Government of the People's Republic of Bangladesh

IMCI

Chart Booklet-2019

স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

World Health Organization

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Save the Children

icddr,b

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Available at: https://www.healthnetbd.com/imci

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

SICK CHILD
AGE 2 MONTHS UP TO 5 YEARS

ASSESS AND CLASSIFY THE SICK CHILD

Assess, Classify and Identify Treatment

TREAT THE CHILD

Teach the Mother to Give Oral Drugs at Home

Teach the Mother to Treat Local Infections at Home

TREAT THE CHILD, continued

Give Extra Fluid for Diarrhoea and Continue Feeding

Give These Treatments in the Clinic Only

Give Follow-up Care

COUNSEL THE MOTHER

Feeding Counselling

Extra Fluids and Mother's Health

When to Return

SICK YOUNG INFANT
AGED UP TO 2 MONTHS

ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT

Assess, Classify and Identify Treatment

Treat the Young Infant and Counsel the Mother

Give Follow-up Care for the Sick Young Infant

Register Forms

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

ASSESS CLASSIFY IDENTIFY TREATMENT

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

GREET THE MOTHER/CAREGIVER
ASK WHAT THE CHILD'S PROBLEMS ARE
Determine if this is an initial or follow-up visit for this problem
- if a follow-up visit, use the follow-up instructions
- if an initial visit, assess the child as follows:

CHECK FOR GENERAL DANGER SIGNS

ASK:	LOOK:		SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Is the child able to drink or breastfeed? • Does the child vomit everything? • Has the child had convulsions?	• See if the child is lethargic or unconscious • Is the child convulsing now?	**URGENT attention**	• Any general danger sign	***Pink:*** **VERY SEVERE DISEASE**	➢ **Give Diazepam if convulsing now** ➢ **Quickly complete the assessment** ➢ **Give any pre-referral treatment immediately** ➢ **Treat to prevent low blood sugar** ➢ **Keep the child warm** ➢ **Refer URGENTLY to hospital**

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

** 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*

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK:

- For how long?

LOOK LISTEN & MEASURE[1]:

- Count the breaths in one minute
- Look for chest indrawing
- Look and listen for stridor
- Look and listen for wheezing
- Measure arterial oxygen saturation (SpO_2) level with pulse oximeter

CHILD MUST BE CALM

Classify COUGH or DIFFICULT BREATHING

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

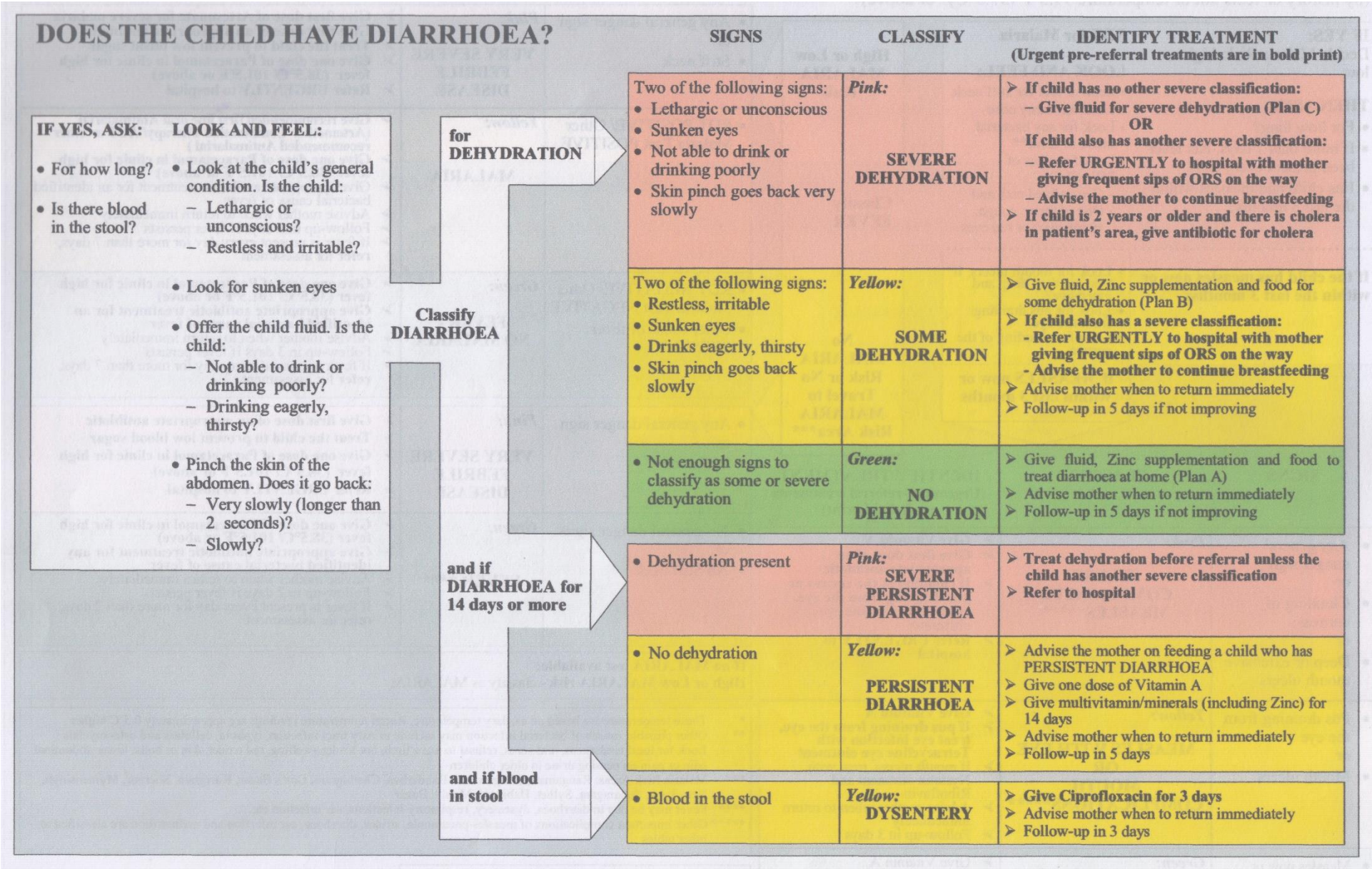
GENERAL DANGER SIGNS:

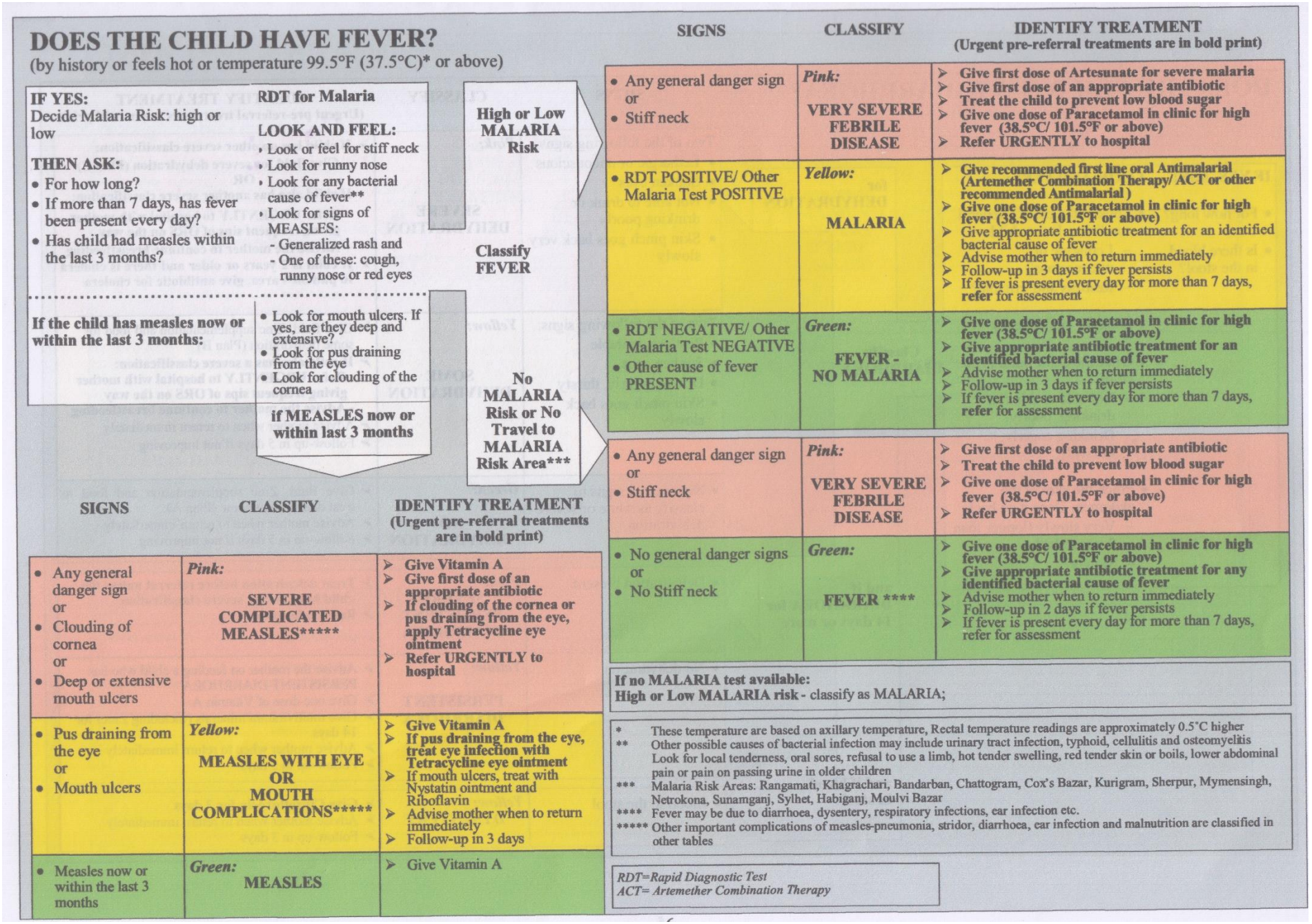
- **The child is unable to drink or breastfeed**
- **The child vomits everything**
- **The child had convulsions**
- **The child is lethargic or unconscious**
- **The child is convulsing now**

