight for age in 14 days (see pg 45)
- Advise the mother to keep infant warm (see pg 39 and 40)

Screen for possible TB disease during routine visits

- If TB is not diagnosed, treatment as per regimen for TB treatment (Refer to pg 59)
- Advise mother to give home care for the young infant (see pg 45) Praise the mother for feeding the infant well. Advise the mother to keep infant warm (see pg 39 and 40)

CHECK FOR LOW BIRTH WEIGHT IN YOUNG INFANT LESS THAN 1 WEEK

Weight less than 1500gm	VERY LOW BIRTH WEIGHT	Treat to prevent low blood sugar (see pg 41) Advise mother to keep the young infant warm on the way to hospital (pg 40) Refer urgently to hospital. Check for HIV.
Weight between 1500gm and 2499gm	LOW BIRTH WEIGHT	 Manage as for FEEDING PROBLEM OR LOW WEIGHT. Advise mother to keep the young infant warm (pg 39) Follow up in 14 days (see pg 47) Check for HIV and screen for possible TB disease.
Weight 2500gm or more	NORMAL BIRTH WEIGHT	 Advise mother to give home care to the young infant (see pg 45) Advise the mother to keep infant warm (see pg 39 and 40) Check for HIV and screen for possible TB disease.

TABLE :40

WHERE REFERRAL IS REFUSED OR NOT FEASIBLE: For Sick Young Infant WITH POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE

FURTHER CLASSIFY THE SICK YOUNG INFANT:

SIGNS

CLASSIFY

IDENTIFY TREATMENT

Young infant has any one of the following: Convulsions or convulsing now Not able to feed or breastfeed No movement at all Weight < 1.5 kg Respiratory Rate less than 20 breaths per minute Grunting Pus draining from the ear Blood in stool Severe abdominal distension High pitched cry Oxygen saturation less than 90%	CRITICAL ILLNESS	 Reinforce URGENT referral. Explain to the caregiver that the infant is very sick and needs urgent referral further evaluation and hospital care If referral is still not possible, give once daily IM gentamicin for 2 days and oral amoxicillin dispersible tablet twice a day for 7 days or until referral is possible (see pg 42) Treat to prevent low blood sugar (see pg 41) Teach the mother how to keep the young infant warm at home (see pg 39) Advise the mother to return immediately if the child becomes worse Advise the mother to return for the second injection on day 2 On day 2 reinforce the need for urgent referral If referral is still not possible give the second IM gentamycin and advise to complete oral amoxicillin for seven days (see pg 42) Advise the mother to return for a mandatory review on day 4 Reassess the young infant at each visit Treat any other classifications that the young infant has.
Young infant has any one of the following: Not feeding well on observation Temperature 37.5°C or more Temperature less than 35.55°C Severe chest indrawing Movement only when stimulated Fast breathing (60 breaths per minute or more) in infants less than 7 days old Wheezing Nasal flaring	CLINICAL SEVERE INFECTION	 Give once daily IM gentamicin for 2 days and oral amoxicillin dispersible tablet twice a day for 7 days or until referral is possible (see pg 42) Treat to prevent low blood sugar (see pg 41) Teach the mother how to keep the young infant warm at home (see pg 39) Advise the mother to return immediately if the child becomes worse Advise the mother to return for the second injection on day 2 On day 2 reinforce the need for urgent referral If referral is still not possible give the second IM gentamycin and advise to complete oral amoxicillin for seven days (see pg 42) Advise the mother to return for a mandatory review on day 4 Reassess the young infant at each visit Treat any other classifications that the young infant has.

^{*}Countries may decide to treat with IM gentamicin for 7 days or 2 days. If a country chooses 2 days, then there is a mandatory follow-up visit on day 4.

^{**}Note that a young infant 7-59 days old having fast breathing (60 breaths per minute or more) does NOT need to be referred; treat at outpatient clinic with oral amoxicillin.

TABLE :41

CLASSIFY

IDENTIFY TREATMENT

CHECK FOR SPECIAL TREATMENT NEEDS

ASK, CHECK, RECORD

Ask, check and record for special treatment needs

Has the mother had within 2 weeks of delivery:

- Fever >38°C?
- Infection treated with antibiotic?
- Membranes ruptured >18 hours before delivery?
- · Foul smelling liquor?
- Mother tested VDRL positive?

Does the mother/caregiver/close household contact have TB disease? Is the infant receiving any other foods or drinks?

CHECK THE YOUNG INFANT'S

IMMUNIZATION SCHEDULE:

IMMUNIZATION STATUS

TABLE :42

Age	Vaccine				
Birth*	BCG	bOPV-0			
6 Weeks		bOPV -1	DPT / HepB / Hib -1	PCV 10-1	ROTA 1

Baby<1 day old and membranes ruptured >18 hours before delivery OR Give baby 1st dose of Benzyl Penicillin and Gentamicin. (see pg 41) **RISK OF BACTERIAL** Treat to prevent low blood sugar (see page 41) Foul smelling liquor OR INFECTION Keep warm (see pg 39 and 40) Mother being treated with Admit or refer urgently to hospital antibiotics for infection Mother has fever >38°C **RISK OF** Give baby single dose of benzathine penicillin (see pg 42) Mother tested VDRL positive CONGENITAL Ensure mother and partner are treated **SYPHILIS** Follow up in 14 days (see pg 45) If child has not been given BCG; withhold BCG Screen for possible TB disease · History of mother or If TB is ruled out, give Isoniazid prophylaxis (IPT) for 6 months. caregiver or close household RISK OF Screen for possible TB during treatment. contact started TB treatment Upon completion of Isoniazid prophylaxis wait for 2 weeks then **TUBERCULOSIS** <2 months before delivery of give BCG the baby If child is found to have TB disease, give full course of TB treatment (see pg 59) Counsel about feeding (see pg 26) Identify concerns of caregiver and family about feeding Advise the caregiver/s how to feed and keep the low weight infant · Infants who are not breast warm at home (see pg 44) fed due to the death or SPECIAL FEEDING If thrush, teach the caregiver/s to treat thrush at home (see pg 45) CIRCUMSTANCES sickness of the mother e.g. Advise caregiver/s to give home care for the young infant. **Orphans** Follow-up any feeding problem or thrush in 2 days (see pg 47) Follow-up low weight for age in 14 days (see pg 47) Once the sick mother recovers, resume breast feeding.

Give all missed doses on this visit.

Include sick babies and those without mother child health booklet.

If the child has no booklet, issue a new one today.

Advise the mother when to return for the next dose.

Use Assess Classify and Identify Treatment Chart in page 10 for child's developmental milestones and Assess for Interaction, Communication and Responsiveness (see pg 11)

Assess for other problems that the infant may have.

Assess the mother's / caregiver's health needs (see pg 12)

ROUTINE CARE FOR ALL NEWBORNS AFTER DELIVERY

The routine care described below applies to all newborns, either born in hospital or born outside and brought to the hospital.

- Keep the baby in skin-to-skin contact on the mother's chest or at her side, in a warm, draught-free room.
- Start breast feeding within the first hour as soon as the baby shows signs of readiness to feed.
- Let the infant breastfeed on demand if able to suck.
- Give IM vitamin K to all newborns.
 - 1 ampoule (1 mg/0.5 ml or 1 mg/ml) once. (Do not use 10 mg/ml ampoule.)
 - For pre-term neonates<1500gm, give 0.5 mg IM.
- Keep umbilical cord clean and dry. Apply 7.1% Chlorhexidine digluconate (4% chlorhexidine) upon cutting the cord and once daily for 7 days thereafter or until the cord detaches (whichever occurs earlier)
- Apply Tetracycline Eye ointment to both eyes once at birth.
- · Give oral polio and BCG vaccines.

KEEP THE YOUNG INFANT WARM

Kangaroo Mother Care is defined as early, prolonged continuous skin-to-skin contact between a mother or her surrogate and her pre-term baby or low birth weight infant. The difference between KMC and skin-to-skin care (which is recommended for all newborns at birth) is in the duration of contact.

Skin-to-skin care is usually done immediately after birth for a short time for every newborn to ensure that all babies stay warm in the first hours of life and helps in early initiation of breast feeding while KMC is prolonged skin to skin contact for a minimum of 20 hours per day

- All stable babies born below 2500g should be started on KMC
- Stable babies between 2000g and 2500g should be evaluated by a health worker, the mother counselled on KMC, the baby initiated and discharged on KMC
- All stable babies below 2000g should be admitted into a KMC unit and started on KMC
 - o Stable babies weighing between 1800g and 2000g can be started on KMC soon after birth
 - o Babies weighing between 1200g and 1799g should be stabilized then started on KMC as soon as possible
- Babies weighing less than 1200g should be transferred immediately to a centre that can offer intensive neonatal
 care. It may take weeks before their condition allows the initiation of KMC. Depending on the facilities available
 for the transfer, KMC can be utilised to keep the baby warm during the transfer to the higher level facility.



Warm the young infant using skin to skin contact (Kangaroo Mother Care)

- Maintain hand and body hygiene
- Provide privacy to the mother. If mother is not available, skin to skin contact can be provided by the father
 or any other adult.
- · Request the mother to sit or recline comfortably.
- Undress the baby gently, except for cap, nappy and socks
- Ask the mother to wear light, loose clothing that is comfortable in the ambient temperature, and can accommodate the young infant.
- Place the young infant on the mother's chest prone in an upright and extended posture, between her breasts in skin to skin contact; turn the baby's head to one side to keep airways clear.
- Ensure that the young infant's hips and elbows are flexed into a frog-like position and the head and chest are on the mother's chest, with the head in a slightly extended position.
- Secure the baby on to the mother's chest with a clean lesso or soft cloth or any of the other recommended carrying pouches for KMC babies that are available
- · Wrap the mother-baby duo with an added blanket or shawl. Cover the young infant with mother's clothes;
- After positioning the young infant, allow mother to rest with the young infant.
- Breastfeed the young infant frequently
- If possible, Warm the room (>25°C) with a heating device

Reassess after 1 hour:

- Assess for signs of Very Severe Disease. >See "VERY SEVERE DISEASE" above.
- Measure axillary temperature by placing the thermometer in the axillar for 5 minutes (or feel for low body temperature).

If any signs of " very severe disease" or temperature still below 36.5°C:

- Refer URGENTLY to hospital after giving pre-referral treatment for "Very Severe Disease".

If no signs of "Very Severe Disease" And temperature 36.5°C or more:

- Advise how to keep the young infant warm at home.
- Advise mother to give home care.
- Advise mother when to return immediately.

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

- Provide skin to skin contact OR
- Keep the young infant clothed or covered as much as possible all the time. Dress the young infant in 3-4 layers of clothes (including hat, gloves, socks) and wrap him/her in a soft dry cloth and cover with a shawl or blanket. Hold the baby close to your body.



TREAT THE YOUNG INFANT

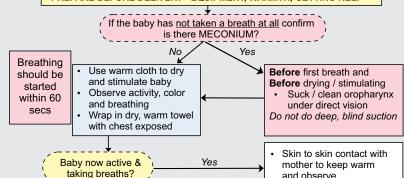
Newborn Resuscitation

For trained health workers - Be prepared

Note for all newborns:

- ✓ Practice delayed cord clamping to prevent early infant anaemia
- Clean the cord with 7.1% Chlorhexidine Digluconate (4% Chlorhexidine) immediately after birth and then once daily until the cord separates
- ✓ Ensure HIV risk known and give TEO & Vitamin K

PREPARE BEFORE DELIVERY - EQUIPMENT, WARMTH, GETTING HELP



Check airway is clear
 If anything visible, use suction to clear

No

- to clear

 Put head in neutral position
- heart rate

 Give oxygen if continued respiratory distress

 ABC ok

 Poor or NO breathing / gasping

 Continue with about 30 breaths / min,
 Reassess ABC every 1 2 mins,
 - SHOUT FOR HELP!
 Start ventilation Ensuring the chest rises

Is heart rate > 60 bpm?

