# INTEGRATED MANAGEMENT OF NEWBORN AND CHILDHOOD ILLNESS

# Chart Booklet







March 2015

## INTEGRATED MANAGEMENT OF NEWBORN AND

## SICK CHILD AGE 2 MONTHS UP TO 5 YEARS



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#### TREAT THE CHILD

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Ministry of Health-ERITREA

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## SICK YOUNG INFANT AGE UP TO 2 MONTHS

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# ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS



**ASSESS** 

CLASSIFY

**IDENTIFY** 

#### ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

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

## **CHECK FOR GENERAL DANGER SIGNS**

#### ASK:

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

#### LOOK:

- See if the child is lethargic or unconscious.
- See if the child is convulsing now

URGENT attention

Any general danger sign

VERY SEVERE DISEASE

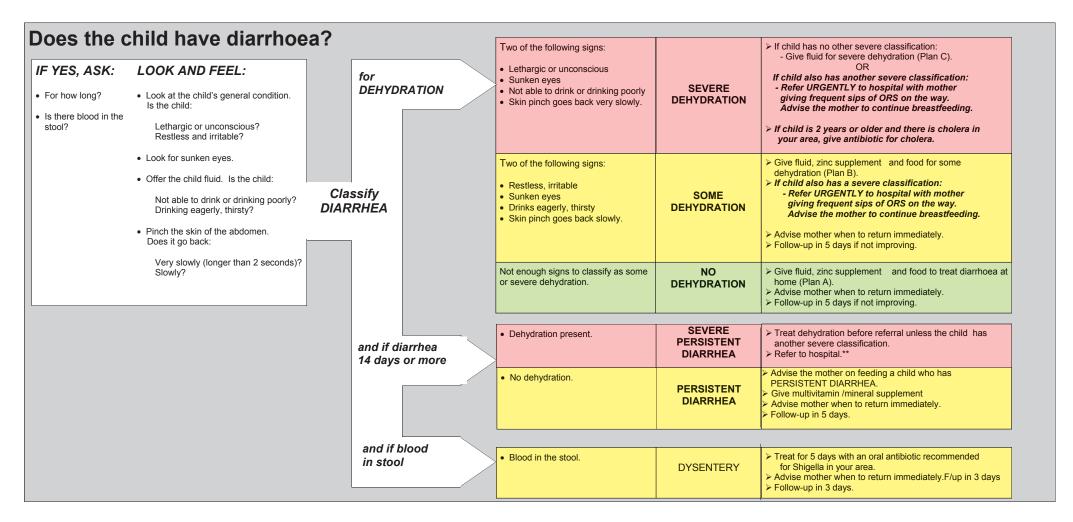
PROBLEMS TO CLASSIFY THE ILLNESS.

- >Give diazepam if convulsing now
- >Quickly complete the assessment
- >Give any pre-referral treatment immediately
- > Give first dose of an appropriate antibiotic.
- >Treat the child to prevent low blood sugar.
- >Refer URGENTLY to hospital.\*

USE ALL BOXES THAT MATCH THE CHILD'S SYMPTOMS AND

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

Joes the (	child have cough or dif	ricuit breathing?	SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print.)
IF YES ASK	LOOK, LISTEN, FEEL:		<ul><li>Any general danger sign or</li><li>Stridor in calm child.</li></ul>	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	> Give first dose of an appropriate antibiotic. > Treat the child to prevent low blood sugar. > Refer URGENTLY to hospital.**
For how long? days	<ul> <li>Count the breaths in one minute.</li> <li>Look for chest indrawing.</li> <li>Look and listen for stridor.</li> </ul>	DIFFICULT	Chest indrawing or     Fast breathing.	PNEUMONIA	<ul> <li>➤ Give an appropriate antibiotic for 5 days.</li> <li>➤ Soothe the throat and relieve the cough with a safe remedy.</li> <li>➤ Advise mother when to return immediately.</li> <li>➤ Follow-up in 3 days.</li> <li>➤ If coughing more than 14 days, refer for assessment</li> </ul>
	If the child is 2 months up to 12 months 12 month up to 5 years	rast breathing is.	No signs of pneumonia or very severe disease.	NO PNEUMONIA: COUGH OR COLD	<ul> <li>If coughing more than 14 days, refer for assessment</li> <li>Soothe the throat and relieve the cough with a safe remedy.</li> <li>Advise mother when to return immediately.</li> <li>Follow-up in 5 days if not improving.</li> </ul>



<sup>\*\*</sup> If referral is not possible, manage the child as described in Integrated Management of Childhood Illness, Treat the Child,

Annex: Where Referral Is Not Possible, and WHO guidelines for inpatient care.—the *Pocket Book for hospital care for children*.

DANGER SIGNS, COUGH DIARRHOEA

#### Does the child have fever? VERY SEVERE Any general danger sign or ➤ Give first dose of artesunate or quinine for severe malaria Stiff neck. FEBRILE > Give first dose of an appropriate antibiotic (by history or feels hot or temperature 37.5°C\* or above) DISEASE > Treat the child to prevent low blood sugar > Give one doe of paracetamol in clinic for high fever (38.50 C or above ) High or Low If ves: Refer URGENTLY to hospital Malaria Risk Decide Malaria Risk: high or low Look and feel: > Look or feel for stiff neck. Malaria test POSITIVE. Then ask: MALARIA Give recommended first line oral antimalarial > For how long? \_\_\_\_days Look for runny nose. > Give one doe of paracetamol in clinic for high fever (38.50 > If more than 7 days, has fever been > Look for any bacterial cause of C or above ) fever\*\*. > Advise mother when to return immediately present every day? > Has the child had measles within Look for signs of MEASLES. > Follow-up in 3 days if fever persists the last 3 months? Generalized rash and > If fever is present every day for more than 7 days, > One of these: cough, runny refer for assessment Do a malaria test\*\*\*: If NO severe nose, or red eyes. ➤ Malaria test NEGATIVE FEVER: Give one doe of paracetamol in clinic for high fever (38.50 classification NO MALARIA C or above ). > In all fever cases if High malaria risk. > Other cause of fever Advise mother when to return immediately > In Low malaria risk if no obvious cause of fever present. PRESENT. > Follow-up in 3 days if fever persists or travel to a malarious area If fever is present every day for more than 7 days, Positive Negative Not available refer for assessment Classify Fever > Any general danger sign **VERY SEVERE** > Give first dose of an appropriate antibiotic **FEBRILE** > Treat the child to prevent low blood sugar **DISEASE** > Give one doe of paracetamol in clinic for high fever > Stiff neck. (38.50 C or above) Refer URGENTLY to hospital No Malaria Risk and No **FEVER** ➤ No general danger signs ➤ Give one doe of paracetamol in clinic for high fever (38.50 Travel to Malaria Risk C or above ). Area > No stiff neck. > Advise mother when to return immediately > Follow-up in 3 days if fever persists > If fever is present every day for more than 7 days, > Look for mouth ulcers. > Any general danger sign SEVERE Give Vitamin A. If the child has measles now Are they deep and exten-COMPLICATED Give first dose of an appropriate antibiotic. > Clouding of cornea or MEASLES\*\*\*\* If clouding of the cornea or pus draining from the eye, within the last 3 months: > Look for pus draining from > Deep or extensive mouth apply tetracycline eye ointment. ulcers Refer URGENTLY to hospital. the eve. If MEALES now or within last 3 > Look for clouding of the months, Classify cornea. MEASLES WITH Pus draining from the eve > Give Vitamin A treatment EYE OR MOUTH > If pus draining from the eye, treat eye infection with tetra-COMPLICA-Mouth ulcers cycline eve ointment TIONS\*\*\*\* > If mouth ulcers, treat with gentian violet ➤ Follow-up in 3 days > Measles now or within Give Vitamin A treatment \*These temperatures are based on axillary temperature. Rectal temperature readings are approximately 0.5°C higher. Measles \*\* Look for local tenderness; oral sores; refusal to use a limb; hot tender swelling; red tender skin or boils; lower abdominal pain the last 3 months. or pain on passing urine in older children. \*\*\* If no malaria test available: High malaria risk - classify as MALARIA; Low malaria risk AND NO obvious cause of fever - classify as MALARIA. \*\*\*\* Other important complications of measles - pneumonia, stridor, diarrhoea, ear infection, and acute malnutrition - are classified in other tables.

## Does the child have an ear problem?

### IF YES, ASK:

- Is there ear pain?
- \_days.

#### LOOK AND FEEL:

#### Classify EAR PROBLEM

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

Tender swelling behind the ear.	MASTOIDITIS	Give first dose of an appropriate antibiotic.     Give first dose of paracetamol for pain.     Refer URGENTLY to hospital.
<ul> <li>Pus is seen draining from the ear and discharge is reported for less than 14 days, or</li> <li>Ear pain.</li> </ul>	ACUTE EAR INFECTION	<ul> <li>Give an appropriate antibiotic for 5 days.</li> <li>Give paracetamol for pain.</li> <li>Dry the ear by wicking</li> <li>Advise mother when to return immediately.</li> <li>Follow-up in 5 days.</li> </ul>
Pus is seen draining from the ear and discharge is reported for 14 days or more.	CHRONIC EAR INFECTION	<ul> <li>Treat with local eardrops for two weeks</li> <li>Dry the ear by wicking.</li> <li>Advise mother when to return immediately.</li> <li>Follow-up in 5 days.</li> </ul>
No ear pain and No pus seen draining from the ear.	NO EAR INFECTION	Advise mother when to return immediately.     No additional treatment.