If the child is:	Fast breathing is:
2 months up to 11 months	50 breaths per minute or more
12 months up to 5 years	40 breaths per minute or more

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stridor in calm child or • Oxygen saturation (SpO_2) <90%	*Pink:* **SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Refer URGENTLY to hospital** ➢ **Give Diazepam if convulsing now** ➢ **Give inhaled Salbutamol if wheezing**
• Chest indrawing or • Fast breathing	*Yellow:* **PNEUMONIA**	➢ **Give oral Amoxicillin for 5 days[2]** ➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaler Salbutamol for 5 days[3] ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheeze, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 3 days
• No signs of pneumonia or very severe disease	*Green:* **COUGH OR COLD**	➢ If wheezing (or disappeared after inhaler Salbutamol) give an inhaled Salbutamol for 5 days ➢ Soothe the throat and relieve the cough with a safe remedy ➢ If coughing for more than 14 days or recurrent wheezing, **refer** for possible TB or asthma assessment ➢ Advise mother when to return immediately ➢ Follow-up in 5 days if not improving

1. If pulse oximeter is not available, determine by only 'ASK' 'LOOK' &'LISTEN'
2. Dispersible Amoxicillin (Amoxicillin DT) as first line drugs in the treatment of pneumonia if not available then Amoxicillin syrup is recommended
3. In settings where inhaled Salbutamol is not available, syrup Salbutamol may be tried but not recommended for treatment of severe acute wheeze


DOES THE CHILD HAVE DIARRHOEA?
IF YES, ASK:
• For how long?
• Is there blood in the stool?
LOOK AND FEEL:
• Look at the child's general condition. Is the child:
– Lethargic or unconscious?
– Restless and irritable?
• Look for sunken eyes
• Offer the child fluid. Is the child:
– Not able to drink or drinking poorly?
– Drinking eagerly, thirsty?
• Pinch the skin of the abdomen. Does it go back:
– Very slowly (longer than 2 seconds)?
– Slowly?
Classify DIARRHOEA
for DEHYDRATION
and if DIARRHOEA for 14 days or more
and if blood in stool
SIGNS
CLASSIFY
IDENTIFY TREATMENT
(Urgent pre-referral treatments are in bold print)
Two of the following signs:
• Lethargic or unconscious
• Sunken eyes
• Not able to drink or drinking poorly
• Skin pinch goes back very slowly
Pink:
SEVERE DEHYDRATION
➢ If child has no other severe classification:
– Give fluid for severe dehydration (Plan C)
OR
If child also has another severe classification:
– Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way
– Advise the mother to continue breastfeeding
➢ If child is 2 years or older and there is cholera in patient's area, give antibiotic for cholera
Two of the following signs:
• Restless, irritable
• Sunken eyes
• Drinks eagerly, thirsty
• Skin pinch goes back slowly
Yellow:
SOME DEHYDRATION
➢ Give fluid, Zinc supplementation and food for some dehydration (Plan B)
➢ If child also has a severe classification:
- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way
- Advise the mother to continue breastfeeding
➢ Advise mother when to return immediately
➢ Follow-up in 5 days if not improving
• Not enough signs to classify as some or severe dehydration
Green:
NO DEHYDRATION
➢ Give fluid, Zinc supplementation and food to treat diarrhoea at home (Plan A)
➢ Advise mother when to return immediately
➢ Follow-up in 5 days if not improving
• Dehydration present
Pink:
SEVERE PERSISTENT DIARRHOEA
➢ Treat dehydration before referral unless the child has another severe classification
➢ Refer to hospital
• No dehydration
Yellow:
PERSISTENT DIARRHOEA
➢ Advise the mother on feeding a child who has PERSISTENT DIARRHOEA
➢ Give one dose of Vitamin A
➢ Give multivitamin/minerals (including Zinc) for 14 days
➢ Advise mother when to return immediately
➢ Follow-up in 5 days
• Blood in the stool
Yellow:
DYSENTERY
➢ Give Ciprofloxacin for 3 days
➢ Advise mother when to return immediately
➢ Follow-up in 3 days