C - circulation

- continue at about 30 breaths / min

 Check heart rate at 1 min

 Give cycles of 1 EFFECTIVE breath for every 3 chest compressions for 1 min.
 - Reassess ABC every 1 2mins
 Stop compressions when HR >
 60 bpm and support breathing
 until OK

Stop bagging when breathing

and heart rate OK

and observe Initiate breast feeding

Count rate of breathing and

Keep warm

GIVE THESE TREATMENTS IN HEALTH FACILITY ONLY

- Explain to the Mother why the drug is being given.
- Determine the dose appropriate for the infant's weight (or age)
- Use a sterile needle and sterile syringe to accurately measure the dose.
- Do not mix benzyl penicillin with Gentamicin.
- Give the drug as intramuscular injection
- If the infant cannot be referred, follow instructions provided in the section
- Where Referral is not Possible (see pg 42)

Treat the Young Infant to prevent Low Blood Sugar

- If infant is able to breastfeed: Ask the mother to breastfeed the infant
- If not able to breastfeed but is able to swallow: Give 20-50 ml (10ml/kg) expressed breast milk and if not available, give 20-50 ml (10ml/kg) sugar water before referral.
- 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 20-50ml (10ml/mg) expressed breast milk or sugar water by NG tube.
- If low blood sugar* is suspected: Give 10% glucose 10ml/ kg by nasogastric tube give the same amount intravenously. (To make 10% glucose mix one part of 50% glucose with 4 parts water injection)

Low blood sugar (hypoglycemia) may be suspected in any infant or child who is convulsing or has loss of consciousness for which there is no obvious cause; has a rectal temperature of below 35.5°C, is drowsy or sweating, is lethargic, floppy or jittery

TABLE :43

Give recommended dose of Intravenous / intramuscular antibiotics

Intraven	Intravenous / intramuscular antibiotics aged ≤ 7days				
	Benzyl Penicillin (50,000iu/kg)	Ampicillin/ Flucloxacillin (50mg/kg)	Gentamicin (3mg/kg<2kg, 5mg/kg>2kg)	Ceftriaxone (50mg/kg)	Metronidazole (7.5m/kg)
Weight	IV / IM	IV / IM	IV / IM	IV / IM	IV
(kg)	12 hrly	12 hrly	24 hrly	24 hrly	12 hrly
1.00	50,000	50	3	50	7.5
1.25	75,000	60	4	62.5	10
1.50	75,000	75	5	75	12.5
1.75	100,000	85	6	75	12.5
2.00	100,000	100	10	150	15
2.50	150,000	125	12.5	125	20
3.00	150,000	150	15	150	22.5
4.00	200,000	200	20	200	30

Referral is the best option for a young infant with SEVERE DISEASE.

TABLE :44

Give an
Appropriate
Antibiotic For
local bacterial
infection:

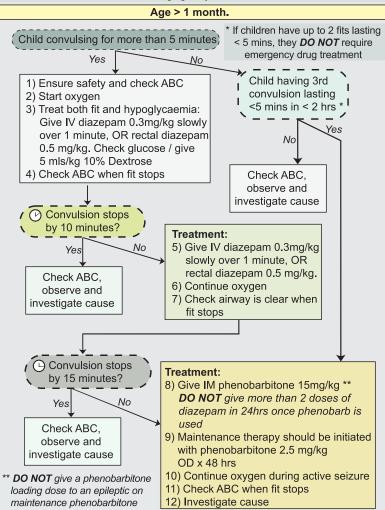
Oral antibiotics aged <7days

	Oral Antibiotics Aged <7 days 25mg/kg 125mg/5mls 12 hourly		
Weight (kg)	Amoxicillin	Ampicillin	Flucloxacillin
2.0	2.0	2.0	2.0
2.5	3.0	3.0	3.0
3.0	3.0	3.0	3.0
4.0	4.0	4.0	4.0

TREAT THE YOUNG INFANT

Treatment of convulsions

<u>Convulsions in the first 1 month</u> of life should be treated with Phenobarbitone 20mg/kg stat, a further 5-10mg/kg can be given within 24 hours of the loading dose with maintenance doses of 5mg/kg daily.



WHERE REFERRAL IS REFUSED OR NOT FEASIBLE: For Sick Young Infant WITH POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE

Give Intramuscular Gentamicin and Amoxicillin

- For CRITICAL ILLNESS: Give Gentamicin 5–7.5 mg/kg/day once daily and Ampicillin 50 mg/kg twice daily till referral is possible or for 7 days.
- For CLINICAL SEVERE INFECTION: Give Gentamicin 5-7.5 mg/kg/day once daily for 7 days*

TABLE :45

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

^{*}Countries may decide to treat with IM gentamicin for 2 days with a mandatory follow-up visit on day 4

Give Oral Amoxicillin

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

TABLE :46

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

TABLE :47

Give Zinc Sulphate for a young infant with diarrhoea:

	ZINC Sulphate Give once daily for 10 days	
AGE or WEIGHT	Tablet 20mg	
Birth up to 2 months (up to 4 kg)	1/2	

For children >2 months refer to page 14, Table 19 on Zinc Sulphate Dosage

For Rehydration Therapy and feeding for diarhoea, refer to page 18 and 19

For a child whose mother has syphilis, give baby Benzathine penicillin STAT dose at 50,000 iu/kg

COUNSEL THE MOTHER

TEACH THE CAREGIVER TO TREAT LOCAL INFECTIONS AT HOME

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

- Explain how the treatment is given.
- Watch her as she does the first treatment in the clinic.
- She should return to the clinic if the infection worsens.
- Check the mother's understanding before she leaves the clinic

TO TREAT SKIN PUSTULES OR UMBILICAL INFECTION

Apply Gentian Violet twice daily for 5 days.

The mother should:

- Wash hands
- Gently wash off pus and crusts with soap and water
- Dry the area
- Paint with gentian violet
- Wash hands
- · Give oral antibiotics: Flucloxacillin and Ampicillin.

TO TREAT THRUSH (WHITE PATCHES IN MOUTH) OR MOUTH ULCERS

The mother should:

- Wash hands
- Wash mouth with clean soft cloth wrapped around the finger and wet with salt water.
- Instill Nystatin
- Wash hands

If breast-fed, advise the mother to wash her breast after feeds and apply the same medicine on the areola.

- Immunize Every Sick Young Infant, as Needed.
- To Treat Diarrhoea, (See pg 18 and 19).
- To counsel the mother about care for development problems, (See pg 29).

TREAT EYE INFECTION WITH TETRACYCLINE EYE OINTMENT

- Clean both eyes 3 times daily for 5 days.
- · Wash hands.
- · Use clean cloth and water to gently wipe away pus.
- Then apply tetracycline eye ointment in both eyes 3 times daily.
 - · Open the eyes of the young infant.
 - 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.

TEACH THE MOTHER/CAREGIVER TO GIVE ORAL DRUGS AT HOME

Follow the instructions below for every oral drug to be given at home (See Table 45) Also follow the instructions listed with each drug's dosage table.

- Determine the appropriate drugs and dosage for the child's age or weight.
- Tell the mother/caregiver the reason for giving the drug to the child.
- · Demonstrate how to measure a dose.
- Watch the mother/caregiver practice measuring a dose by themselves.
- Ask the mother/caregiver to give the first dose to their child.
- Explain carefully how to give the drug, then label and package the drug.
- If more than one drug will be given, collect, count and package each drug separately.
- Explain that all the oral drug tablets or syrups must be used to finish the course of treatment, even if the child gets better.
- Check the mother's/caregiver's understanding before they leave the clinic.

COUNSEL THE MOTHER

TEACH CORRECT POSITIONING AND ATTACHMENT FOR BREAST FEEDING

- · Show the mother how to hold 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.
- If still not suckling effectively, ask the mother to express breast milk and feed with cup and spoon
 in the clinic
- If able to feed with a cup and spoon advise mother to continue breast feeding the infant and at the end of each feed express breast milk and feed with a cup and spoon.
- If not able to feed with a cup and spoon, refer to hospital.

TEACH THE MOTHER TO TREAT BREAST OR NIPPLE PROBLEMS

- If the nipple is flat or inverted, evert the nipple several times with fingers before each feed and put the baby on the breast.
- If the nipple is sore, apply breast milk for soothing effect and ensure correct positioning and attachment of the baby. If mother continues discomfort, feed expressed breast milk with cup and spoon
- If breasts are engorged, let the baby continue to suck if possible. If the baby cannot suckle effectively, help the mother to express the milk and then put the young infant to the breast. Putting warm compress on the breast may help.
- If breasts abscess, advice the mother to feed from the other breast and refer. If the young infant wants more milk give appropriate formula.

Counsel the HIV positive mother on feeding recommendations (see pg 27), about feeding problems and guidance on infant feeding in HIV context (see pg 26)

TEACH THE MOTHER HOW TO KEEP THE YOUNG INFANT WITH LOW WEIGHT OR LOW BODY TEMPERATURE WARM AT HOME:

- · Do not bathe young infant with low weight or low body temperature; instead sponge with lukewarm water to clean (in a warm room).
- Provide skin to skin contact (Kangaroo mother care) as much as possible, day and night.
- When not in skin to skin contact or if this is not possible.
 - Warm the room (>25°C) with a home heater
 - Clothe the young infant in 3-4 layers of warm clothes, cover the head with a cap (include gloves and socks) and wrap him / her in a soft dry cloth and cover with a warm blanket or shawl.
 - Let the baby and mother lie together on a soft, thick bedding.
 - Change clothes (e.g. napkins) whenever they are wet.

FEEL THE FEET OF THE BABY PERIODICALLY—BABY'S FEET SHOULD BE ALWAYS WARM TO TOUCH

COUNSEL THE MOTHER

ADVISE MOTHER TO GIVE HOME CARE FOR THE YOUNG INFANT

- FOOD
- FLUIDS
- CORD CARE:

ADVISE MOTHER ON UMBILICAL CORD CARE:

- Wash hands with soap and running water.
- Open the container of Chlorhexidine.
- Apply the Chlorhexidine to the base of the umbilical cord, cord stump, and tip of the cord. Ensure the entire cord is covered with Chlorhexidine.
- Spread the gel using your index finger
- Wash hands after application.
- Do not clean off the Chlorhexidine from the umbilicus after application. Do not wrap or bind the umbilical area after Chlorhexidine application. Do not apply anything else, except for Chlorhexidine.
- Continue application once daily up to the seventh day or until the umbilical cord falls whichever happens first.
- WHEN TO RETURN
- MAKE SURE THE YOUNG INFANT STAYS WARM AT ALL TIMES.

In cool weather, cover the infant's head and feet and dress the infant with extra clothing.

Counsel the Mother on her own health (see pg 31)

- Breastfeed frequently, as often and for as long as the infant wants, day or night, during sickness and health.
 - If baby cannot be breast-fed, counsel on alternative feeding (pg 26)

TABLE :48

When to return to a health worker or health facility Follow up visit

If th	e infant has:	Return for follow-up in:
•	Jaundice	1 day
•	Local bacteria infection	2 days
•	Some dehydration	
•	No dehydration, if not improving	
•	Eye infection	
•	Feeding problem	
•	Thrush or mouth ulcers	
•	Low weight or low birth weight	14 days
•	Risk of congenital syphilis	
•	Risk of tuberculosis (after completion of IPT)	
•	Poor interaction and/or communication and responsiveness	
•	Developmental milestone alert	30 days
•	Confirmed HIV infection	Monthly
•	HIV exposed	

When to return immediately

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

Breast feeding or drinking poorly

Becomes sicker

Develops a fever

Fast breathing

Difficult breathing

Yellow eyes, palms and soles if infant has jaundice

Blood in stool

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

ASSESS EVERY YOUNG INFANT FOR VERY SEVERE DISEASE DURING FOLLOW UP VISIT.