#### THEN CHECK FOR ACUTE MALNUTRITION AND ANEMIA Visible severe wasting Give vitamin A Edema of both feet COMPLICATED Give first dose appropriate antibiotic > Treat the child to prevent low blood sugar **SEVERE ACUTE** Advise the mother to keep the child warm. **MALNUTRITION** WFH/L less than -3 zscores OR MUAC **LOOK AND FEEL:** Refer URGENTLY to hospital. less than 115 mm AND any one of the Look for signs of acute malnutrition following: > Medical complication present or > Look for visible severe wasting. > Not able to finish RUTF **MALNUTRITION** > Look for oedema of both feet. > WFH/L less than -3 zscores OR UNCOMPLICATED Admit to community based therapeutic feeding MUAC less than 115 mm AND SEVERE ACUTE program (CBTF). But if CBTF is not available Determine WFH/L\* \_\_\_ z-score. > Able to finish RUTF. **MALNUTRITION** refer to hospital. Give oral antibiotics for 5 days Measure MUAC\*\* mm in a child 6 Give ready-to-use therapeutic food for a child aged months or older. 6 months or more Counsel the mother on how to feed the child. If WFH/L less than -3 z-scores or MUAC less > Advise mother when to return immediately than 115 mm. then: MODERATE > Assess the child's feeding and counsel the mother WFH/L ≥ -3 and -2 z-scores OR on the feeding recommendations ACUTE Classify Check for any medical complication > MUAC 115 up to 125 mm. > If feeding problem, follow up in 7 days MALNUTRITION NUTRITIONAL present: Advise mother when to return immediately STATUS > Any general danger signs > Follow-up in 30 days > Any severe classification > Pneumonia with chest indrawing > If child is less than 2 years old, assess the WFH/L - 2 z-scores or more OR NO ACUTE If no medical complications present: child's feeding and counsel the mother on **MALNUTRITION** MUAC 125 mm or more. Child is 6 months or older, offer RUTF\*\*\* feeding according to the feeding recommendations to eat. Is the child: > If feeding problem, follow-up in 7 days > Not able to finish RUTF portion? > Able to finish RUTF portion? Child is less than 6 months, assess breastfeeding: Refer URGENTLY to hospital. > Does the child have a breastfeeding Severe palmar pallor **SEVERE ANAEMIA** Some palmar pallor Look for palmar pallor. Is it: **ANAEMIA** Give oral antimalarial if high malaria risk **ANAEMIA** > Severe palmar pallor Assess the child's feeding and counsel the mother on feeding > Some palmar pallor according to the FOOD BOX on the COUNSEL THE If the child is less than 2 years old, assess the child's feeding according the FOOD BOX on the COUNSEL THE No palmar pallor **NO ANAEMIA** MOTHER chart. - If feeding problem follow-up in 5 days... Advise mother when to return immediately.

<sup>\*</sup>WFH/L is Weight-for-Height or Weight-for-Length determined by using the WHO growth standards charts.

<sup>\*\*</sup> MUAC is Mid-Upper Arm Circumference measured using MUAC tape in all children 6 months or older.

<sup>\*\*\*</sup>RUTF is Ready-to-Use Therapeutic Food for conducting the appetite test and feeding children with severe acute malanutrition.

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

IMMUNIZATION SCHEDULE:

**AGE VACCINE** Birth OPV-0 **BCG** PCV1 6 weeks DPT-HBV-Hib - 1 OPV-1 RTV1 RTV2 PCV2 10 weeks DPT-HBV-Hib - 2 OPV-2 14 weeks DPT-HBV-Hib - 3 OPV-3 PCV3 9 months Measles 1 (Mcv1) 18 months Measles 2 (Mcv2)

VITAMIN A
SUPPLEMENTATION •
STATUS:

Is child age 6 months or older?

Has child received a dose of vitamin A in the previous 6 months?

# ASSESS OTHER PROBLEMS ASSESS MOTHER'S HEALTH PROBLEMS

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.





**Ministry Of Health** Eritrea

WHO

## TREAT THE CHILD

## CARRY OUT THE TREATMENT STEPS IDENTIFIED ON THE ASSESS AND CLASSIFY CHART



## TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

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

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

## ➤ Give an Appropriate Oral Antibiotic

> FOR PNEUMONIA, or ACUTE EAR INFECTION FIRST-LINE ANTIBIOTIC: AMOXICILLIN

AMOXYCILLIN*  AGE or WEIGHT    AGE or WEIGHT   AMOXYCILLIN*   Bive three times daily for 5 days		r 5 days	
	TABLET 250 mg	SYRUP 125 mg per 5 ml	SYRUP 250 mg per 5 ml
2 months up to 12 months (4 - <10 kg)		5 ml	2.5 ml
12 months up to 3 years (10 - <14 kg)	1	7.5 ml	5 ml
3 years up to 5 years (14-19 kg)	1	10ml	5 ml

<sup>\*</sup>Amoxicillin is the recommended first-line drug of choice in the treatment of pneumonia due to its efficacy and increasing high resistance to cotrimoxazole.

#### > FOR DYSENTERY:

Give antibiotic recommended for Shigella in your area for 5 days. FIRST-LINE ANTIBIOTIC FOR SHIGELLA: CIPROFLOXACIN

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

#### > FOR CHOLERA:

Give antibiotic recommended for Cholera in your area for 3 days. FIRST-LINE ANTIBIOTIC FOR CHOLERA:

	ERYTHROMYCIN  ➤ Give four 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

## TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

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

## ➤ Give Oral Antimalarial

FIRST-LINE ANTIMALARIAL: ARTESUNATE PLUS AMODIQUINE

[ Quinine - for infants < 5 kg body weight OR less than 5 months ]

SECOND-LINE ANTIMALARIAL: QUININE TABLETS

Age OR Weight in (kg)	ARTESUNATE (50 mg)			AMODIAQUINE (153 mg)		
	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3
5—11 months (7-11 kg )	1/2	1/2	1/2	1/2	1/2	1/2
12 months - 5 years	1	1	1	1	1	1

Age OR Weight in (kg)	ARTESUNATE (100 mg)			AMODIAQUINE (200 mg)		
	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3
5—11 months (7-11 kg )	1/4	1/4	1/4	1/2	1/2	1/2
12 months - 5 years	1/2	1/2	1/2	3/4	3/4	3/4

Quinine		
	TABLET 300 mg salt	
2 months up to 12 months	1/4	
12 months up to 3 years	1/3	
3 years up to 5 years	1/2	

#### ➤ Give Paracetamol for High Fever (38.5°C or above) or Ear Pain

> Give paracetamol every 6 hours until 24 hrs.

PARACETAMOL				
AGE or WEIGHT TABLET (100 mg) TABLET (500 mg)				
2 months up to 3 years (4 - <14	1	1/4		
3 years up to 5 years (14 - <19	1 1/2	1/2		

## ➤ Give Vitamin A

- > For measles, give two doses.
  - Give first dose in clinic.
  - > Give mother one dose to give at home the next day.
- For vitamin supplements of child age 6 months or older who has not received vitamin A in previous 6 months. Thereafter every 6 months. Give one dose in clinic.

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

## ➤ Give Iron

> Give one dose daily for 14 days.

AGE or WEIGHT	IRON/FOLATE TABLET Ferrous sulfate 200 mg + 250 mcg Folate	IRON SYRUP Ferrous fumarate 100 mg per 5 ml
2 months up to 4 months (4 - <6 kg)		1.00 ml (< 1/4 tsp.)
4 months up to 12 months (6 - <10 kg)		1.25 ml (1/4 tsp.)
12 months up to 3 years (10 - <14 kg)	1/2 tablet	2.00 ml (<1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)

For severe malnutrition, give one dose

before referral to hospital

### ➤ Give Zinc supplementation for all children with diarrhea

Give once daily for 14 days...

ZINC			
AGE or WEIGHT	TABLET (20 mg)		
Below 6 months	1/2		
6 months and above	1		

# ➤ Give Multivitamin/mineral supplement → For persistent diarrhea, give one dose daily of \_\_\_\_\_\_\_for 14 days.

**ORAL DRUGS** 

## TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

- > Explain to the mother what the treatment is and why it should be given.
- > Describe the treatment steps listed in the appropriate box.
- > Watch the mother as she does the first treatment in the clinic (except remedy for cough or sore throat).
- > Tell her how often to do the treatment at home.
- > If needed for treatment at home, give mother the tube of tetracycline ointment or a small bottle of gentian violet.
- > Check the mother's understanding before she leaves the clinic.
- Treat Eye Infection with Tetracycline Eye Ointment
  - > Clean both eyes 3 times daily.
    - Wash hands.
    - Ask child to close the eve.
    - Use clean cloth and water to gently wipe away pus.
  - Then apply tetracycline eye ointment in both eyes 3 times daily.
    - Ask the child to look up.
    - Squirt a small amount of ointment on the inside of the lower lid.
    - Wash hands again.
  - ➤Treat until redness is gone.
  - Do not use other eye ointments or drops, or put anything else in the eye.

- ➤ Dry the Ear by dry Wicking for all ear infections, and apply Ciprofloxacin Eardrops for chronic ear infections.
  - > 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.
    - Apply Ciprofloxacin eardrops 2-3 drops after dry wicking three times daily for two weeks.

## Treat Mouth Ulcers with Gentian Violet

- ➤Treat the mouth ulcers twice daily for 5 days
  - Wash hands.
  - Wash the child's mouth with clean soft cloth wrapped around the finger and wet with salt water.
  - Paint the mouth with half-strength gentian violet.
  - Wash hands again.
- ➤ Soothe the Throat, Relieve the Cough with a Safe Remedy
  - · Safe remedies to recommend:
    - Breastmilk for exclusively breastfed infant.
    - Milk, honey in milk ,sebko, tea with lemon, water with lemon.
  - Harmful remedies to discourage:
    - cough syrups containing antihistamines and/or codeine (Codeine, Benyllin, Berantin).

## GIVE THESE TREATMENTS IN CLINIC ONLY

- Explain to the mother why the drug is given.
- Determine the dose appropriate for the child's weight (or age).
- >Use a sterile needle and sterile syringe. Measure the dose accurately.
- ➤ Give the drug as an intramuscular injection.
- > If child cannot be referred, follow the instructions provided.

## ➤ Give An Intramuscular Antibiotic

#### FOR CHILDREN BEING REFERRED URGENTLY

> Give first dose of intramuscular chloramphenicol and refer child urgently to hospital.