WHERE REFERRAL IS REFUSED OR NOT FEASIBLE: For Sick Young Infant WITH POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE

CLINICAL SEVERE INFECTION:

If a 2-day gentamicin regimen is being used:

- Follow up at the next contact for injection (day 2) and on day 4 of treatment.
- At each contact, reassess the young infant as on page 12.
- If the young infant is improving, complete the 2 days treatment with IM gentamicin.
 Ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished.

If a 7-day gentamicin regimen is being used:

· Follow up during every injection contact.

Refer young infant if:

- Infant becomes worse after treatment is started or
- Any new sign of CLINICAL SEVERE INFECTION appears while on treatment or
- Any sign of CLINICAL SEVERE INFECTION is still present after day 8 of treatment or
- If no improvement on day 4 after 3 full days of treatment.
- Depending on whether the national policy is for 2 days or 7 days gentamicin policy

LOCAL BACTERIAL INFECTION

After 2 days:

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?

Look at the eyes. Is there pus? Is there associated swelling or redness of the eyelids?

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.
- · If there are many or severe pustules, refer to hospital
- If skin pustules are improved, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home.

EYE INFECTION

After 2 days:

Look for pus draining from the eyes.

Treatment:

- If pus is still draining from the eyes, 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 the mother correct treatment and advise her to give treatment for 5 days.
 - Follow up in 2 days.
- If no pus, ask the mother to continue treatment for 5 days.

JAUNDICE

After 1 day:

Look for jaundice.

- Are palms and soles yellow?
- If palms and soles are yellow or age 14 days or more, refer to hospital.
- If palms and soles are not yellow and age is less than 14 days, advise on home care and when to return immediately

DIARRHOEA: Some dehydration

After 2 days:

Ask: - Has the diarrhoea stopped?

Treatment:

- If the diarrhoea has not stopped, Assess and Treat the young infant for diarrhoea
- If the diarrhoea has stopped, tell the mother to continue exclusive breast feeding. Advise her to continue giving zinc to complete 10 days.

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

ASSESS EVERY YOUNG INFANT FOR VERY SEVERE DISEASE DURING FOLLOW UP VISIT.

FEEDING PROBLEM

After 2 days:

Reassess feeding.

Ask about any feeding problems found on the initial visit.

- Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the young infant back after 2 days.
- · If the young infant is low weight for age, ask the mother to return 14 days after the initial visit to measure the young infant's weight gain.

Exception:

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

LOW WEIGHT OR LOW BIRTH WEIGHT

After 2 days:

Weigh the young infant and determine if the infant is still low weight for age.

Reassess feeding.

- · If the infant is no longer low weight for age, praise the mother and encourage her to continue, until normal weight is attained
- If the infant is still low weight for age, 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 low weight for age 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 2 weeks until the infant is feeding well and gaining weight regularly or is no longer low weight for age.

Exception:

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

THRUSH OR MOUTH ULCERS

After 2 days:

Look for ulcers or white patches in the mouth (thrush).

Reassess feeding.

- If thrush or mouth ulcers are worse or the infant has problems with attachment or sucking, refer to Hospital...
- If thrush or mouth ulcers are the same or better, and the baby is feeding well continue with Gentian Violet or Nystatin for a total of 5 days.

48

Breastfeeding problem? Yes____/No___

Date of Visit: DD/MM/YYYY Facility Name:	Caregiver's Name: Caregiver'	's Tel:
Name of Child:	Weight:Kgs Temperature:°C Height or Length: Initial or Follow up Visit?	cm
ASSESS THE CHILD (Circle All Signs Present)		CLASSIFY
CHECK FOR GENERAL DANGER SIGNS: NOT ABLE TO DRINK OR BREAST FEED HISTORY OF CONVULSIONS LETHARGIC OR UNCON- VOMITS EVERYTHING CONVULSING NOW	scious	General danger signs present? YesNo Remember to use danger signs when selecting the classification
DOES THE CHILD HAVE A COUGH OR DIFFICULTY BREATHING? Yes / No For how long? days	Yes / No / No Cold hands+ Temp <35.5°C Yes / No Capillary refill >3 seconds? Yes / No	
DOES THE CHILD HAVE FEVER? (By history/feels hot/temperature is 37.5°C or above) Has the child visited a high malaria risk area in the last 1 month? Yes / No Malaria Test Results: Positve Negative Are the following signs present: Stiff neck? Yes / No Runny nose? Yes / No Generalized rash? Yes / No A compared to the child visited a high malaria risk: High Malaria ri	Has fever been present for ≥ 7 days? Yes / No sk Yes / No Low Malaria risk Yes / No ough or red eyes? Yes / No	
If the child has signs of measles now or within the last 3 months? Check for the following: Mouth ulcers? Yes / No Check if deep or extensive Pus draining from the eye? Yes / No Clouding of cornea? Yes / No DOES THE CHILD HAVE AN EAR PROBLEM? Yes / No For how long? Is there pain?	s there discharge? Is pus draining from ear? Tender swelling behind ear?	
Days Yes / No	Yes/No Yes/No Yes/No	

5	=
6	⋛
Č	5
Ĺ	Ĺ
(כ
3	Ζ
2	5
	Ľ
Ç	Š
L	ر U
	2

THEN CHECK FOR ANAEMIA:											
Does the child have: Severe palr	nor pallor? Yes/f	No S	ome palmor pallor? Yes	/No	No palmor pa	allor? Yes_	/No				
CHECK FOR HIV EXPOSURE AND INFECT	ION:										
5					5.11.505	/ 16	ALL ADOL ALEO				
Check for the following for presumptive	HIV exposed? Yes	/No	Antibody test (≥18mths): PC	DS/ NEG	Oral Candi		Bmths) POS/NEG ush? Other AIDS defining		TB Contac	+2	
symptomatic diagnosis of HIV	Severe Pneumonia? Y	es/No	Severe sepsis? Yes/N	lo	Yes/		conditions ? Yes/No		Yes		
CHECK THE CHILD'S IMMUNIZATION STA	TUS:										
					IMMUN	IZATION					
Circle immunizations needed today	At E	Birth A	t 6 Weeks	At 10 Weeks	At 14 Weeks		At 6 months Measles Rubella At 9 months	At 18 r	nonths		
Tick immunizations that have been given	BCC		OPV 1 enta 1	bOPV 2 Penta 2	bOPV3	(only in the event Measles Rubella of measles rubella Yellow fever	Measle	easles Rubella		Indicate next return date:
	bor		CV 10 1	PCV 10 2	Penta 3 PCV 10 3	'	outbreak or HEI				Immunization:
		F	ota 1	Rota 2	IPV 1						Growth monitoring
CHECK THE CHILD'S VITAMIN A & DEWOR	RMING STATUS:										
			VITAMIN A					DEWORMI	NG		
 Circle Vitamin A supplements and deworming needed today 	6 mths	12 mths	18mths	24mths	30mth		12 mths 18mths		24mi	ths 30mths	Indicate next return date: Vitamin A
 Tick Vitamin A supplements and deworming that have been given 	36mths		48mths	54mths	60 mth		36mths 42mths		48m		Deworming
							60 mths				Growth monitoring
CHECK FOR DEVELOPMENTAL MILESTON	NES AND INTERACTION	ON, COMMUNICATION	AND RESPONSIVENESS								
	N	W: A A I: I					Coveriver Astion (Skills)	y 45	No(V)	Recommendations	Indicate next return date:
Assess for the following milestones	Normal Limits	Write Age Achieved	Tick if present	Tick If Delayed		Age Coho		Yes(√)	No(X)	Recommendations	Developmental Milestones
Head Holding/ Control	1-3 months						Does the caregiver move baby's arms or legs or gently strokes the baby?			Counsel the	Stimulation
Turns towards the origin of sound	2-3 months					2 mont				caregiver according to the recommendations	
Extend hand to grasp a toy	2-3 months					and old	Does the caregiver talk to child Does the caregiver respond to baby's			for CCD (page 29)	
Sitting	5-9 months						sounds/gestures to get baby smile?				
Standing	7- 13 months				l		Does the caregiver play with child?				
Walking	12- 13 months										
CHECK FOR TB DISEASE:											
TB contact? Yes No		Persistent fever and/	or night sweats for >14days	? Yes No		Confirm	TB (Bacteriologically or Clinically) POS	/NEG	_		
Cough of any duration? Yes No		Fast breathing Yes_	No			Do Che	•				
Weight loss or poor weight gain? Yes1	No	Chest in drawing Yes	No			Do man	toux test				
ASSESS FOR OTHER CHILDHOOD ILLNES	SSES:										
Eye infection					An	y other pro	blem				

TRFAT

IREAI
(Indicate treatment given for each classification, advice given and return date) (Admit or refer any child who has a danger sign and no other severe classification)
Return for follow-up in
Advise Caregiver when to return immediately. Give any immunizations or Vitamin A needed today:
Feeding advice:
Adviso on Core for Development
Advice on Care for Development:

RECORDING FORM

Date of Visit: DD/MM/YYYY Facility Name: Caregiver's Name: Caregiver's Name:	er's Tel:
Name of Child: Kgs Temperature:°C Height or Length:	cm
Ask: What are the child's problems? Initial or Follow up Visit?	
ASSESS THE INFANT	CLASSIFY
ASK & CHECK FOR POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE (Circle all signs once confirmed present).	1
Has the infant had convulsions? Yes/No Is the child not able to feed or breastfeed? Yes/No Fast breathing (>60 breaths per minute)? Yes/No Central Cyanosis? Yes/No	
Breathing: Is the baby gapsing or not breathing at all when stimulated? Yes/No Breath counts per minute? Infant has no movement even when stimulated? Yes/No Fever (>37.5°C or feels hot)? Yes/No	
Severe chest indrawing? Yes/No Grunting? Yes/No Wheezing? Yes/No Nasal flaring? Yes/No Infant drowsy (lethargic) or unconscious? Yes/No Low body temperature(<35.5°C)? Yes/No	
Bulging fontanelle? Yes/No Pus draning from ear? Yes/No Umbilicus red? Yes/No Umbilicus draining pus? Yes/No Skin pustules? Yes/No	
Is there blood in stool? Yes/No Severe abdominal distension? Yes/No High-pitched cry? Yes/No	
ASK & CHECK FOR JAUNDICE: (Circle all signs once confirmed present)	
Does the infant have yellow discolouration of the skin? Yes/No If yes, for how many days? Are the infant's eyes yellow? Yes/No Are the infant's palms yellow? Yes/No Are the infant's soles yellow? Yes/No	
ASK & CHECK FOR EYE INFECTION: (Circle all signs once confirmed present)	
s there eye discharge? Yes/No If yes, for how long?Days Eyes draining pus? Yes/No Eyes swollen? Yes/No Excessive tearing? Yes/No	
White spot on the pupil? Yes/No Crossed eyes? Yes/No Clouding of the cornea and no signs of Measles? Yes/No Fear of light? Yes/No ASK & CHECK FOR DIARRHOEA: (Circle all signs once confirmed present)	
Does the infant have diarrhoea? Yes/No If yes, for how long?Days	
Does the infant have sunken eyes? Yes/No Pinch the skin of the abdomen, does it go back: Very slowly (>2secs) / Slowly / Immediately Is not able to drink? Yes/No Not passing urine? Yes/No ASK & CHECK FOR HIV EXPOSURE & INFECTION: (Circle all signs once confirmed present)	
s the child HIV Exposed? Yes/No DNA PCR TEST (<18mths) POS NEG Unknown Check HIV status for all unknown	
ASK & CHECK FOR TB EXPOSURE & INFECTION: (Circle all signs once confirmed present)	
Ask for history of mother or caregiver or close household contact started TB treatment <2months before delivery of the baby Yes/ No Confirm poor weight gain, Yes/ No	
Does the child have 2 or more: Coughs?Yes / No Fever? Poor weight gain?, Lethargy? Yes / No Confirm TB (Bacteriologically OR Clinically) POS /NEG If Yes, Suspect TB	
ASK & CHECK FOR FEEDING PROBLEMS OR LOW WEIGHT: (Circle all signs once confirmed present)	
Determine weight for age: LowNot Low Receives other foods or drinks? Yes / No Mouth ulcers? Yes / No	
Not well attached to breast? Yes / No Low weight for age? Yes / No Thrush (white patches in mouth)? Yes / No	
Not wNot suckling effectively? Yes / No Breast-feeds less than 8 times in 24 hours? Yes / No	
f the infant has no indications for urgent referral to hospital from previous assessment: Proceed with assessment	

5
œ
\cap
\mathbf{c}
ш
48
G
Ż
$\overline{\cap}$
=
œ
\cap
\mathcal{L}
O
HΪ
Ξ
Ľ

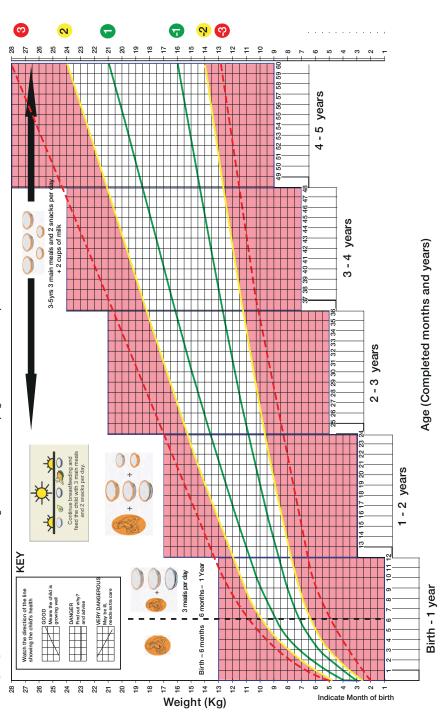
ASSESS BREASTFEEDING:	
Has the infant breastfed in the previous hour? Yes/ No If no, ask mother to put infant to the breast. Observe the breastfeed for 4 minutes	
Infant Positioning: Is infants head and body straight? Is infant facing the mother with nose opposite to the nipple? Is infant's body close to the mother's body? Is mother supporting infants whole body and not just neck and shoulders? Yes / No Yes / No	
Circle Positioning Outcome: Correct positioning Incorrect positioning	
Breast Attachment: Is the infant's chin touching breast? Yes / No Is infant's mouth wide open? Yes / No Is infant's lower lip turned outward? Yes / No Is there more areola above than below the infant's mouth? Yes / No	
Circle Attachment Outcome: No attachment at all Not well attached Good attachment	
Is the infant suckling effectively? (slow deep sucks, sometimes pausing?) Suckling effectively Not suckling effectively Not suckling at all Does the infant have ulcers or white patches in the mouth (thrush)? Yes / No	
Low Birth Weight:	
Is the infant less than 1 week old? Yes / No	
Determine infant's weight Less than 2kg Between 2kg and 2.5 kg 2.5kg or more	
CHECK YOUNG INFANT'S IMMUNIZATION STATUS:	
• Circle immunizations needed today • Tick immunizations that have been given • Tick immunizations that have been given BCG bOPV 1 bOPV 0 Penta 1	Indicate next return date: Immunization: Growth monitoring
PCV 10 1	Growth monitoring
Rota 1	
CHECK FOR SPECIAL TREATMENT NEEDS:	
	<u> </u>
Has the mother had within 2 weeks of delivery: Fever >38°C? Infection treated with antibiotic? Membranes ruptured >18 hours before delivery? Foul smelling liquor? Wes / No Yes / No_	
Mother tested HIV positive? Has mother been on ARVs? Has mother received infant feeding counselling? Has the mother received TB treatment in the last 2 months?	از
Yes / No Yes / No Yes / No Yes / No	
CHECK FOR DEVELOPMENTAL MILESTONES AND INTERACTION, COMMUNICATION AND RESPONSIVENESS	
Milestones Normal Limits Write Age Achieved Tick if present Tick if Delayed Age Cohort Caregiver Action (Skills) Yes(1) No(X) Recommendations	Indicate next return date: Developmental Milestones
Social Smile 4- 6 weeks Does the caregiver move baby's arms or legs or gently strokes the baby	
Head Holding/ Control 1-3 months Does the caregiver get baby's attention with shaker toy or other objects Counsel the caregiver according	Check For Stimulation
O to 6 Months Does the caregiver talk to baby (Copies baby's sounds, looks into baby's eyes and talks softly to baby) to the recommendations for CCD (page 29)	—————
Does the caregiver respond to baby's sounds and gestures to get baby smile	
Does the caregiver think the child is learning? (slow, learns well)	
ASSESS FOR ANY OTHER PROBLEMS:	
Eye infection	
Any other problem	5

TRFAT

INCAL
(Indicate treatment given for each classification, advice given and return date) (Admit or refer any child who has a danger sign and no other severe classification)
Return for follow-up in
Advise Caregiver when to return immediately. Give any immunizations or Vitamin A needed today:
Feeding advice:
Advice on Care for Development:

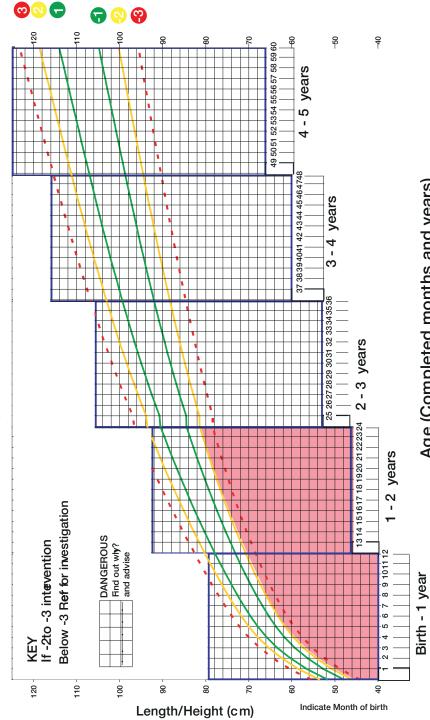
Weight-for-Age BOYS ±3 Refer for further investigations ±2 to±3 Refer for nutritional counselling

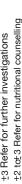
See page 26 for reasons for special care



Length/Height-for-Age BOYS

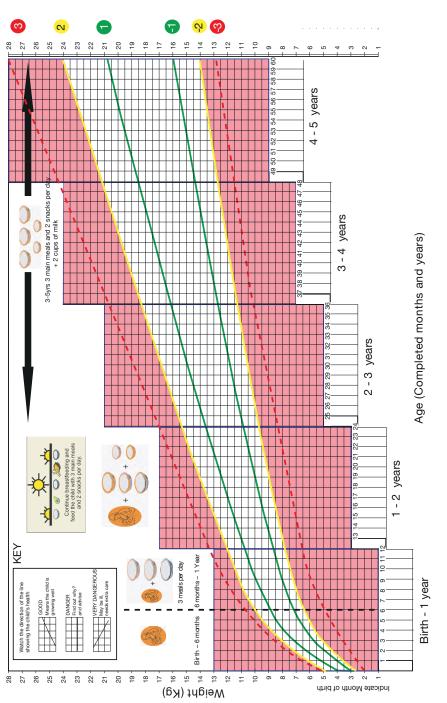
See page 26 for reasons for special care



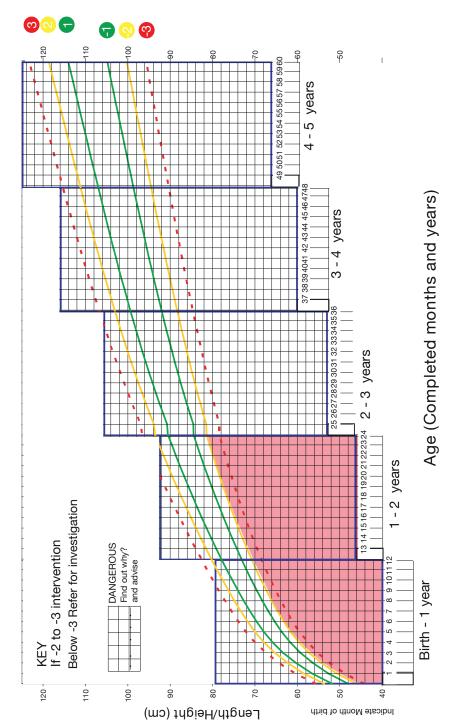


Weight-for-Age GIRLS





GIRLS Length/Height-for-Age



Weight For Length From Birth To 2 Years: Boys

,	ME	gm	LFC	<i>'</i> '	CIIÉ	Jui	LIO
Length (cm)				Median	1 SD		
45.0	1.9	2.0	2.2	2.4	2.7	3.0	3.3
45.5	1.9	2.1	2.3	2.5	2.8	3.1	3.4
46.0	2.0	2.2	2.4	2.6	2.9	3.1	3.5
46.5	2.1	2.3	2.5	2.7	3.0	3.2	3.6
47.0	2.1	2.3	2.5	2.8	3.0	3.3	3.7
47.5	2.2	2.4	2.6		3.1	3.4	3.8 3.9
48.0 48.5	2.3	2.5	2.7	2.9 3.0	3.2	3.6	
	2.3	_	2.8		3.3	3.7	4.0 4.2
49.0 49.5	2.4	2.6 2.7	3.0	3.1	3.5	3.8	4.2
50.0	2.6	2.8	3.0	3.3	3.6	4.0	4.4
50.5	2.7	2.9	3.1	3.4	3.8	4.1	4.5
51.0	2.7	3.0	3.2	3.5	3.9	4.1	4.7
51.5	2.8	3.1	3.3	3.6	4.0	4.4	4.8
52.0	2.9	3.2	3.5	3.8	4.1	4.5	5.0
52.5	3.0	3.3	3.6	3.9	4.2	4.6	5.1
53.0	3.1	3.4	3.7	4.0	4.3	4.8	5.3
53.5	3.2	3.5	3.8	4.1	4.5	4.9	5.4
54.0	3.3	3.6	3.9	4.3	4.7	5.1	5.6
54.5	3.4	3.7	4.0	4.4	4.8	5.3	5.8
55.0	3.6	3.8	4.2	4.5	5.0	5.4	6.0
55.5	3.7	4.0	4.3	4.6	5.1	5.6	6.1
56.0	3.8	4.1	4.4	4.8	5.3	5.8	6.3
56.5	3.9	4.2	4.6	5.0	5.4	5.9	6.5
57.0	4.0	4.3	4.7	5.1	5.6	6.1	6.7
57.5	4.1	4.5	4.9	5.3	5.7	6.3	6.9
58.0	4.3	4.6	5.0	5.4	5.9	6.4	7.1
58.5	4.4	4.7	5.1	5.6	6.1	6.6	7.2
59.0	4.5	4.8	5.3	5.7	6.2	6.8	7.4
59.5	4.6	5.0	5.4	5.9	6.4	7.0	7.6
60.0	4.7	5.1	5.5	6.0	6.5	7.1	7.8
60.5	4.8	5.2	5.6	6.1	6.7	7.3	8.0
61.0	4.9	5.3	5.8	6.3	6.8	7.4	8.1
61.5	5.0	5.4	5.9	6.4	7.0	7.6	8.3
62.0	5.1	5.6	6.0	6.5	7.1	7.7	8.5
62.5	5.2	5.7	6.1	6.7	7.2	7.9	8.6
63.0	5.3	5.8	6.2	6.8	7.4	8.0	8.8
63.5	5.4	5.9	6.4	6.9	7.5	8.2	8.9
64.0	5.5	6.0	6.5	7.0	7.6	8.3	9.1
64.5	5.6	6.1	6.6	7.1	7.8	8.5	9.3
65.0	5.7	6.2	6.7	7.3	7.9	8.6	9.4
65.5	5.8	6.3	6.8	7.4	8.0	8.7	9.6
66.0	5.9	6.4	6.9	7.5	8.2	8.9	9.7
66.5	6.0	6.5	7.0	7.6	8.3	9.0	9.9
67.0	6.1	6.6	7.1	7.7	8.4	9.2	10.0
67.5	6.2	6.7	7.2	7.9	8.5	9.3	10.2
68.0	6.3	6.8	7.3	8.0	8.7	9.4	10.3
68.5	6.4	6.9	7.5	8.1	8.8	9.6	10.5
69.0	6.5	7.0	7.6	8.2	8.9	9.7	10.6
69.5	6.6	7.1	7.7	8.3	9.0	9.8	10.8
70.0	6.6	7.2	7.8	8.4	9.2	10.0	10.9
70.5	6.7	7.3	7.9	8.5	9.3	10.1	11.1
71.0	6.8	7.4	8.0	8.6	9.4	10.2	11.2
71.5	6.9	7.5 7.6	8.1 8.2	8.8 8.9	9.5 9.6	10.4	11.3 11.5
72.0 72.5	7.0 7.1	7.6	8.2	9.0	9.6	10.5	
							11.6
73.0 73.5	7.2 7.2	7.7 7.8	8.4 8.5	9.1 9.2	9.9	10.8	11.8 11.9
74.0	7.3	7.9	8.6	9.2	10.0	11.0	12.1
74.0	7.4	8.0	8.7	9.3	10.1	11.2	12.1
75.0	7.4	8.1	8.8	9.4	10.2	11.3	12.2
75.5	7.6	8.2	8.8	9.5	10.3	11.4	12.5
76.0	7.6	8.3	8.9	9.7	10.4	11.5	12.5
76.5	7.7	8.3	9.0	9.7	10.6	11.6	12.7
77.0	7.8	8.4	9.1	9.9	10.7	11.7	12.7