#### IF REFERRAL IS NOT POSSIBLE:

- > Repeat the chloramphenicol injection every 12 hours for 5 days.
- > Then change to an appropriate oral antibiotic to complete 10 days of treatment.

AGE or WEIGHT	CHLORAMPHENICOL Dose: 40 mg per kg Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml
2 months up to 4 months (4 - < 6 kg)	1.0 ml = 180 mg
4 months up to 9 months (6 - < 8 kg)	1.5 ml = 270 mg
9 months up to 12 months (8 - < 10 kg)	2.0 ml = 360 mg
12 months up to 3 years (10 - < 14 kg)	2.5 ml = 450 mg
3 years up to 5 years (14 - 19 kg)	3.5 ml = 630 mg

## > Give Quinine for Severe Malaria

#### FOR CHILDREN BEING REFERRED WITH VERY SEVERE FEBRILE DISEASE:

- > Check which quinine formulation is available in your clinic.
- > Give first dose of intramuscular quinine and refer child urgently to hospital.

#### IF REFERRAL IS NOT POSSIBLE:

- Give first dose of intramuscular quinine.
- The child should remain lying down for one hour.
- Repeat the quinine injection at 4 and 8 hours later, and then every 12 hours until the child is able to take an oral antimalarial. Do not continue quinine injections for more than 1 week.
- If low risk of malaria, do not give quinine to a child less than 4 months of age...

AGE or WEIGHT	INTRAMUSCULAR QUININE		
	Draw up this dose of undiluted quinine in syringe (300mg/ml)	Add this amount of normal saline :	Total diluted solution to administer (60 mg/ml):
2 months up to 4 months (4 - < 6 kg)	0.2 ml	0.8 ml	1.0 ml
4 months up to 12 months (6 - < 10 kg)	0.3 ml	1.2 ml	1.5 ml
12 months up to 2 years (10 - < 12 kg)	0.4 ml	1.6 ml	2.0 ml
2 years up to 3 years (12 - < 14 kg)	0.5 ml	2.0 ml	2.5 ml
3 years up to 5 years (14 - 19 kg)	0.6 ml	2.4 ml	3.0 ml

# Treat a Convulsing Child with Diazepam

#### Manage the Airway

- > Turn the child on his or her side to avoid aspiration.
- > Do not insert anything in the mouth.
- ➤ If the lips and the tongue are blue, open the mouth and make sure the air way is clear.
- ➤ If necessary, remove secretions from the throat through a catheter though the nose.

#### Give Diazepam Rectally

- > Draw up the dose from an ampoule of diazepam into a tuberculin syringe. Then remove the needle.
- ➤ Insert the syringe 4 to 5 cm into the rectum and inject the diazepam solution.
- ➤ Hold buttocks together for a few minutes.

AGE or WEIGHT	DIAZEPAM GIVEN RECTALLY
1 month up to 4 months (3 - < 6	0.5 ml
4 months up to 12 months (6 - <	1.0 ml
12 months up to 3 years (10 - <	1.25 ml
3 years up to 5 years (14 - 19 kg)	1.5 ml

#### If High fever, lower the fever

> Sponge the child with room-temperature water.

Treat the Child to Prevent Low Blood Sugar.

# ➤ Treat the Child to Prevent Low Blood Sugar

> If the child is able to breastfeed:

Ask the mother to breastfeed the child.

> If the child is not able to breastfeed but is able to swallow:

Give expressed breastmilk or a breastmilk substitute. If neither of these is available, give sugar water. Give 30-50 ml of milk or sugar water before departure.

To make sugar water: Dissolve 4 level teaspoons of sugar (20 grams) in a 200-ml cup of clean water.

> If the child is not able to swallow:

Give 50 ml of milk or sugar water by nasogastric tube or give a 10% glucose 5ml/kg IV or 50% glucose 1ml/kg IV slowly.

## GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

(See FOOD advice on COUNSEL THE MOTHER chart.)

## > Plan A: Treat Diarrhoea at Home

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

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

#### > TELL THE MOTHER:

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

#### It is especially important to give ORS at home when:

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

## > TEACH THE MOTHER HOW TO MIX AND GIVE ORS. GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME.

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

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

#### Tell the mother to:

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

#### 2. Give Zinc supplement.

- Tell the mother how much to give
  - Up to 6 months 1/2 tablet
  - 6 months or more 1 tablet for 14 days
- Show the mother how to give Zinc supplements
  - Infants— dissolve tablet in a small amount of expressed breastmilk, ORS or clear water in a cup
  - Older children—tablets can be chewed or dissolved in a small amount of clean water
- 3. CONTINUE FEEDING
- 4. WHEN TO RETURN

See COUNSEL THE MOTHER chart

# ➤ Plan B: Treat Some Dehydration with ORS

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

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

\* Use the child's age only when you do not know the weight. The approximate amount of ORS required (in ml) can also be calculated by multiplying the child's weight (in kg) times 75.

AGE*	Up to 4 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 mi	200 - 400	400 - 700	700 - 900	900 - 1400

If the child wants more ORS than shown, give more.

• For infants under 6 months who are not breastfed, also give 100-200 ml clean water during this period.

#### > SHOW THE MOTHER HOW TO GIVE ORS SOLUTION.

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

#### **≻AFTER 4 HOURS:**

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

#### >IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT:

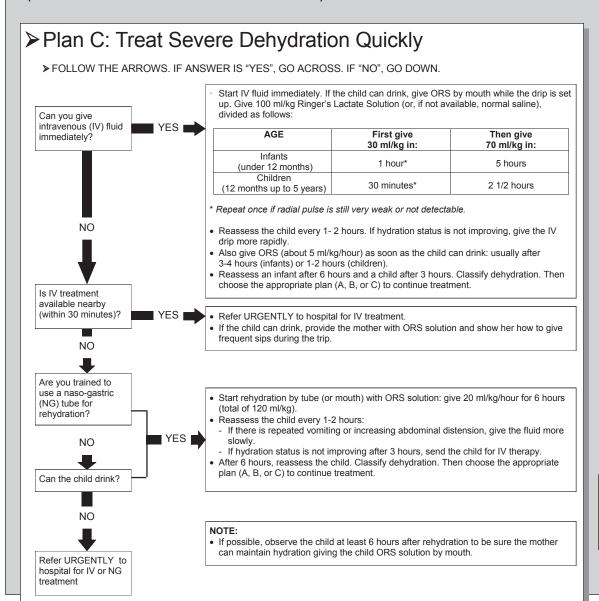
- Show her how to prepare ORS solution at home.
- Show her how much ORS to give to finish 4-hour treatment at home.
- Give her enough ORS packets to complete rehydration. Also give her 2 packets as recommended in Plan A.
- Explain the 3 Rules of Home Treatment:
  - 1. GIVE EXTRA FLUID
- 2. GIVE ZINC SUPPLEMENT.
- 3. CONTINUE FEEDING
- 4. WHEN TO RETURN



See Plan A for recommended fluids and See COUNSEL THE MOTHER chart

## GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

(See FOOD advice on COUNSEL THE MOTHER chart)



IMMUNIZE AND GIVE VITAMIN A TO EVERY SICK CHILD, AS NEEDED.

## GIVE READY-TO-USE THERAPEUTIC FOOD

#### Give Ready-to-Use Therapeutic Food for SEVERE ACUTE MALNUTRITION

- > Wash hands before giving the ready-to-use therapeutic food (RUTF).
- > Sit with the child on the lap and gently offer the ready-to-use therapeutic food.
- > Encourage the child to eat the RUTF without forced feeding.
- > If still breastfeeding, continue by offering breast milk first before every RUTF feed.
- > Give only the RUTF for at least two weeks, if breastfeeding continue to breast and gradually introduce foods recommended for the age (See Feeding recommendations in COUNSEL THE MOTHER chart).
- > When introducing recommended foods, ensure that the child completes his daily ration of RUTF before giving other foods.
- > Offer plenty of clean water, to drink from a cup, when the child is eating the ready-to-use therapeutic food.

Recommended Amounts of Ready-to-Use Therapeutic Food

CHILD'S WEIGHT (kg)	Packets per day	Packets per Week Supply
4-4 . 9kg	2.0	14
5-5 . 9kg	2.5	18
7.0—8.4 kg	30	21
8.5 - 9.4kg	3.5	25
9.5 - 10.4kg	4.0	28
10.5 -11.9kg	4.5	32
>12.0kg	5.0	35

## **GIVE FOLLOW-UP CARE**

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

#### > PNEUMONIA

After 3 days:

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

See ASSESS & CLASSIFY

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

#### Treatment:

- > If chest indrawing, stridor or a general danger sign give a dose of Intramascular chloramphenicol. Then refer URGENTLY to hospital.
- > If breathing rate, fever and eating are the same, advise the mother to return in 3 days or refer. (If the child has measles within the last 3 months, refer ).
- > If breathing slower, less fever, or eating better, complete the 5 days of antibiotic.

#### PLAN C> 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.

Continue to give multivitamin/mineral supplement.

#### > DYSENTERY

After 3 days:

Assess the child for diarrhoea. > See ASSESS & CLASSIFY chart. Ask.

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

#### Treatment:

- > If the child is **dehydrated**, treat dehydration.
- > If number of stools, amount of blood in stools, fever, abdominal pain, or eating is

same or worse: Refer

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

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

Ensure that mother understands the oral rehydration method fully and that she also understands the need for an extra meal each day for a week.

## **GIVE FOLLOW-UP CARE**

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

#### > MALARIA (Low or High Malaria Risk)

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

Do a full reassessment of the child. > See ASSESS & CLASSIFY chart.

Assess for other causes of fever.

#### Treatment:

- > If the child has any general danger sign or stiff neck, treat as VERY SEVERE FEBRILE DISEASE.
  - > If the child has any *cause of fever other than malaria*, provide treatment.
  - > If malaria is the only apparent cause of fever:
  - > Do microscopy to look for malaria parasites. If parasites are present and the child has finished a

full course of the first line antimalarial, give the second-line antimalarial, if available, or refer the child to a hospital.