DIIU	1 10) _	160	115.	DU	ys	
Length (cm)	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
77.5	7.9	8.5	9.2	10.0	10.9	11.9	13.0
78.0	7.9	8.6	9.3	10.1	11.0	12.0	13.1
78.5	8.0	8.7	9.4	10.2	11.1	12.1	13.2
79.0	8.1	8.7	9.5	10.3	11.2	12.2	13.3
79.5	8.2	8.8	9.5	10.4	11.3	12.3	13.4
80.0	8.2	8.9	9.6	10.4	11.4	12.4	13.6
80.5	8.3	9.0	9.7	10.5	11.5	12.5	13.7
81.0	8.4	9.1	9.8	10.6	11.6	12.6	13.8
81.5	8.5	9.1	9.9	10.7	11.7	12.7	13.9
82.0	8.5	9.2	10.0	10.8	11.8	12.8	14.0
82.5	8.6	9.3	10.1	10.9	11.9	13.0	14.2
83.0	8.7	9.4	10.2	11.0	12.0	13.1	14.3
83.5	8.8	9.5	10.3	11.2	12.1	13.2	14.4
84.0	8.9	9.6	10.4	11.3	12.2	13.3	14.6
84.5	9.0	9.7	10.5	11.4	12.4	13.5	14.7
85.0	9.1	9.8	10.6	11.5	12.5	13.6	14.9
85.5	9.2	9.9	10.7	11.6	12.6	13.7	15.0
86.0	9.3	10.0	10.8	11.7	12.8	13.9	15.2
86.5	9.4	10.1	11.0	11.9	12.9	14.0	15.3
87.0	9.5	10.2	11.1	12.0	13.0	14.2	15.5
87.5	9.6	10.4	11.2	12.1	13.2	14.3	15.6
88.0	9.7	10.5	11.3	12.2	13.3	14.5	15.8
88.5	9.8	10.6	11.4	12.4	13.4	14.6	15.9
89.0	9.9	10.7	11.5	12.5	13.5	14.7	16.1
89.5	10.0	10.2	11.6	12.6	13.7	14.9	16.2
90.0	10.1	10.9	11.8	12.7	13.8	15.0	16.4
90.5	10.2	11.0	11.9	12.8	13.9	15.1	16.5
91.0	10.3	11.1	12.0	13.0	14.1	15.3	16.7
91.5	10.4	11.2	12.1	13.1	14.2	15.4	16.8
92.0	10.5	11.3	12.2	13.2	14.3	15.6	17.0
92.5	10.6	11.4	12.3	13.3	14.4	15.7	17.1
93.0	10.7	11.5	12.4	13.4	14.6	15.8	17.3
93.5	10.7	11.6	12.5	13.5	14.7	16.0	17.4
94.0	10.8	11.7	12.6	13.7	14.8	16.1	17.6
94.5	10.9	11.8	12.7	13.8	14.9	16.3	17.7
95.0	11.0	11.9	12.8	13.9	15.1	16.4	17.9
95.5	11.1	12.0	12.9	14.0	15.2	16.5	18.0
96.0	11.2	12.1	13.1	14.1	15.3	16.7	18.2
96.5	11.3	12.2	13.2	14.3	15.5	16.8	18.4
97.0	11.4	12.3	13.3	14.4	15.6	17.0	18.5
97.5	11.5	12.4	13.4	14.5	15.7	17.1	18.7
98.0	11.6	12.5	13.5	14.6	15.9	17.3	18.9
98.5 99.0	11.7	12.6	13.6 13.7	14.8 14.9	16.0 16.2	17.5 17.6	19.1
	11.8					17.6 17.8	19.2
99.5	11.9 12.0	12.8 12.9	13.9 14.0	15.0 15.2	16.3 16.5	17.8	19.4 19.6
100.0		13.0	14.1	15.2	16.6	18.0	
	12.1 12.2						19.8
101.0	12.2	13.2	14.2	15.4 15.6	16.8 16.9	18.3 18.5	20.0
101.5	12.3		14.4		17.1	18.7	20.2
102.0	12.4	13.4		15.7 15.9	17.3		20.4
102.5	12.5	13.5 13.6	14.6 14.8	16.0	17.4	18.8 18.5	20.6
	12.7		14.9	16.2		19.2	
103.5 104.0	12.7	13.7	15.0	16.2	17.6 17.8	19.2	21.0 21.2
104.0	12.0	14.0	15.0	16.5	17.9	19.4	21.5
105.0	13.0	14.1	15.2	16.6	18.1	19.8	21.7
105.0	13.0	14.1	15.4	16.8	18.3	20.0	21.7
106.0	13.3	14.4	15.6	16.9	18.5	20.0	22.1
106.5	13.4	14.5	15.7	17.1	18.6	20.2	22.4
107.0	13.5	14.6	15.9	17.3	18.8	20.4	22.6
107.5	13.6	14.7	16.0	17.4	19.0	20.8	22.8
108.0	13.7	14.9	16.2	17.6	19.2	21.0	23.1
108.5	13.8	15.0	16.3	17.8	19.4	21.2	23.3
109.0	14.0	15.1	16.5	17.9	19.6	21.4	23.6
109.5	14.1	15.3	16.6	18.1	19.8	21.7	23.8
110.0	14.2	15.4	16.8	18.3	20.0	21.9	24.1
110.0	1-7-2	10.7	10.0	10.0	20.0		-5-01