- > If fever has been present every day for 7 days, refer for assessment.
- > If there is no other apparent cause of fever and you do not have a microscopy to check for

#### > FEVER -NO MALARIA

If fever persists after 3 days:

Do a full reassessment of the child. > See ASSESS & CLASSIFY chart. Repeat the malaria test.

#### Treatment:

- If the child has any general danger sign or stiff neck, treat as VERY SEVERE FEBRILE DISEASE.
- If a child has a positive malaria test, give first-line oral antimalarial. Advise the mother to return in 3 days if the fever persists.
- > If the child has any other cause of fever other than malaria, provide treatment.
- > If there is no other apparent cause of fever:
  - > If the fever has been present for 7 days, refer for assessment.

#### > MEASLES WITH EYE OR MOUTH COMPLICATIONS

After 3 days:

Look for red eyes and pus draining from the eyes. Look at mouth ulcers.

Smell the mouth.

Treatment for Eve Infection:

- > If pus is draining from the eye, ask the mother to describe how she has treated the eye infection. If treatment has been correct, refer to hospital. If treatment has not been correct, teach mother correct treatment.
- > If the pus is gone but redness remains, continue the treatment.
- > If no pus or redness, stop the treatment.

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 for a total of 5 days.

## **GIVE FOLLOW-UP CARE**

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

#### > EAR INFECTION

After 5 days:

Reassess for ear problem. > See ASSESS & CLASSIFY chart. Measure the child's temperature.

Treatment:

- If there is tender swelling behind the ear or high fever (38.5°C or above), refer URGENTLY to hospital.
- If ear pain 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 and giving local antibiotic correctly. If the mother is wicking and giving local antibiotic correctly, encourage the mother to continue.
  - > But if no response in 10 days, refer to hospital

#### > FEEDING PROBLEM

After 5 days:

Reassess feeding. > See questions at the top of the COUNSEL chart. 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 child back again.
- > If the child is classified as MODERATE ACUTE MALNUTRITION, ask the mother to return 30 days after the initial visit to measure the child's WFH/L, MUAC.

#### > ANEMIA

After 14 days:

Do reassessment of the child for pallor see ASSESS and CLASSIFY CHART.

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

#### > MODERATE ACUTE MALNUTRITION

After 30 days:

- > Assess the child using the same measurement (WFH/L or MUAC) used on the initial visit:
  - > If WFH/L, weigh the child, measure height or length and determine if WFH/L.
  - > If MUAC, measure using MUAC tape.
  - > Check the child for oedema of both feet.
- > 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 one month. Continue to see the child monthly 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 125 mm. or more.

#### 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.

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 CHART.)

## **COUNSEL THE MOTHER**

## **FEEDING COUNSELLING**

## Assess Child's Appetite

All children aged 6 months or more with SEVERE ACUTE MALNUTRITION (WFH/L less than -3 z-scores or MUAC less than 115 mm) and no medical complication should be assessed for appetite.

Appetite is assessed on the initial visit and at each follow-up visit to the health facility. Arrange a quiet corner where the child and mother can take their time to get accustomed to eating the

RUTF. Usually the child eats the RUTF portion in 30 minutes.

#### Explain to the mother:

- > The purpose of assessing the child's appetite.
- What is ready-to-use-therapeutic food (RUTF).
- How to give RUTF:
  - > Wash hands before giving the RUTF.
  - > Sit with the child on the lap and gently offer the child RUTF to eat.
  - > Encourage the child to eat the RUTF without feeding by force.
  - > Offer plenty of clean water to drink from a cup when the child is eating the RUTF.

#### Offer appropriate amount of RUTF to the child to eat:

- > After 30 minutes check if the child was able to finish or not able to finish the amount of RUTF given and decide:
  - > Child ABLE to finish at least one-third of a packet of RUTF portion (92 g) or 3 teaspoons from a pot within 30 minutes.
  - > Child NOT ABLE to eat one-third of a packet of RUTF portion (92 g) or 3 teaspoons from a pot within 30 minutes.





## **COUNSEL THE MOTHER**



Ministry Of Health Eritrea

**WHO** 

## FOOD

## > Assess the Child's Feeding

Ask questions about the child's usual feeding and feeding during this illness. Compare the mother's answers to the **Feeding Recommendations** for the child's age in the box below.

#### ASK -

- Do you breastfeed your child?
  - How many times during the day?
  - Do you also breastfeed during the night?
- Does the child take any other food or fluids?
  - What food or fluids?
  - How many times per day?
  - What do you use to feed the child?
  - How large are servings? Does the child receive his own serving? Who feeds the child and how?
- > During this illness, has the child's feeding changed? If yes, how?

## > Feeding Recommendations During Sickness and Health

#### **Newborn 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.
- Expose infant to direct sunshine daily

## 6 Months up to 12 Months



- Breastfeed as often as the child wants. 8 times or more day and night.
- > Give adequate servings of:
  - > Thick Sebko, Tihni or Medida, enriched with oil, milk, or pulses.
  - > Fitfit shiro ,merek, milk ,
  - Ga'at or tukusha with milk, butter or oil.
  - rice or mashed potato with carrot ,hamli , pumpkin, eggs, or fish
  - > fruits whenever possible.
- 3 times per day if breastfed;
- > 5 times per day if not breastfed.
- > Enrich foods with butter, oil milk or pulses.
- > Expose infant to direct sunshine daily

### 12 Months up to 2 Years



- Breastfeed as often as the child wants.
  - Give adequate servings of:
  - > Fitfit shiro Merek,Ades or milk
  - > Ga'at or tikusha with butter, milk or oil
  - rice or potato cooked with carrot ,hamli, or pumpkin,
  - > egg and fish
  - > fruits whenever possible.
  - > or family foods 5 times per day.
- Feed or supervise child's feeding.



#### 2 Years and Older



- Give family foods at 3 meals a day. Also, twice daily, give nutritious food between meals, such as:
- Any bread with milk, egg or butter, Milk, Fish, ,Titko,, Fruits, whenever possible.



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

# <u>If the child is NOT FEEDING WELL DURING ILLNESS</u>, counsel the mother to

- Breastfeed more frequently and longer, if possible.
- Feed soft, varied, appetizing ,favorite food to encourage the child to eat as much as possible, and offer frequent small feedings.
- · Clear a blocked nose if interferes with feeding
- · Expect that the appetite will improve as child gets better.
- · Give at least one extra meal a day after the child is better.

# Feeding Recommendations For a Child Who Has <u>PERSISTENT</u> DIARRHOEA

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

## > Counsel the Mother About Feeding Problems

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

> If the mother reports difficulty with breastfeeding, assess breastfeeding. (See *YOUNG INFANT* chart.) Show the mother correct positioning and attachment for breastfeeding.

>If the child is less than 6 months old and is taking water, milk, butter or ghee, abake, tea or other liquids or foods:

- Build mother's confidence that she can produce all the breast milk that the child needs.
- Suggest giving more frequent, longer breastfeeds day and night, and gradually reducing other milk or foods.

#### > If the child is older than 6 months and is not taking complementary foods counsel the mother to:

- Breast feed as much as possible, including at night.
- And show her how to prepare complementary foods hygienically from locally available mixed foods.
- Make sure the child is given adequate in amount.

#### > If the baby receives only diluted complementary food (tea, abake, thin tihni or sebko).

- Advise the mother to thicken the food and enrich with butter, oil, mashed pulses, pounded peanuts or grounded fish and start solid family foods and stop giving tea and abake.

#### > If the mother is using a bottle to feed the child:

- Recommend substituting a cup for bottle.
- Show the mother how to feed the child with a cup.

#### > 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.

#### > Mother complains of inadequate breast milk :

- -Build mother's confidence that she can produce all the breast milk that the child needs.
- -suggest giving more frequent at least, 10 times a day, and longer breast feeds day and night.

#### > If the child is not feeding well during illness, counsel the mother to:

- Breastfeed more frequently and for longer if possible.
- Clear a blocked nose if it interferes with feeding.
- Use soft, varied, appetizing, favorite foods to encourage the child to eat as much as possible, and offer frequent small feedings.
- Expect that appetite will improve as child gets better.
- Give at least one extra meal a day after the child is better.

#### > If child is not exposed to direct sunlight regularly:

Counsel the mother to expose the child to sunlight daily.

#### > If the child is born to HIV positive mother:

Counsel the mother on infant feeding options, (refer to HIV complementary modules).

> Follow-up any feeding problem in 5 days.





## FLUID.

## > Advise the Mother to Increase Fluid During Illness

#### FOR ANY SICK CHILD:

- > Breastfeed more frequently and for longer at each feed.
- > Increase fluid. For example, give soup, rice water, yogurt drinks, clean water or fruit juices without sugar if child is above 6 months of age.

#### FOR CHILD WITH DIARRHOEA:

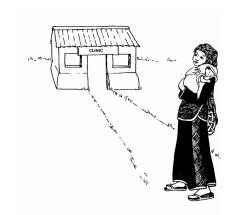
> Giving extra fluid can be lifesaving. Give fluid according to Plan A or Plan B on TREAT THE CHILD chart.

#### > Advise the Mother When to Return to Health Worker

#### **FOLLOW-UP VISIT**

Advise the mother to come for follow-up at the earliest time listed for the child's problems.