Weight For Length From Birth To 2 Years: Girls

1	wei	gm	נוכ	<i>,</i> , ,	CII	jui	LLOIII	Dirt		0 2	160	ars:	Gi	ris	
Length (cm)	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD		Length (cm)	-3 SD	-2 SD	-1 SD	Median	1SD	2 SD	3 SD
45.0	1.9	2.1	2.3	2.5	2.7	3.0	3.3	77.5	7.4	8.1	8.8	9.6	10.5	11.6	12.8
45.5	2.0	2.1	2.3	2.5	2.8	3.1	3.4	78.0	7.5	8.2	8.9	9.7	10.6	17.7	12.9
46.0	2.0	2.2	2.4	2.6	2.9	3.2	3.5	78.5	7.6	8.2	9.0	9.8	10.7	11.8	13.0
46.5	2.1	2.3	2.5	2.7	3.0	3.3	3.6	79.0	7.7	8.3	9.1	9.9	10.8	11.9	13.1
47.0	2.2	2.4	2.6	2.8	3.1	3.4	3.7	79.5	7.7	8.4	9.1	10.0	10.9	12.0	13.4
47.5	2.2	2.4	2.6	2.9	3.2	3.5	3.8	80.0	7.8	8.5	9.2	10.1	11.0	12.1	13.4
48.0	2.3	2.5	2.7	3.0	3.3	3.6	4.0	80.5	7.9	8.6	9.3	10.2	11.2	12.3	13.5
48.5	2.4	2.6	2.8	3.1	3.4	3.7	4.1	81.0	8.0	8.7	9.4	10.3	11.3	12.4	13.7
49.0	2.4	2.6	2.9	3.2	3.5	3.8	4.2	81.5	8.1	8.8	9.5	10.4	11.4	12.5	13.8
49.5	2.5	2.7	3.0	3.3	3.6	3.9	4.3	82.0	8.1	8.8	9.6	10.5	11.5	12.6	13.9
50.0	2.6	2.8	3.1	3.4	3.7	4.0	4.5	82.5	8.2	8.9	9.7	10.6	11.6	12.8	14.1
50.5	2.7	2.9	3.2	3.5	3.8	4.2	4.6	83.0	8.3	9.0	9.8	10.7	11.8	12.9	14.2
51.0	2.8	3.0	3.3	3.6	3.9	4.3	4.8	83.5	8.4	9.1	9.9	10.9	11.9	13.2	14.4
51.5	2.8	3.1	3.4	3.7	4.0	4.4	4.9	84.0	8.5	9.2	10.2	11.0	12.0	13.2	14.5
52.0	2.9	3.2	3.5	3.8	4.2	4.6	5.1	84.5	8.6	9.3	10.2	11.4	12.1	13.3	14.7
52.5	3.0	3.3	3.6	3.9	4.3	4.7	5.2	85.0	8.7	9.4	10.3	11.2	12.3	13.5	14.9
53.0	3.1	3.4	3.7	4.0	4.4	4.9	5.4	85.5	8.8	9.5	10.4	11.3	12.4	13.6	15.0
53.5	3.2	3.5	3.8	4.2	4.6	5.0	5.5	86.0	8.9	9.7	10.5	11.5	12.6	13.8	15.2
54.0	3.3	3.6	3.9	4.3	4.7	5.1	5.6	86.5	9.0	9.8	10.6	11.6	12.7	13.9	15.4
54.5	3.4	3.7	4.0	4.4	4.8	5.3	5.9	87.0	9.1	9.9	10.7	11.7	12.8	14.1	15.5
55.0	3.5	3.8	4.2	4.5	5.0	5.4	6.1	87.5	9.2	10.0	10.9	11.8	13.0	14.2	15.7
55.5	3.6	3.9	4.3	4.7	5.1	5.7	6.3	88.0	9.3	10.1	11.0	12.0	13.1	14.4	15.9
56.0	3.7	4.0	4.4	4.8	5.3	5.8	6.4	88.5	9.4	10.2	11.1	12.1	13.2	14.5	16.0
56.5	3.8	4.1	4.5	5.0	5.4	6.0	6.6	89.0	9.5	10.3	11.2	12.2	13.4	14.7	16.2
57.0	3.9	4.3	4.6	5.1	5.6	6.1	6.8	89.5	9.6	10.4	11.3	12.3	13.5	14.8	16.4
57.5	4.0	4.4	4.8	5.2	5.7	6.3	7.0	90.0	9.7	10.5	11.4	12.5	13.7	15.0	16.5
58.0	4.1	4.5	4.9	5.4	5.9	6.5	7.1	90.5	9.8	10.6	11.5	12.6	13.8	15.1	16.7
58.5	4.2	4.6	5.0	5.5	6.0	6.6	7.3	91.0	9.9	10.7	11.7	12.7	13.9	15.3	16.9
59.0	4.3	4.7	5.1	5.6	6.2	6.8	7.5	91.5	10.0	10.8	11.8	12.8	14.1	15.5	17.0
59.5	4.4	4.8	5.3	5.7	6.3	6.9	7.7	92.0	10.1	11.9	11.9	13.0	14.2	15.6	17.2
60.0	4.5	5.9	5.4	5.9	6.4	7.1	7.8	92.5	10.1	11.0	12.0	13.1	14.3	15.8	17.4
60.5	4.6	5.0	5.5	6.0	6.6	7.3	8.0 8.2	93.0	10.2	11.1	12.1	13.2	14.5	15.9	17.5
61.0	4.7	5.1	5.6	6.1 6.3	6.7 6.9	7.4	8.2	93.5	10.3	11.2	12.2	13.3	14.6	16.1	17.7
61.5 62.0	4.8 4.9	5.2 5.3	5.7 5.8	6.4	7.0	7.6	8.4	94.0	10.4	11.3	12.3	13.5	14.7	16.2	17.9
					_			94.5	10.5	11.4	12.4	13.6	14.9	16.4	18.0
62.5	5.0	5.4	5.9	6.5 6.8	7.1	7.8	8.7 8.8	95.0 95.5	10.6	11.5	12.6	13.7	15.0	16.5	17.2
63.0	5.1 5.4	5.5	6.2 6.2	6.7	7.4	8.0	9.0	96.0	10.7	11.6	12.7 12.8	13.8 14.0	15.2 15.3	16.7 16.8	18.4 18.6
63.5 64.0	5.4 5.3	5.6 5.7	6.3	6.9	7.4 7.5	8.1	9.0	96.0	10.8 10.9	11.7 11.8	12.8	14.0	15.4	17.0	18.7
64.5	5.4	5.8	6.4	7.0	7.6	8.4	9.1	96.5	11.0	11.8	13.0	14.1	15.4	17.0	18.7
65.0	5.5	5.9	6.5	7.1	7.8	8.6	9.5	97.0		12.0		14.2	15.7	17.1	
65.5	5.5	6.0	6.6	7.1	7.9	8.7	9.6	98.0	11.1 11.2	12.1	13.1	14.4	15.7	17.5	19.1 19.3
66.0	5.6	6.1	6.7	7.3	8.0	8.8	9.8	98.5	11.3	12.3	13.4	14.6	16.0	17.6	19.5
66.5	5.7	6.2	6.8	7.4	8.1	9.0	9.0	99.0	11.4	12.3	13.5	14.8	16.2	17.8	19.5
67.0	5.8	6.3	7.1	7.5	8.3	9.0	10.0	99.5	11.5	12.4	13.6	14.0	16.2	18.0	19.8
67.5	5.9	6.4	7.0	7.6	8.4	9.2	10.2	100.0	11.6	12.6	13.7	15.0	16.5	18.1	20.0
68.0	6.0	6.5	7.1	7.7	8.5	9.4	10.2	100.5	11.7	12.7	13.9	15.0	16.6	18.3	20.0
68.5	6.1	6.6	7.2	8.9	8.6	9.5	10.5	101.0	11.8	12.7	14.0	15.2	16.8	18.5	20.2
69.0	6.1	6.7	7.4	8.0	8.7	9.6	10.6	101.5	11.9	13.0	14.1	15.5	17.0	18.7	20.4
69.5	6.2	6.8	7.4	8.1	8.8	9.7	10.7	102.0	12.0	13.1	14.3	15.6	17.1	18.9	20.8
70.0	6.3	6.9	7.8	8.3	9.2	9.9	10.9	102.5	12.5	13.2	14.4	15.8	17.3	19.0	21.0
70.5	6.4	6.9	7.6	8.3	9.1	10.0	11.0	103.0	12.3	13.3	14.5	15.9	17.5	19.2	21.3
71.0	6.5	7.0	7.7	8.4	9.2	10.1	11.1	103.5	12.4	13.5	14.7	16.1	17.6	19.4	21.5
71.5	6.5	7.1	7.7	8.5	9.3	10.2	11.3	104.0	12.5	13.6	14.8	16.2	17.8	19.6	21.7
72.0	6.6	7.2	7.8	8.6	9.4	10.3	11.4	104.5	12.6	13.7	15.0	16.4	18.0	19.8	21.9
72.5	6.7	7.3	7.9	8.7	9.5	10.5	11.5	105.0	12.7	13.8	15.1	16.5	18.2	20.0	22.2
73.0	6.8	7.4	8.0	8.8	9.6	10.6	11.7	105.5	12.8	14.0	15.3	16.7	18.4	20.2	22.4
73.5	6.9	7.4	8.1	8.9	9.7	10.7	11.8	106.0	13.0	14.1	15.4	16.9	18.5	20.5	22.6
74.0	6.9	7.5	8.2	9.0	9.8	10.8	12.9	106.5	13.1	14.3	15.6	17.1	18.7	20.7	22.9
74.5	7.0	7.6	8.3	9.1	9.9	10.9	12.0	107.0	13.2	14.4	15.7	17.2	18.9	20.9	23.1
75.0	7.1	7.7	8.4	9.1	10.0	11.0	12.2	107.5	13.3	14.5	15.9	17.4	19.1	21.1	23.4
75.5	7.1	7.8	8.5	9.2	10.1	11.1	12.3	108.0	13.5	14.7	16.0	17.6	19.3	21.3	23.6
76.0	7.2	7.8	8.5	9.7	10.2	11.2	12.4	108.5	13.6	15.8	16.2	17.8	19.5	21.6	23.9
76.5	7.3	7.9	8.6	9.4	10.3	11.4	12.5	109.0	13.7	15.0	16.4	18.0	19.7	21.8	24.2
77.0	7.4	8.0	8.7	9.5	10.4	11.5	12.6	109.5	13.9	15.1	16.5	18.1	20.0	22.0	24.4
								110.0	14.0	15.3	16.7	18.3	20.2	22.3	24.7

Calculating a child's weight for length

- Locate the appropriate table for boys or girls.

 Locate the row containing the child's length in the left column.
- Note where the child's weight lies with respect to the lengths recorded in this row. Look up the column to read the weight for length of the child.

Weight For Height From 2 - 5 Years: Boys

			•			•	•
Height (cm)	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
65.0	5.9	6.3	6.9	7.4	8.1	8.8	9.6
65.5	6.0	6.4	7.0	7.6	8.2	8.9	9.8
66.0	6.1	6.5	7.1	7.7	8.3	9.1	9.9
66.5	6.1	6.6	7.2	7.8	8.5	9.2	10.1
67.0	6.2	6.7	7.3	7.9	8.6	8.4	10.2
67.5	6.3	6.8	7.4	8.0	8.7	9.5	10.4
68.0	6.4	6.9	7.5	8.1	8.8	9.6	10.4
68.5	6.5	7.0	7.6	8.2	9.0	9.8	10.7
69.0	6.6	7.1	7.7	8.4	9.1	9.9	10.8
69.5	6.7	7.2	7.8	8.5	9.2	10.0	11.0
70.0	6.8	7.3	7.9	8.6	9.3	10.2	11.1
70.5	6.9	7.4	8.0	8.7	9.5	10.3	11.3
71.0	6.9	7.5	8.1	8.8	9.6	10.4	11.4
71.5	7.0	7.6	8.2	8.9	9.7	10.4	11.6
72.0			8.3	9.0	9.8	10.7	11.7
	7.1	7.7					
72.5	7.2	7.8	8.4	9.1	9.9	10.8	11.8
73.0	7.3	7.9	8.7	9.2	10.0	11.0	12.0
73.5	7.4	7.9	8.6	9.3	10.2	11.1	12.1
74.0	7.4	8.0	8.7	9.4	10.3	11.2	12.2
74.5	7.5	8.1	8.8	9.5	10.4	11.3	12.4
75.0	7.6	8.2	8.9	9.6	10.5	11.4	12.5
75.5	7.7	8.3	9.0	9.7	10.6	11.6	12.6
76.0	7.7	8.4	9.1	9.8	10.7	11.7	12.8
76.5	7.8	8.5	9.2	9.9	10.8	11.8	12.9
77.0	7.9	8.5	9.2	10.0	10.9	11.9	13.0
77.5	8.0	8.6	9.3	10.1	11.0	12.0	13.1
78.0	8.0	8.7	9.4	10.2	11.1	12.1	13.3
78.5	8.1	8.8	9.5	10.3	11.2	12.2	13.4
79.0	8.2	8.8	9.6	10.4	11.3	12.3	13.5
79.5	8.3	8.9	9.7	10.5	11.4	12.4	13.6
80.0	8.3	9.0	9.7	10.6	11.5	12.6	13.7
80.5	8.4	9.1	9.8	10.7	11.6	12.7	13.8
81.0	8.5	9.2	9.9	10.8	11.7	12.8	14.0
81.5	8.6	9.3	10.0	10.9	11.8	12.9	14.1
82.0	8.7	9.3	10.1	11.0	11.9	13.0	14.2
82.5	8.7	9.4	10.1	11.1	12.1	13.1	14.4
	8.8		10.2			13.1	
83.0		9.5		11.2	12.2		14.5
83.5	8.9	9.6	10.4	11.3	12.3	13.4	14.6
84.0	9.0	9.7	10.5	11.4	12.4	13.5	14.8
84.5	9.1	9.9	10.7	11.5	12.6	13.7	14.9
85.0	9.2	10.0	10.8	11.7	12.7	13.8	15.1
85.5	9.3	10.1	10.9	11.8	12.8	13.9	15.2
86.0	9.4	10.2	11.0	11.9	12.9	14.1	15.4
86.5	9.5	10.3	11.1	12.0	13.1	14.2	15.5
87.0	9.6	10.4	11.2	12.2	13.2	14.4	15.7
87.5	9.7	10.5	11.3	12.3	13.3	14.5	15.8
88.0	9.8	10.6	11.5	12.4	13.5	14.7	16.0
88.5	9.9	10.7	11.6	12.5	13.6	14.8	16.1
89.0	10.0	10.8	11.7	12.6	13.7	14.9	16.3
89.5	10.1	10.9	11.8	12.8	13.9	15.1	16.4
90.0	10.2	11.0	11.9	12.9	14.0	15.2	16.6
90.5	10.3	11.1	12.0	13.0	14.1	15.3	16.7
91.0	10.5	11.2	12.1	13.4	14.2	15.5	16.9
91.5	10.5	11.3	12.2	13.2	14.4	15.6	17.0
92.0	10.6	11.4	12.3	13.4	14.5	15.8	17.2

Height (cm)	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
92.5	10.7	11.5	12.4	13.5	14.6	15.9	17.3
93.0	10.8	11.6	12.6	13.6	14.7	16.0	17.5
93.5	10.9	11.7	12.7	13.7	14.9	16.2	17.6
94.0	11.0	12.8	12.8	13.8	15.0	16.3	17.8
94.5	11.1	11.9	12.9	13.9	15.1	16.5	17.9
95.0	11.1	12.0	13.0	14.1	15.3	16.6	18.1
95.5	11.2	12.1	13.1	14.2	15.4	16.7	18.3
96.0	11.3	12.2	13.2	14.3	15.5	16.9	18.4
96.5	11.4	12.3	13.3	14.4	15.7	17.0	18.6
97.0	11.5	12.4	13.4	14.6	15.8	17.2	18.8
97.5	11.6	12.5	13.6	14.7	15.9	17.4	18.9
98.0	11.7	12.6	13.7	14.8	16.1	17.5	19.1
98.5	11.8	12.8	13.8	14.8	16.2	17.7	19.3
99.0	11.9	12.9	13.9	15.1	16.4	17.9	19.5
99.5	12.0	13.0	14.0	15.2	16.5	18.0	19.7
100.0	12.1	13.1	14.2	15.4	16.7	18.2	19.9
100.5	12.2	13.2	14.3	15.5	16.9	18.4	20.1
101.0	12.3	13.3	14.4	15.6	17.0	18.5	20.3
101.5	12.4	13.4	14.5	15.8	17.2	18.7	20.5
102.0	12.5	13.6	14.7	15.9	17.3	18.9	20.7
102.5	12.6	13.7	14.7	16.1	17.5	19.1	20.9
103.0	12.8	13.8	14.9	16.2	17.7	19.3	21.1
103.5	12.9	13.9	15.1	16.4	17.8	19.5	21.3
104.0	13.0	14.0	15.2	16.5	18.0	19.7	21.6
104.5	13.1	14.2	14.4	16.7	18.2	19.9	21.8
105.0	13.2	14.3	15.5	16.8	18.4	20.1	22.0
105.5	13.3	14.4	15.6	17.0	18.5	20.3	22.2
106.0	13.4	14.5	15.8	17.2	18.7	20.5	20.5
106.5	13.5	14.7	15.9	17.2	18.9	20.7	22.7
100.5	13.7	14.8	16.1	17.5	19.1	20.7	22.9
107.5	13.8	14.9	16.2	17.7	19.3	21.1	23.2
107.5	13.9	15.1	16.4	17.8	19.5	21.3	23.4
108.5	14.0	15.2	16.5	18.0	19.7		23.7
109.0	14.1	15.3	16.7	18.2	19.8	21.5 21.8	23.9
109.5	14.3	15.5		18.3	1010	22.0	24.2
110.0	14.3		16.8		13.5		24.2
110.5	14.4	15.6 15.8	17.0 17.1	18.5 18.7	20.2	22.2	24.4
					20.4		
111.0	14.6	15.9	17.3	18.9	20.7	22.7	25.0
111.5	14.8	16.0	17.5	19.1	20.9	22.9	25.2
112.0	14.9	16.2	17.6	19.2	21.1	23.1	25.5
112.5	15.0	16.3	17.8	19.4	21.3	23.4	25.8
113.0	15.2	16.5	18.0	19.6	21.5	23.6	26.0
113.5	15.3	16.6	18.1	19.8	21.7	23.9	26.3
114.0	15.4	16.8	18.3	20.0	21.9	24.1	26.6
114.5	15.6	16.9	18.5	20.2	22.1	24.4	26.9
115.0	15.7	17.1	18.6	20.4	22.4	24.6	27.2
115.5	15.8	17.2	18.8	20.6	22.6	24.9	27.5
116.0	16.0	17.4	19.0	20.8	22.8	25.1	27.8
116.5	16.1	17.5	19.2	21.0	23.0	25.4	28.0
117.0	16.2	17.7	19.0	21.2	23.3	25.6	28.3
117.5	16.4	18.9	19.5	21.4	23.5	25.9	28.6
118.0	16.5	18.0	19.7	21.6	23.7	26.1	28.9
118.5	16.7	18.2	19.9	21.8	23.9	26.4	29.2
119.0	16.8	18.3	20.0	22.0	24.1	26.6	29.5
119.5	16.9	18.5	20.2	22.2	24.4	26.6	29.8
120.0	17.1	18.6	20.4	22.4	24.6	27.2	30.1

Weight For Height From 2 - 5 Years: Girls

Height (cm)	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
65.0	5.6	6.1	6.6	7.2	7.9	8.7	9.7
65.5	5.7	6.2	6.7	7.4	8.1	8.9	9.8
66.0	5.8	6.3	6.8	7.5	8.2	9.0	10.9
66.5	5.8	6.4	6.9	7.6	8.3	9.1	10.1
67.0	5.9	6.4	7.0	7.7	8.4	9.3	10.2
67.5	6.0	6.5	7.1	7.8	8.5	9.4	10.4
68.0	6.1	6.6	7.2	7.9	8.7	9.5	10.5
68.5	6.2	6.7	7.3	8.0	8.8	9.7	10.7
69.0	6.3	6.8	7.4	8.1	8.9	9.8	10.8
69.5	6.3	6.9	7.5	8.2	9.0	9.9	10.9
70.0	6.4	7.0	7.6	8.3	9.1	10.0	11.1
70.5	6.5	7.1	7.7	8.4	9.2	10.1	11.2
71.0	6.6	7.1	7.8	8.5	9.3	10.3	11.3
71.5	6.7	7.2	7.9	8.6	9.4	10.4	11.5
72.0	6.1	7.3	8.0	8.7	9.5	10.5	11.6
72.5	6.8	7.4	8.1	8.8	9.7	10.6	11.7
73.0	6.9	7.5	8.1	8.9	9.8	10.7	11.8
73.5	7.0	7.6	8.2	9.0	9.9	10.8	12.0
74.0	7.0	7.6	8.3	9.1	10.0	11.0	12.1
74.5	7.1	7.7	8.4	9.2	10.1	11.1	12.2
75.0	7.2	7.8	8.5	9.6	10.2	11.2	12.3
75.5	7.2	7.9	8.6	9.4	10.3	11.3	12.5
76.0	7.3	8.0	8.7	9.5	10.4	11.4	12.6
76.5	7.4	8.0	8.7	9.6	10.5	11.5	12.7
77.0	7.5	8.1	8.8	9.6	10.6	11.6	12.8
77.5	7.5	8.2	8.9	9.7	10.7	11.7	12.9
78.0	7.6	8.3	9.0	9.8	10.8	11.8	13.1
78.5	7.7	8.4	9.1	9.9	10.9	12.0	13.2
79.0	7.8	8.4	9.2	10.0	11.0	12.1	13.3
79.5	7.8	8.5	9.3	10.1	11.1	12.2	13.4
80.0	7.9	8.6	9.4	10.2	11.2	12.3	13.6
80.5	8.0	8.7	9.5	10.3	11.3	12.4	13.7
81.0	8.1	8.8	9.6	10.4	11.4	12.6	13.9
81.5	8.2	8.9	9.7	10.6	11.6	12.7	14.0
82.0	8.3	9.0	9.8	10.7	11.7	12.8	14.1
82.5	8.4	9.1	9.9	10.8	11.8	13.0	14.3
83.0	8.5	9.2	10.0	10.9	11.9	13.1	14.5
83.5	8.5	9.3	10.1	11.0	12.1	13.3	14.6
84.0	8.6	9.4	10.2	11.1	12.2	13.4	14.8
84.5	8.7	9.5	10.3	11.3	12.3	13.5	14.9
85.0	8.8	9.6	10.4	11.4	12.5	13.7	15.1
85.5	8.9	9.7	10.6	11.5	12.6	13.8	15.3
86.0	9.0	9.8	10.7	11.6	12.7	14.0	15.4
86.5	9.1	9.9	10.8	11.8	12.9	14.2	15.6
87.0	9.2	10.0	10.9	11.9	13.0	14.3	15.8
87.5	9.3	10.1	11.0	12.0	13.2	14.5	15.9
88.0	9.4	10.2	11.1	12.1	13.3	14.6	16.1
88.5	9.5	10.3	11.2	12.3	13.4	14.8	16.3
89.0	9.6	10.4	11.4	12.4	13.6	14.9	16.4
89.5	9.7	10.5	11.5	12.5	13.7	15.1	16.6
90.0	9.8	10.6	11.6	12.6	13.8	15.2	16.8
90.5	9.9	10.7	11.7	12.8	14.0	15.4	16.9
91.0	10.0	10.9	11.8	12.9	14.1	15.5	17.1
91.5	10.1	11.0	11.9	13.0	14.3	15.7	17.3
92.0	10.2	11.1	12.0	13.1	14.4	15.8	17.4

Height (cm)	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
92.5	10.3	11.2	12.1	13.3	14.5	16.0	17.6
93.0	10.4	11.3	12.3	13.4	14.7	16.1	17.8
93.5	10.5	11.4	12.4	13.5	14.8	16.3	17.9
94.0	10.6	11.5	12.5	13.6	14.9	16.4	18.1
94.5	10.7	11.6	12.6	13.8	15.1	16.6	18.3
95.0	10.8	11.7	12.7	13.9	15.2	16.7	18.5
95.5	10.8	11.8	12.8	14.0	15.4	16.9	18.6
96.0	10.9	11.9	12.9	14.1	15.5	17.0	18.8
96.5	11.0	12.0	13.1	14.3	15.6	17.2	19.0
97.0	11.1	12.1	13.2	14.4	15.8	17.4	19.2
97.5	11.2	12.2	13.3	14.5	15.9	17.5	19.3
98.0	11.3	12.3	13.4	14.7	16.1	17.7	19.5
98.5	11.4	12.4	13.5	14.8	16.2	17.9	19.7
99.0	11.5	12.5	13.7	14.9	16.4	18.0	19.9
99.5	11.6	12.7	13.8	15.1	16.5	18.2	20.1
100.0	11.7	12.8	13.9	15.2	16.7	18.4	20.3
100.5	11.9	12.9	14.1	15.4	16.9	18.6	20.5
101.0	12.0	13.0	14.2	15.5	17.0	18.7	20.7
101.5	12.1	13.1	14.3	15.7	17.2	18.9	20.9
102.0	12.2	13.3	14.5	15.8	17.4	19.1	21.1
102.5	12.3	13.4	14.6	16.0	17.5	19.3	21.4
103.0	12.4	13.5	14.7	16.1	17.7	19.5	21.6
103.5	12.5	13.6	14.9	16.3	17.9	19.7	21.8
104.0	12.6	13.8	15.0	16.4	18.1	19.9	22.0
104.5	12.8	13.9	15.2	16.6	18.2	20.1	22.3
105.0	12.9	14.0	15.3	16.8	18.4	20.3	22.5
105.5	13.0	14.2	15.5	16.9	18.6	20.5	22.7
106.0	13.1	14.3	15.6	17.1	188	20.8	23.0
106.5	13.3	14.5	15.8	17.3	19.0	21.0	23.2
107.0	13.4	14.6	15.9	17.5	19.2	21.2	23.5
107.5	13.5	14.7	16.1	17.7	19.4	21.4	23.7
108.0	13.7	14.9	16.3	17.8	19.6	21.7	24.0
108.5	13.8	15.0	16.4	18.0	19.8	21.9	24.3
109.0	13.9	15.2	16.6	18.2	20.0	22.1	24.5
109.5	14.1	15.4	16.8	18.4	20.3	22.4	24.8
110.0	14.2	15.5	17.0	18.6	20.5	22.6	25.1
110.5	14.4	15.7	17.1	18.8	20.7	22.9	25.4
111.0	14.5	15.8	17.3	19.0	20.9	23.1	25.7
111.5	14.7	16.0	17.5	19.2	21.2	23.4	26.0
112.0	14.8	16.2	17.7	19.4	21.4	23.6	26.2
112.5	15.0	16.3	17.7	19.4	21.6	23.9	26.5
113.0	15.1	16.5	18.0	19.8	21.8	24.2	26.8
113.5	15.3	16.7	18.2	20.0	22.1	24.4	27.1
114.0	15.4	16.8	18.4	20.2	22.3	24.7	27.4
114.5	15.6	17.0	18.6	20.5	22.6	25.0	27.8
115.0	15.7	17.2	18.8	20.7	22.8	25.2	28.1
115.5	15.7	17.3	19.0	20.7	23.0	25.5	28.4
116.0	16.0	17.5	19.2	21.1	23.3	25.8	28.7
116.5	16.2	17.7	19.4	21.3	23.5	26.1	29.0
117.0	16.3	17.7	19.4	21.5	23.8	26.3	29.0
117.5	16.5	18.0	19.8	21.7	24.0	26.6	29.6
118.0	16.6	18.2	19.9	22.0	24.2	26.9	28.9
118.5	16.8	18.4	20.1	22.2	24.5	27.4	30.3
119.0	16.9	18.5	20.1	22.2	24.5	27.4	30.6
119.0	17.1	18.7	20.5	22.4	25.0	27.4	30.9
120.0	17.1	18.7	20.5	22.8	25.0	28.0	31.2
120.0	17.3	16.9	20.7	22.8	25.2	26.0	31.2

Calculating a child's weight for height

- Locate the appropriate table for boys or girls.
- Locate the row containing the child's height in the left column.
- Note where the child's weight lies with respect to the height recorded in this row. Look up the column to read the weight for height of the child.