If the child has:	Return for follow up in: up in:
PNEUMONIA DYSENTERY MALARIA, if fever persists FEVER-MALARIA UNLIKELY, if fever persists FEVER-NO MALARIA, If fever persists MEASLES WITH EYE OR MOUTH COMPLICATIONS	3 days
PERSISTENT DIARRHOEA ACUTE EAR INFECTION CHRONIC EAR INFECTION FEEDING PROBLEM	5 days
PALLOR	14 days
MODERATE MALNTRTION	30 days



#### WHEN TO RETURN IMMEDIATELY

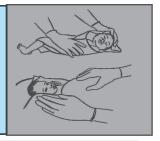
Advise mother to return immediately if the child has any of these signs:				
Any sick child	Not able to drink or breastfeed     Becomes sicker     Develops a fever			
If child has NO PNEUMONIA: COUGH OR COLD, also return if:	Fast breathing     Difficult breathing			
If child has Diarrhoea, also return if:	Blood in stool     Drinking poorly			

## > Counsel the Mother About Her Own Health

- > If the mother is sick, provide care for her, or refer her for help.
- > If she has a breast problem (such as engorgement, sore nipples, breast infection), provide care for her or refer her for help.
- > Advise her to eat well to keep up her own strength and health.
- > Check the mother's immunization status and give her tetanus toxoid if needed.
- > Make sure she has access to:
  - Reproductive health (ANC, FP)
  - Counseling on STD and AIDS prevention

## IMMEDIATEAND FOLLOW UP ACTIONS FOR ESSENTIAL NEWBORN CARE

Step 1: dry baby's body with dry towel. Wrap with another dry one and cover head:



Step 2:

Assess breathing and color if

- Breaths are<30/min. or</li>
- Tongue, lips or trunk are blue or
- Gasping, then Resuscitate:

Step 3: Tie the cord two finger from abdomen and another tie two fingers from the 1st one. Cut the cord between the 1st and 2nd tie



Step 4: Apply tetracycline eye ointment once



Step 5: Give vitamin K,1mg IM on anterior mid thigh for babies ≥ 1.5kg and /or ≥32 weeks and 0.5mg for babies <1.5kg and / or 32 weeks.

Step 6: Weigh baby (if <1500 gm or gestational age <32wks refer urgently)

**Step8**: Give the first immunization (BCG, OPVo)

Step 7: Place the baby in Skin to skin Contact and on the breast to initiate breast feeding immediately:





#### **NEWBORN DANGER SIGNS**

(refer baby urgently if any of these is present)

- Breathing ≤30 or ≥ 60 breaths per minute, grunting, severe chest indrawing, blue tongue & lips, or gasping ).
- · Unable to suck or sucking poorly
- feels cold to touch or axillary temperature < 35.5°C</li>
- feels hot to touch or axillary temperature = 37.5°C or above
- · Red swollen eyelids and pus discharge from the eyes
- Umbilical pus discharge and redness extending to the skin.
- Convulsion
- Jaundice /Yellow skin at age < 24 hours or > 2 weeks OR Involving soles and palms
- · Pale, bleeding
- Persistent vomiting, absent first stool in 24 hrs of life, Swollen abdomen.

Delay bathing of the baby for 24 hours after birth.

Provide three postnatal visits at 6hours, 6days and 6 weeks

## Maternal danger signs

Refer baby urgently if any of these is present: Fever

Vaginal bleeding (heavy)

Vaginal discharge

Headache/blurred vision

Convulsion/coma

Swelling of the head and face

## **ASSESS, CLASSIFY AND TREAT BIRTH ASPHYXIA**

- 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:

IF YOU ARE ATTENDING DELIVERY or BABY BROUGHT TO YOU IMMEDIATELY AFTER BIRTH Assess and check for Birth Asphyxia after drying and wrapping with dry cloth

**IDENTIFY TREATMENT** 

#### USE ALL BOXES THAT MATCH INFANT'S SYMPTOMS AND PROBLEMS TO

STAIL TOWN AND TROBLEMS TO						
THEN CHECK FOR BIRTH ASPHYXIA	SIGNS CLASSIFY AS		TREATMENT: (Urgent pre-treatments are in bold print)			
Assess Look, Listen  - Is baby not breathing? or Is baby not crying? - Is baby's tongue, lips or trunk blue? - Is baby gasping? - Count breaths in one minute	If any of the following sign  Not breathing or Blue tongue, lips or trunk or Gasping or Is breathing poorly (less than 30 per minute)	Birth ASPHYIXIA	Start Resuscitation  ➤ Position the newborn supine with neck slightly extended  ➤ Clear the mouth and nose with gauze or clean cloth  ➤ Ventilate with appropriate size mask and self inflating bag  ➤ If the resuscitation is successful continue giving essential newborn care  - Monitor continuously for 6 hours.  - Give appropriate antibiotics I.M. for 3 days.  - Follow after, 12 hrs, 24 hrs, 3 days and 6 weeks  ➤ If the baby remains weak or is having irregular breathing after 20 minutes of resuscitation; Give first dose of IM antibiotics, treat to prevent low blood sugar advise the how to keep warm on the way to hospital, and refer urgently to hospital  ➤ Stop resuscitation after 20 minutes if no response (no spontaneous breathing)			
	Strong cry or     Breathing more than 30 per minute or     Pink tongue, lips or trunk	No Birth ASPHYXIA	<ul> <li>Cord care</li> <li>Eye care</li> <li>Vitamin K</li> <li>Initiate skin-to-skin contact</li> <li>Initiate exclusive breastfeeding</li> <li>Advise mother when to return immediately</li> <li>Follow after, 6 hrs, 6 days and 6 weeks</li> </ul>			

## ASSESS AND CLASSIFY THE NEWBORN FOR BIRTH WEIGHT AND GESTATIONAL AGE

**ASSESS** 

## CLASSIFY

# IDENTIFY TREATMENT & CARE

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

		SIGNS	CLASSIFY AS	TREATMENT
- Ask the gestational age - Ask for birth weight or - Weigh the baby (with in 7 days of life)	Classify ALL Newborns	Weight < 1500gm or Gestational Age < 32 weeks	VERY LOW BIRTH WEIGHT AND/OR VERY PRETERM	<ul> <li>▶ Give first dose of intramuscular antibiotics</li> <li>▶ Continue feeding with expressed breastmilk</li> <li>▶ Continue Kangaroo Mother Care</li> <li>▶ Give Vitamin K 0.5mg IM on anterior mid thigh</li> <li>▶ Refer URGENTLY with mother to hospital</li> </ul>
of life)		Weight 1500 to < 2500 grams or Gestational age 32-38 weeks	LOW BIRTH WEIGHT AND/OR PRETERM	<ul> <li>▶ Kangaroo Mother Care (KMC)</li> <li>▶ Counsel on exclusive breastfeeding</li> <li>▶ Counsel mother/family on prevention of infection</li> <li>▶ Give Vitamin K 1mg IM on anterior mid thigh</li> <li>▶ Provide follow-up visits at age 6 hrs, 3 days &amp; then every week for 6 weeks</li> <li>▶ Advise mother when to return immediately</li> </ul>
		Weight ≥ 2500gm or Gestational age ≥ 38 week	NORMAL WEIGHT AND/OR TERM	<ul> <li>Counsel on exclusive breastfeeding</li> <li>Counsel mother/family on prevention of infection</li> <li>Provide three follow-up visits at age 6hrs, 6 days &amp; 6 weeks</li> <li>Give Vitamin K 1mg IM on anterior mid thigh</li> <li>Advice mother when to return immediately</li> </ul>







## ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT

## **ASSES**

#### **CLASSIFY**

USE ALL BOXES THAT MATCH INFANT'S SYMPTOMS AND PROBLEMS TO

**CLASSIFY THE ILLNESS.** 

# 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 VERY SEVERE DISEASE OR POSSIBLE SERIOUS BACTERIAL INFECTION

#### **CLASSI** SIGNS TREATMENT (Urgent pre-referral treatents are in bold print) > Convulsions or > Give first dose of intramuscular > Fast breathing (60 breaths per antibiotics. FOR VERY SEVERE minute or more) or Treat to prevent low blood sugar. VERY SEVERE ASK: LOOK, LISTEN, FEEL: > Severe chest indrawing or DISEASE AND **DISEASE OR** > Advise mother how to keep the infant > Nasal flaring or LOCAL BACTERIAL warm on the way to the hospital. POSSIBLE Has the . Count the breaths in one > Grunting or Refer URGENTLY to hospital.\*\* **SERIOUS** YOUNG infant had > Apnoea or > If apnoea, stimulate or resuscitate INFANT Repeat the count if elevated. **BACTERIAL** convulsions? > Central cyanosis or MUST BE · Look for severe chest INFECTION > Bulging fontanel or CALM > Ambu bag if available, if not use indrawing. > Pus draining from ear or mouth to mouth technique and refer . Look for nasal flaring. > Profuse eye discharge or . Look and listen for grunting. **URGENTLY** Look for apnea Classify ALL > Umbilical redness extending to the > to hospital. Continue doing so on YOUNG Look for central cyanosis skin or the way to hospital if the baby is . Look and feel for bulging fontanel.( infant **INFANTS** > Fever (37.5°C\* or above or feels hot) having spells of apnoea. must be calm) or low body temperature (less than . Look for pus draining from the ear. 35.5°C\* or feels cold) or . Look for eve discharge > Many or severe skin pustules(0.5cm Is it profuse pusy discharge? or with surrounding redness or . Look at the umbilicus. Is it red or draining > Lethargic or unconscious or pus? Does the redness extend to the skin? > Less than normal movement. Measure axillary temperature (or feel for fever or low body temperature). Give an appropriate oral . Look for skin pustules. Are there many or • Red umbilicus or draining pus or Oral antibiotic except for eve infection. severe pustules?(>0.5cm or with surrounding LOCAL Skin pustules (< 0.5cm and no surrounding</li> Teach the mother to treat local infections redness)? redness). **BACTERIAL** . See if the young infant is lethargic or at home. Little eye discharge INFECTION unconscious. Advise mother to give home care for . See if the young infant is convulsing now. the young infant. . Look at the young infant's movements. Follow-up in 2 days. Are they less than normal? Warm the baby (Skin to skin contact-MILD Axilliary temperature 35.5-36.4°C Kangaroo Mother Care) HYPOTHERMIA Reassess after 1 hour. If the temperature remains same or worse, then refer FOR **HYPOTHERMIA** Treat to prevent low blood sugar. Advise the mother when to return immediately Follow-up in 2 days.

# THEN ASK for: ANY SETUP FOR BACTERIAL INFECTION?

#### ASK the mother for:

- Fever before, during and/or soon after the delivery or
- > Offensive smell of the liquor or
- Prolonged rupture of membrane (> 18 hours) or
- Early rupture of membrane

Classify
For any setup
for infection

SIGNS

**CLASSIFY AS** 

REATMENT

(Urgent pre-referral treatments are in bold print)

No sign of Infection (asymptomatic) HAVING RISK FOR SERIOUS BACTERIAL INFECTION

- > Give appropriate antibiotics for 3 days I.M. injection.
- Advise the mother when to return immediately.
- > Follow-up in 2 days

## THEN CHECK FOR JAUNDICE

## ASK:

Does the baby have yellow eyes or skin?

## LOOK, LISTEN, FEEL:

- Look for jaundice.
- Look at the young infant's palms and soles. Are they yellow?

**CLASSIFY**JAUNDICE

• A	Yellow palms and soles if age 24 hours or more OR Any jaundice if age less than 24 hours Any jaundice lasting more than 14 days.	SEVERE (SERIOUS) JAUNDICE	<ul> <li>Give first dose appropriate IM antibiotics</li> <li>Treat to prevent low blood sugar:</li> <li>Encourage breast feeding, if breast-feeding poorly, provide extra fluid by cup or spoon.</li> <li>Advise the mother to keep the infant warm on the way to hospital.</li> <li>Refer URGENTLY to hospital.</li> </ul>				
•	No yellow palms and soles and any jaun- dice appearing after 24 hours of age	JAUNDICE	<ul> <li>Advise the mother to breastfeed as often and for as long as the baby wants day and night.</li> <li>Expose the baby to direct sunshine daily.</li> <li>Follow-up in 1 day.</li> <li>Advise mother when to return immediately.</li> </ul>				
•	No jaundice	NO JAUNDICE	>Advise the mother to give home care for the young infant				

## THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT:

ASK:		Classify EEDING
<ul> <li>Is there any difficulty feeding</li> <li>Is the infant breastfed? If ye how many times in 24 hours</li> <li>Does the infant usually rece any other foods or drinks? If yes, how often?</li> <li>What do you use to feed the</li> </ul>	g?  • Determine weight for age. s, ?? ive	EEDING
Is breastfe Is taking a	ifficulty feeding, seding less than 8 times in 24 hours, iny other foods or drinks, or ght for age,  AND	
Uaa na in	· · · · -	
nas no inc	dications to refer urgently to hospital:	
ASSESS BREASTFEEDING:		
Has the infant breastfed in the previous hour?	<ul> <li>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.</li> <li>(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.).</li> <li>Is the infant able to attach?         <ul> <li>no attachment at all</li> <li>not well attached</li> <li>good</li> </ul> </li> </ul>	
To check positioning, look for:  > Infant's head & body straight  > Facing her breast  > Infant's body close to her body  > Supporting the infant's whole body  (all of these signs should be present if the positioning is good	<ul> <li>➤ TO CHECK ATTACHMENT, LOOK FOR:</li> <li>➤ Chin touching breast</li> <li>➤ Mouth wide open</li> <li>➤ Lower lip turned outward</li> <li>➤ More areola visible above than below the mouth</li> <li>(All of these signs should be present if the attachment is good.)</li> <li>➤ Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)?         <ul> <li>not suckling at all not suckling effectively suckling effectively</li> </ul> </li> <li>➤ Clear a blocked nose if it interferes with breastfeeding.</li> <li>➤ Look for ulcers or white patches in the mouth (THRUSH).</li> </ul>	

	Not able to feed or No attachment at all or Not suckling at all. Very low weight for age	VERY LOW WEIGHT OR NOT ABLE TO FEED OR VERY SEVERE DISEASE OR POSSI- BLE SERIOUS BAC- TERIAL INFECTION	Give first dose of intramuscular antibiotics.     Treat to prevent low blood sugar.     Advise the mother how to keep the young infant warm on the way to the hospital.     Refer URGENTLY to hospital.
A A A AA	Not well attached to breast or Not suckling effec- tively or Less than 8 breast- feeds in 24 hours or Receives other foods or drinks or Low weight for age or Thrush (ulcers or white patches in mouth)	FEEDING PROBLEM OR LOW WEIGHT	<ul> <li>Advise the mother to breastfeed as often and for as long as the infant wants, day and night.</li> <li>If not well attached or not suckling effectively, teach correct positioning and attachment.</li> <li>If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding.</li> <li>If receiving other foods or drinks, counsel mother about exclusive breastfeeding and tell her to gradually reduce other foods or drinks and finally stop.</li> <li>If not breastfeeding at all:         <ul> <li>Refer for breastfeeding counseling and possible for possible relactation.</li> <li>Advise about correctly preparing breast milk substitutes and using a cup until breast feeding is established.</li> </ul> </li> <li>If thrush, teach the mother to treat thrush at home.</li> </ul>
1	Not low weight for age and no other signs of inade- quate feeding.	NO FEEDING PROBLEM	<ul> <li>Advise mother to give home care for the young infant.</li> <li>Praise the mother for feeding the infant well.</li> </ul>

# THEN ASK: Does the young infant have diarrhea?

#### > If infant does not have POSSIBLE SERIOUS BACTE-Two of the following signs: RIAL INFECTION: SEVERE - Give fluid for severe dehydration > Lethargic or uncon-**DEHYDRATION** (Plan C). scious Sunken eyes > If infant also has POSSIBLE SERIOUS BACTERIAL **DEHYDRATION** > Skin pinch goes back INFECTION: very slowly. - Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise mother IF YES. ASK: LOOK AND FEEL: to continue breastfeeding. • For how long? • Look at the young infant's general Two of the following signs: Give fluid; food and Zinc supplement for some condition. Is the infant: SOME dehydration (Plan B). • Is there blood in the Lethargic or unconscious? If infant also has POSSIBLE SERIOUS BACTE-> Restless, irritable **DEHYDRATION** stool? Restless and irritable? > Sunken eyes RIAL INFECTION: > Skin pinch goes back - Refer URGENTLY to hospital with mother • Look for sunken eyes. slowly. giving frequent sips of ORS on the way. Classify · Pinch the skin of the abdomen. > Advise mother to continue breastfeeding. DIARRHEA Does it go back: Very slowly (longer than 2 > Not enough signs to NO Give fluids, food and Zinc supplement to treat seconds)? classify as some or **DEHYDRATION** diarrhoea at home (Plan A). Slowly? severe dehydration. If the young infant is dehydrated, treat dehy-Diarrhoea lasting 7 dration before referral unless the infant has SEVERE days or more. and if diarrhoea also POSSIBLE SERIOUS BACTERIAL IN-**PERSISTENT** 7 days or more FECTION. **DIARRHOEA** Refer to hospital. What is diarrhea in young infant? If the stool have changed from usual pattern and are many and watery ( more water than fecal matter). The normally frequent or semi-solid stools of a breastfed baby are not diarrhea. ➤ Give first dose of intramuscular antibiotics Blood in the stool.. >Advise mother to keep the infant warm on and if blood Blood in the way to the hospital. in stool >Treat to prevent low blood sugar. stool ➤ Refer URGENTLY to hospital.

## THEN CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS.

Don't give oral polio for a baby who is more than 14 days old. Keep an interval of at least 4 weeks between OPV-0 and OPV-1

AGE VACCINE

IMMUNIZATION SCHEDULE:

Birth

BCG

OPV-0

6 weeks DPT - HBV - Hib - 1 OPV-1 RTV1 PCV1

## **ASSESS OTHER PROBLEMS**

## **ASSESS MOTHER'S HEALTH PROBLEMS**

## TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

# Give an Appropriate Oral Antibiotic

> For local bacterial infection:

> First-line antibiotic: AMOXYCILLIN

AGE or	AMOXYCILLIN Give three times daily for 5 days			
WEIGHT	Tablet 250 mg	Syrup 125 mg in 5 ml		
Birth up to 1 month (< 3 kg)		2.5ml		
1 month up to 2 months (3-4 kg)	1/4	5ml		

## TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

## GIVE THESE TREATMENTS IN CLINIC ONLY

#### > GIVE VITAMIN K TO ALL NEWBORNS IM STAT

Birth weight/Gestational age	Vitamin K- Dose:		
<1.5kg or < 32 weeks	0.5mg		
≥ 1.5kg or ≥ 32 weeks	1mg		

#### > Give First Dose of Intramuscular Antibiotics

> Give first dose of both benzylpenicillin and gentamicin intramuscular.

	GENTAMICIN Dose: 2.5 mg per kg			BENZYLPENICILLIN Dose: 50 000 units per kg		
	Undiluted 2 ml vial		Add 6 ml sterile water to 2 ml	To a vial of 600 mg (1 000 000 units):		(1 000 000 units):
WEIGHT	containing 20 mg = 2 ml at 10 mg/ml	OR	vial containing 80 mg* = 8 ml at 10 mg/ml	Add 2.1 ml sterile water = 2.5 ml at 400 000 units/ml	OR	Add 3.6 ml sterile water = 4.0 ml at 250 000 units/ml
1 kg		0.25 ml*		0.1 ml		0.2 ml
2 kg		0.50 ml*		0.2 ml		0.4 ml
3 kg		0.75 ml*		0.4 ml		0.6 ml
4 kg		1.00 ml*		0.5 ml		0.8 ml
5 kg		1.25 ml*		0.6 ml		1.0 ml

<sup>\*</sup> Avoid using undiluted 40 mg/ml gentamicin. The dose is 1/4 of that listed.

➤ Referral is the best option for a young infant classified with **VERY SEVERE DISEASE OR** POSSIBLE SERIOUS BACTERIAL INFECTION. If referral is not possible, give benzylpenicillin and gentamicin for at least 5 days. Give benzylpenicillin every 6 hours <u>plus</u> gentamicin every 8 hours. For infants in the first week of life, give gentamicin every 12 hours.

## TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

## ➤ To Treat Diarrhoea, See TREAT THE CHILD Chart.

## ➤ Immunize Every Sick Young Infant as Needed.

## ▶ Teach the Mother to Treat Local Infections at Home

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

#### To Treat Skin Pustules or Umbilical Infection

## The mother should:

- Wash hands
- > Gently wash off pus and crusts with soap and water
- > Dry the area
- > Paint with gentian violet
- Wash hands

## To Treat Thrush (ulcers or white patches in mouth)

#### The mother should:

- Wash hands
- Wash mouth with clean soft cloth wrapped around the finger and wet with salt water
- > Paint the mouth with half-strength gentian violet
- > Wash hands

## To Treat Eye Infections:

## The mother should:

- Wash hands.
- Clean the eyes using clean cloth and water by gently wiping away pus.
- Then apply tetracycline eye ointment in both eyes 2 times daily by squirting a small amount of ointment on the inside of the lower lid
- Wash hands again.
- · Treat until redness is gone.
- Do not use other eye ointments or drops, or put anything else in the eye.

# TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

# > Teach Correct Positioning and Attachment for Breastfeeding

- > 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.

# CARE OF THE LOW BIRTH WEIGHT NEWBORN

#### Tips to help a mother breastfeed her low birth weight baby

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

#### Expressing breastmilk (can take 20-30 minutes or longer in the beginning)

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

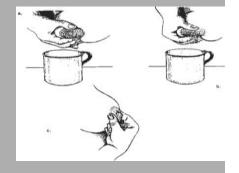
### TIPS for storing and using stored breastmilk

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

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

#### Show families how to cup feed

- Hold the baby closely sitting a little upright as shown in the picture
- · Hold a small cup half-filled to the babies lower lip
- . When the baby becomes awake and opens mouth, keep the cup at the baby's lips letting the baby take the milk
- Give the baby time to swallow and rest between sips
- . When the baby takes enough and refuses put to the shoulder & burp her/him by rubbing the back
- Measure baby's intake over 24 hours rather than at each feeding





# TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

#### KEEP THE YOUNG INFANT WARM

#### Warm the young infant using Skin-to-Skin contact (Kangaroo Mother Care)

Provide privacy to the mother. If mother is not available, Skin-to-skin contact may 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.

Place the baby prone on mother's chest in an upright and extended posture, between her breasts, in Skin-to-skin contact; turn baby's head to one side to keep airways clear. Keep the baby in this position for 24 hrs every day.

Cover the baby with mother's blouse, 'pallu' or gown; wrap the baby-mother together with an added blanket, "Gabi" or shawl.

Breastfeed the baby frequently.

If possible, warm the room

Provide follow-up

REASSESS after 1 hour:

- Check for signs of Possible Serious Bacterial Infection and
- Measure axillary temperature by placing the thermometer in the axilla for 5 minutes (or feel for low body temperature).

If any signs of very severe disease or Possible Serious Bacterial Infection OR temperature still below 36.5°C (or feels cold to touch):

- Refer URGENTLY to hospital after giving pre-referral treatments for very severe disease or Possible Serious Bacterial Infection.
- -If no sign of Possible Serious Bacterial Infection AND temperature 36.5°C or more (or is not cold to touch):
- Advise how to keep the infant warm at home.
- Advise mother to give home care.
- Advise mother when to return immediately.

If skin-to-skin contact is not possible:

- Dress the baby with extra clothing including hat, gloves and socks and cover the baby with blanket; hold the baby close to caregiver's body, OR
- Place the baby under overhead radiant warmer, if available.

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

#### Teach the mother how to keep the baby with low temperature warm at home(re-warming) using:-

- Skin to skin contact (Kangaroo Mother care-KMC) in as much as possible, day and night.
- If skin to skin conact is not possible, dress the baby with extra clothing including hat, gloves and socks and cover the body with a blanket .
- -Keep the baby in the same bed with the mother and change the clothes whenever they are wet.
- Avoid full bathing the baby for at least 24 hours

## Keep the young infant warm on the way to the hospital

- > By Skin-to-skin contact OR
- > Dressing the baby with extra clothing including hat, gloves and socks and cover the baby with blanket

# ➤ Advise Mother to Give Home Care for the Young Infant

FLUIDS

Breastfeed frequently, as often and for as long as the infant wants, day and night, during sickness and health.

#### > WHEN TO RETURN

#### Follow-up Visit

If the infant has:	Return for follow-up in:		
All newborns	6hrs, 2days, 7days		
Birth asphyxia	12hrs, 24hrs, 3days, 6weeks		
<ul> <li>Jaundice</li> </ul>	1day		
Low birth weight/preterm,     Low body temperature     LOCAL BACTERIAL INFECTION     ANY FEEDING PROBLEM     THRUSH	2days 2 days 2days 2days		
LOW WEIGHT FOR AGE	14 days		

#### When to Return Immediately:

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

Breastfeeding or drinking poorly
Becomes sicker
Develops a fever or
Stomach and axilla feel cold
Fast breathing
Difficult breathing
Jaundice increasing
Blood in stool

- > 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.
- MAKE SURE THE YOUNG INFANT IS EXPOSED TO DIRECT SUNSHINE DAILY.
- > ADVISE MOTHER TO AVOID HARMFUL TRADITIONAL PRACTICES INCLUDING UVULECTOMY, BLOOD LETTING, CAUTERIZATION AND USE OF INJESTANTS.
- > ADVICE MOTHER TO WASH HANDS BEFORE HANDLING THE BABY:

# GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

# PROVIDE 3 FOLLOW-UP VISITS FOR ALL NEWBORNS:

#### 6 hours visit

- > Check for danger signs in the newborn and in the mother.
- > Counsel mother/family to keep the baby warm.
- > Counsel mother/family on exclusive breastfeeding.
- > Check umbilicus for bleeding.
- > Counsel mother to keep umbilicus clean and dry and infection prevention actions.
- > Weigh newborn, if not weighed at birth.
- > Immunize newborn with OPV& BCG.
- > Give Vitamin K, if not given before.
- > Counsel the lactating mother to take at least 2 more varied meals than usual .

### 2 days visit

- > Check for danger signs in the newborn and in the mother.
- > Counsel and support exclusive breastfeeding .
- > Follow-up of kangaroo mother care.
- > Follow-up of counseling given during previous visits.
- > Counsel mother / family to protect baby from infection.
- > (e.g.hand washing, keeping cord clean and dry, keeping clean anything
- > that will touch the baby ,cloth, bedding, covers, and promote exclusive,
- breastfeeding, avoid harmful traditional practices.)
- > Immunize baby with OPV& BCG if not given before.

# 7 days visit

- > Check for danger signs in the baby.
- > Counsel and support exclusive breastfeeding
- > Immunize baby with OPV & BCG if not given before.
- > Counsel mother/father on the need of family planning
- > Counsel mother/ family to protect baby from infection (e.g. hand washing, keeping clean anything that will touch the baby cloth, bedding, covers, and promote exclusive breastfeeding, avoid harmful traditional practices.)

# GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

Assess every young infant for very severe disease or possible bacterial infection during follow-up visit also, If any new problem do full assessment.

### > 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 for eye discharge or redness.

Treatment:

- If pus or redness of the umbilicus or skin pustules remains or is worse, refer to hospital.
- > If *pus and redness of the umbilicus or skin pustules are improved*, tell the mother to continue giving the 5 days of antibiotic and continue treating the local infection at home.
- > If pus is draining form the eye, ask the mother to describe how she had treated the eye I infection.

If treatment has been correct, refer to the hospital.

If treatment has not been correct, teach mother correct treatment

If discharge is gone but redness remains, continue the treatment.

If no discharge or redness, stop the treatment

### > JAUNDICE

After 1 day:

Ask for new problems

Look for jaundice

Are the palms and soles yellow?

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

#### BIRTH ASPHYXIA

After 12 hrs, 24 hrs, 3 days Look for breathing problems:

- If breathing problem deteriorates, stimulate, give oxygen( if available), and refer.
- If the baby is breathing well and color is good, keep the baby warm by skin-to-skin contact for continued warmth, stimulation, and start breastfeeding as soon as possible. Defer the first full bath for at least 24 hours.
- > Continue follow-up as scheduled.

#### > LOW BIRTH WEIGHT/PRETERM, MILD HYPOTHERMIA

After 2 days

Weekly follow-up for low birth weight

- · Check for danger signs in the newborn
- · Counsel and support exclusive breastfeeding
- · Follow-up of kangaroo mother care
- · Follow-up of counseling given during previous visits
- Counsel mother/ family to protect baby from infection

# GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

### > FEEDING PROBLEM

After 2 days:

Reassess feeding. > See "Then Check for Feeding Problem or Low Weight" above.

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 again.
- 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

After 14 days:

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

Reassess feeding. > See "Then Check for Feeding Problem or Low Weight" above.

- > If the infant is *no longer low weight for age*, praise the mother and encourage her to continue.
- > 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 few 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

After 2 days:

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

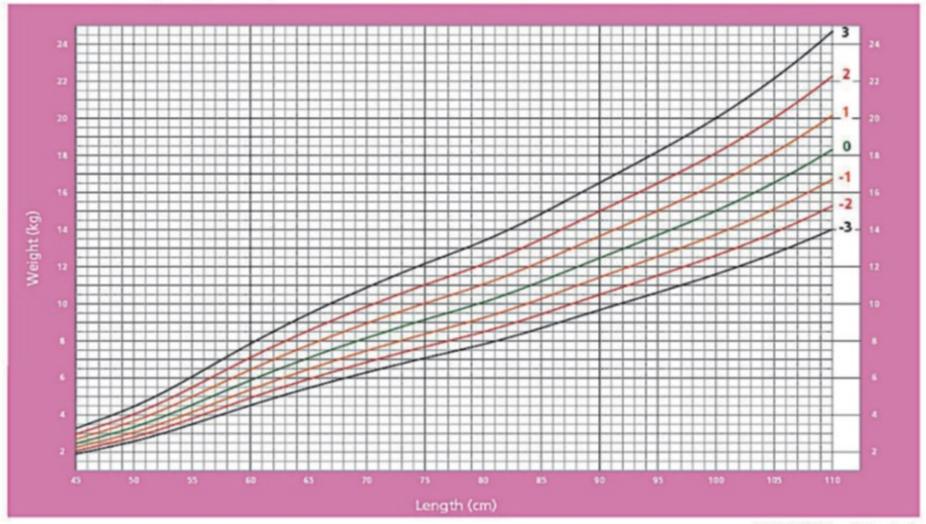
Reassess feeding. > See "Then Check for Feeding Problem or Low Weight" above.