MINISTRY OF HEALTH



ALGORITHM FOR PULMONARY TB DIAGNOSIS IN CHILDREN

presenting illness History of

For all children presenting to a health facility ask for the following suggestive symptoms:

Ask for history of contact with adult/adolescent with chronic cough or TB within the last (Cough, fever, poor weight gain, lethargy or reduced playfulness) Suspect TB if child has two or more of these suggestive symptoms 2 years

Examination Physical

Examine the child and check for

- Temparature >37.5 (fever)
- Weight (to confirm poor weight gain, weight loss) check growth monitoring curve
 - Respiratory rate (fast breathing)
- Examine other systems for abormal signs suggestive of extra-pulmonary TB# Respiratory system examination - any abnormal findings

Investigations

Obtain specimen* for Xpert MTB/RIF (and culture when indicated**)
Do a chest Xray (where available)
Do a Mantoux test*** (where available)
Do a HIV test

Do other tests to diagnose extra-pulmonary TB where suspected#

Diagnosis

Diagnose if specimen is positive for MTB **Bacteriologically** confirmed TB:

Clinically diagnosed TB:

Child has two or more of the following suggestive symptoms:

- Persistent cough, fever, poor weight gain, lethargy PLUS two or more of the following:
- Positive contact, abnormal respiratory signs, abnormal CXR, positive Mantoux

Note: If the child has clinical signs suggestive of EPTB, refer to EPTB diagnostic table#

Treatment

Treat for TB as follows

- All children with bacteriologically confirmed TB
 All children with a clinical diagnosis of TB

NB: In children who do not have an Xpert result, or their Xpert result is negative, **but** they have clinical signs and symptoms suggestive of TB they should be treated for TB

4 All forms of TB (Except TB meningitis, bone and joint TB): **Treat for 6 months (2 RHZE /**

TB meningitis, bone and joint TB: Treat for 12 months (2 RHZE/ 10 RH)

*Specimen may include: Expectorated sputum (child > 5 years), induced sputum, nasopharyngeal aspirate and gastric aspirate. **Attempt to obtain specimen in every child**

**Do a culture and DST for the following children:

- Rifampicin resistance detected by the Xpert test
- Refugees and children in contact with anyone who has Drug Resistant TB 7
- Those not responding to TB treatment 3.
- Those with Indeterminate Xpert results
- *** This may include IGRA in facilities where available

#Use IMNCI guidelines to classify severity of disease





MINISTRY OF HEALTH REGIMEN FOR TREATMENT OF TB IN CHILDREN



: :	Recommen	Recommended regimen
I B disease category	Intensive phase	Continuation phase
All forms of TB (Except TB meningitis and TB of the bones and joints)	2 months RHZE	4 months RH
TB meningitis, TB of the bones and joints	2 months RHZE	10 months RH
Drug resistant TB	Refer to a DR TB spe	Refer to a DR TB specialist and inform CTLC

R= Rifampicin H= Isoniazid Z= Pyrazinamide E= Ethambutol
For previously treated children who present with symptoms of TB within two years of completing anti-TB treatment, evaluate for drug resistant TB, progressive HIV disease or other chronic lung disease. Make every effort to diagnose the child and manage as per the algorithm for TB diagnosis
Ethambutol is safe and can be used in children in doses not exceeding 25mg/kg/day

DOSAGES FOR PAEDIATRIC TB TREATMENT (IMPROVED FORMULATIONS) DOSAGES FOR A CHILD UP TO 3.9KGS

Weight			Number of Tablets		
(Kgs)			Intensive Phase		Continuation Phase
	RHZ (75/50/150mg)	E(100mg)	How to reconstitute the medicines	RH(75/50mg)	How to reconstitute the medicines
Less than 2kg	1/4	1/4	Dissolve one (1) tablet of RHZ in 20 ml of safe drinking water. Once fully dissolved, add the completely crushed one (1) tablet of Ethambutol and give 5ml (1/4) of this solution measured with a syringe	1/4	Dissolve one (1) tablet of RH in 20 ml of safe drinking water. Once fully dissolved, give 5ml (1/4) of this solution measured with a syringe
2-2.9	1/2	1/2	Dissolve one (1) tablet of RHZ in 20 ml of safe drinking water. Once fully dissolved, add the completely crushed one (1) tablet of Ethambutol and give 10ml (1/2) of this solution measured with a syringe	1/2	Dissolve one (1) tablet of RH in 20 ml of safe drinking water. Once fully dissolved, give 10ml (1/2) of this solution measured with a syringe
3-3.9	3/4	3/4	Dissolve one (1) tablet of RHZ in 20 ml of safe drinking water. Once fully dissolved, add the completely crushed one (1) tablet of Ethambutol and give 15ml (3/4) of this solution measured with a syringe	3/4	Dissolve one (1) tablet of RH in 20 ml of safe drinking water. Once fully dissolved, give 15ml (3/4) of this solution measured with a syringe

Ethambutol is not dispersible. Crush it completely before adding to be prepared solution of RHZ during the intensive phase After giving the child their dose for the day, discard the rest of the solution. Prepare a fresh solution every day DOSAGES FOR A CHILD BETWEEN 4 - 25KGS

Weight band (Kgs)			Number of Tablets		
		Inte	Intensive Phase		Continuation Phase
	RHZ (75/50/150mg)	E(100mg)	How to reconstitute the medicines	RH(75/50mg	How to reconstitute the medicines
4 - 7.9	1	1	Dissolve the tablet(s) of RHZ in 20 m l of	1	Dissolve the tablet(s) of RH in 20 ml
8 - 11.9	2	2	Once fully dissolved, add the completely	2	Once fully dissolved give ALL of this
12 - 15.9	3	3	give ALL of this solution to the child	3	
16 - 24.9	4	4		4	
25kg and above			Use adult dosages and preparations	rations	

DOSAGES FOR A CHILD ABOVE 25KGS: ADULT FORMULATION DOSAGE TABLE

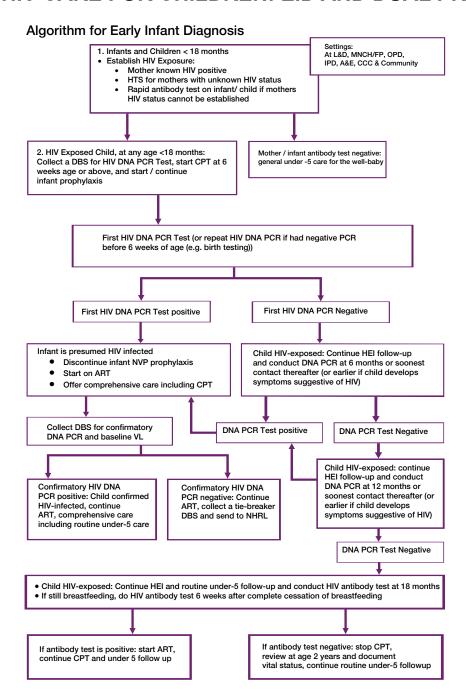
	Number of tablets	tablets
	Intensive Phase	Continuation Phase
Weight band (Kgs)	RHZE (150/75/400/275mg)	RH(150/75mg)
25 - 39.9	2	2
40 - 54.9	3	3
55kg and above	4	4

PYRIDOXINE (VITAMIN B6) DOSING FOR CHILDREN ON TB TREATMENT

Weight band (Kgs)	Dose in mg	Number of 25mg tablets	Number of 50mg tablets
Less than 5	6.25	Half a tablet 3 TIMES PER WEEK	Not suitable for young infants
5.0 - 7.9	12.5	Half a tablet daily	Half of 50mg tablet 3 TIMES PER WEEK
8.0 - 14.9	25	One tablet daily	Half of 50mg tablet daily
15kg and above	92	Two tablets daily	One 50 mg tablet daily

July 2016

HIV CARE FOR CHILDREN: EID AND DUAL PROPHYLAXIS



ARV Prophylaxis for HIV-Exposed Infants

TABLE:49

	Infant Prophylaxis	Maternal ART
HIV exposed Infant	12 weeks of infant prophyslaxis: - AZT + NVP for 6 weeks, followed by NVP for 6 weeks DBS for PCR at first contact, following EID algorithm	If mother not on ART, initiate ART as soon as possible (preferably same day)

1. If a breastfeeding mother refuses to start ART but agrees to provide infant ARV prophylaxis, provide 6 weeks of AZT+NVP, followed by daily NVP until 6 weeks after complete cessation of breasfeeding. Perform DBS for PCR at first contact with the infant and follow the EID algorithm

Note: If child has contraindication or unable to tolerate NVP or AZT then continue the other drug to complete a total of 12 weeks of infant prophylaxis

Dosing of ARVs for Infant Prophylaxis from Birth to 12 Weeks of Age

TABLE:50

Age/Weight	Dosing of NVP (10mg/mL) OD	Dosing of AZT (10mg/mL) BD
Birth to 6 weeks		
Birth weight < 2000 g	2 mg /kg per dose	4 mg /kg per dose
Birth weight 2000-2499 g	10 mg (1 ml of syrup)	10 mg (1 ml of syrup)
Birth weight ≥2500 g	15 mg (1.5 ml of syrup)	15 mg (1.5 ml of syrup)
> 6weeks to 12 weeks		
Any weight	20 mg (2 ml of syrup)	60 mg (6 ml of syrup)

>12 weeks refer to the two tables below

NVP Dosing for Infant Prophylaxis beyond 12 Weeks of Age*

TABLE :51

Age	Dosing of NVP (10mg/mL) Once Daily
12 weeks - 14 weeks	20 mg (2 ml of syrup)
15 weeks - 6 months	25 mg (2 ml of syrup)
7 months - 9 months	30 mg (2 ml of syrup)
10 months - 12 months	40 mg (2 ml of syrup)
>12 months	50 mg (2 ml of syrup)

AZT Dosing for Infant Prophylaxis beyond 12 Weeks of Age*

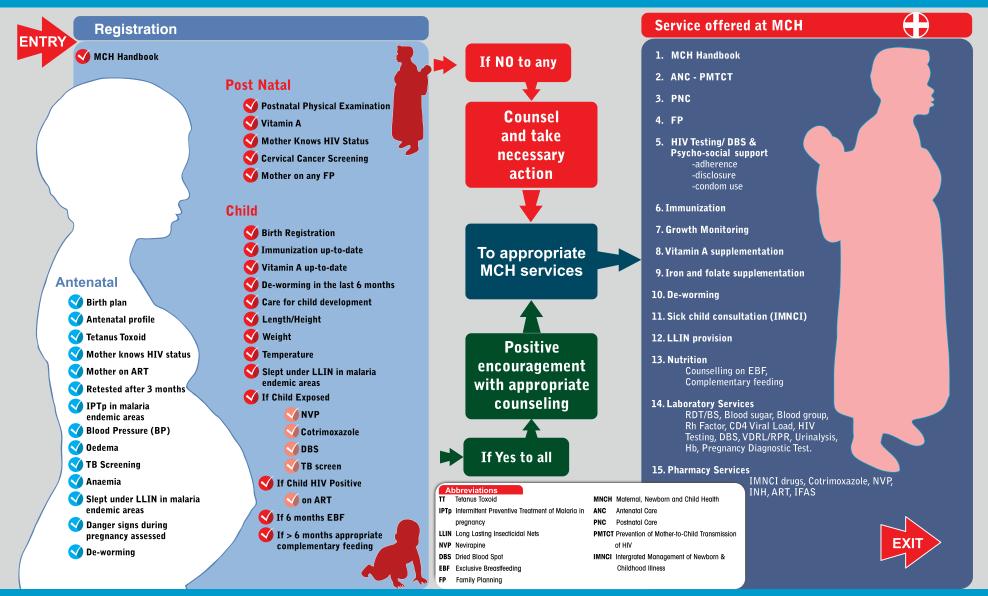
TABLE :52

Weight	Dosing of AZT: (10mg/mL) Twice Daily
3.0-5.9 kg	6 ml of syrup
6.0-9.9 kg	9 ml of syrup
10.0-13.9 kg	12 ml of syrup
14.0-19.9 kg	15 ml of syrup

^{*}Child presents to facility late and has to be on AZT and NVP beyond 12 weeks of age



Integrated MCH Flow Chart





Newborn, Child and Adolescent Health Unit (NCAHU) Division of Family Health

MINISTRY OF HEALTH