- > If thrush is worse, or the infant has problems with attachment or suckling, refer to hospital.
- If thrush is the same or better, and if the infant is feeding well, continue half-strength gentian violet for a total of 5 days.

# Weight-for-length GIRLS

World Health Organization

Birth to 2 years (z-scores)

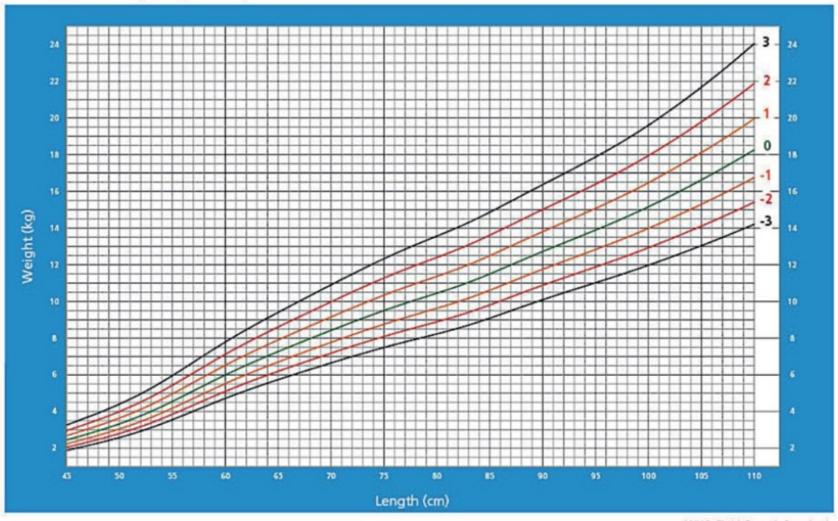


WHO Child Growth Standards

# **Weight-for-length BOYS**

Birth to 2 years (z-scores)

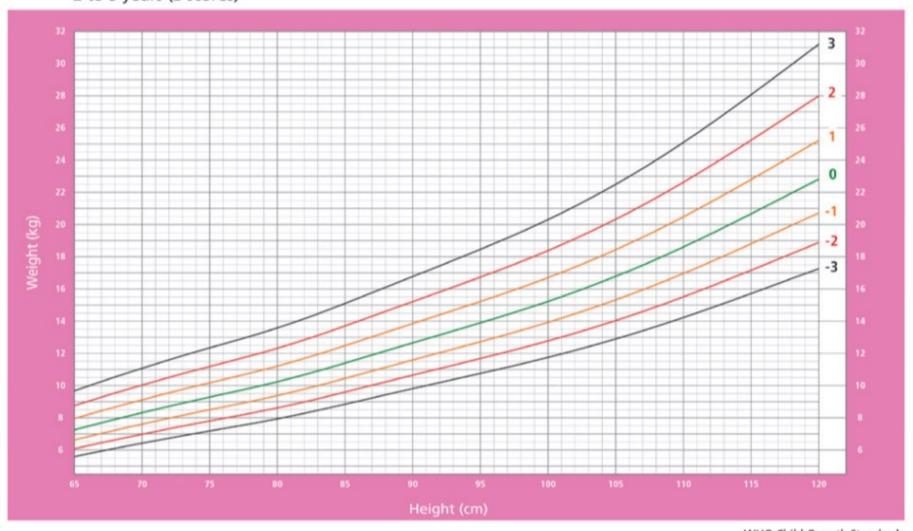




# **Weight-for-Height GIRLS**

World Health Organization

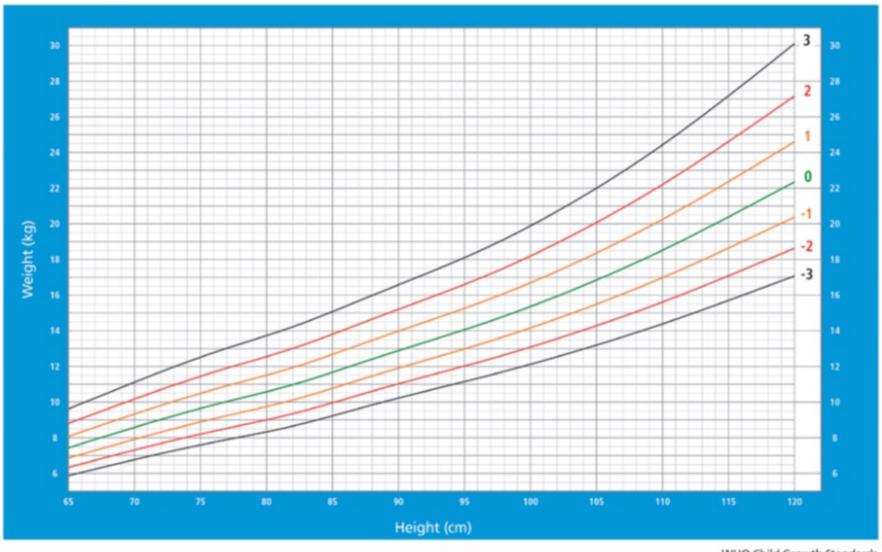
2 to 5 years (z-scores)



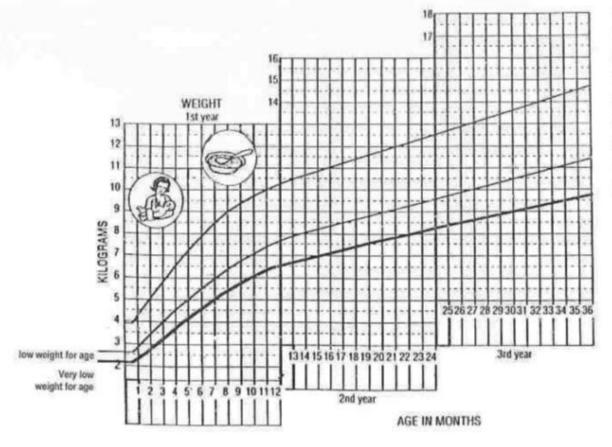
# **Weight-for-height BOYS**

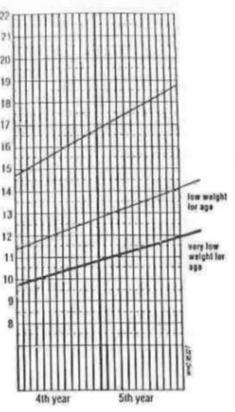
2 to 5 years (z-scores)





# WEIGHT FOR AGE CHART





RECORDING FORM

# TREAT

MANAGEMENT OF THE SICK YOUNG INFANT AGE OF TO 2 MONTHS	Date
Initial visit? Follow	rup Visit?
CHECK THE NEWBORN FOR BIRTH ASPHYXIA	-
Is the baby not breathing? OR     Not breathing. Not Breathing well or breathing <30/minute      Is the baby not crying?	
<ul> <li>Is the baby gasping?</li> <li>Count the breaths in one minute</li></ul>	
CHECK THE NEWBORN FOR BIRTH WEIGHT AND GESTATIONAL AGE	
<ul> <li>Ask for gestational ageweeks.</li></ul>	
Weigh the baby ( within 7days • <1.5kg 1.5kg - 2.5kg	
CHECK FOR VERY SEVERE DISEASE OR POSSIBLE BACTERIAL INFECTION	
Has the infant had	
<ul> <li>Look for apnea</li> <li>Look for central cyanosis</li> <li>Look and feel for bulging fontanel (infant must be calm)</li> <li>Look for puts draining from the ear.</li> <li>Look for eye discharge</li> <li>Is it profuse pusy discharge?</li> </ul>	
<ul> <li>Look at the unbilicus. is it red or draining pus? Does the redness extend to the skin?</li> <li>Measure axiliary temperature (or feel for fever or low body temperature).</li> <li>Look for skin pustules. Are there many or severe pustules?(&gt;0.5cm or with surrounding redness)?</li> <li>See if the young infant is lethargic or unconscious.</li> <li>See if the young infant is convulsing now.</li> <li>Look at the young infant's movements.</li> <li>Are they less than normal?</li> </ul>	
Any setup for bacterial infection?  Premature rupture of membrane, Prolonged rupture of membrane ( >18hrs), maternal fever, Offensive liquor  Yes No	
Does the infant have yellow eyes or skin?  Look for jaundice. Jaundice occurring within 24 hours? OR lasting > 2 weeks?  Look at the young infant's paims and soles. Are they yellow?	
DOES THE YOUNG INFANT HAVE DIARRHOEA?  Yes No	
- For how long?Days Look at the child's general condition ls the child: - Is there blood in the stools? Lethargic or unconscious? - Residess and irritable? - Look for sunken eyes Pinch the skin of the abdomen. Does it go back: - Very slowly (longer than 2 seconds)? - Slowly?	
THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT	
Is there any difficulty of feeding? Yes No	
If the infant has any difficulty feeding, is feeding less than 8 times in 24 hours, is taking any other food or drinks, or is low weight for age AND has no indications to refer urgently to hospital: Assess breast feeding  Has the infant breastfed in the previous  Infant's head 8 body straight. Yes  No	
¯ he	
Lower lip turned outward  More areola above than below the mouth Yes	
CHECK THE YOUNG INFANT'S IMMUNIZATION AND MOTHER'S VITAMIN A SUPPLEMENTATION STATUS (Circle immunizations needed today).  BCG DPT1 DPT1 HIB1 HiB2 HB1 HB2 MOTHER'S VITAMIN A	
OPV0 OPV1 OPV2 PCV1 PCV 2 RTV1 RTV2 SUPPLEMENTATION	
ASSESS OTHER PROBLEMS ASSESS MOTHER'S HEALTH PROBLEMS	

Return for follow-up in Give any immunizations or vitamin A Supplement needed today:		