DOES THE CHILD HAVE FEVER?
(by history or feels hot or temperature 99.5°F (37.5°C)* or above)
IF YES:
Decide Malaria Risk: high or low
THEN ASK:
• For how long?
• If more than 7 days, has fever been present every day?
• Has child had measles within the last 3 months?
RDT for Malaria
LOOK AND FEEL:
› Look or feel for stiff neck
› Look for runny nose
› Look for any bacterial cause of fever**
› Look for signs of MEASLES:
- Generalized rash and
- One of these: cough, runny nose or red eyes
High or Low MALARIA Risk
Classify FEVER
If the child has measles now or within the last 3 months:
• Look for mouth ulcers. If yes, are they deep and extensive?
• Look for pus draining from the eye
• Look for clouding of the cornea
if MEASLES now or within last 3 months
No MALARIA Risk or No Travel to MALARIA Risk Area***
SIGNS
CLASSIFY
IDENTIFY TREATMENT
(Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stiff neck
Pink: VERY SEVERE FEBRILE DISEASE
➢ Give first dose of Artesunate for severe malaria
➢ Give first dose of an appropriate antibiotic
➢ Treat the child to prevent low blood sugar
➢ Give one dose of Paracetamol in clinic for high fever (38.5°C/ 101.5°F or above)
➢ Refer URGENTLY to hospital
• RDT POSITIVE/ Other Malaria Test POSITIVE
Yellow: MALARIA
➢ Give recommended first line oral Antimalarial (Artemether Combination Therapy/ ACT or other recommended Antimalarial)
➢ Give one dose of Paracetamol in clinic for high fever (38.5°C/ 101.5°F or above)
➢ Give appropriate antibiotic treatment for an identified bacterial cause of fever
➢ 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, refer for assessment
• RDT NEGATIVE/ Other Malaria Test NEGATIVE • Other cause of fever PRESENT
Green: FEVER - NO MALARIA
➢ Give one dose of Paracetamol in clinic for high fever (38.5°C/ 101.5°F or above)
➢ Give appropriate antibiotic treatment for an identified bacterial cause of fever
➢ 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, refer for assessment
SIGNS
CLASSIFY
IDENTIFY TREATMENT
(Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Stiff neck
Pink: VERY SEVERE FEBRILE DISEASE
➢ Give first dose of an appropriate antibiotic
➢ Treat the child to prevent low blood sugar
➢ Give one dose of Paracetamol in clinic for high fever (38.5°C/ 101.5°F or above)
➢ Refer URGENTLY to hospital
• No general danger signs or • No Stiff neck
Green: FEVER ****
➢ Give one dose of Paracetamol in clinic for high fever (38.5°C/ 101.5°F or above)
➢ Give appropriate antibiotic treatment for any identified bacterial cause of fever
➢ Advise mother when to return immediately
➢ Follow-up in 2 days if fever persists
➢ If fever is present every day for more than 7 days, refer for assessment
• Any general danger sign or • Clouding of cornea or • Deep or extensive mouth ulcers
Pink: SEVERE COMPLICATED MEASLES*****
➢ Give Vitamin A
➢ Give first dose of an appropriate antibiotic
➢ If clouding of the cornea or pus draining from the eye, apply Tetracycline eye ointment
➢ Refer URGENTLY to hospital
• Pus draining from the eye or • Mouth ulcers
Yellow: MEASLES WITH EYE OR MOUTH COMPLICATIONS*****
➢ Give Vitamin A
➢ If pus draining from the eye, treat eye infection with Tetracycline eye ointment
➢ If mouth ulcers, treat with Nystatin ointment and Riboflavin
➢ Advise mother when to return immediately
➢ Follow-up in 3 days
• Measles now or within the last 3 months
Green: MEASLES
➢ Give Vitamin A
If no MALARIA test available:
High or Low MALARIA risk - classify as MALARIA;
* These temperature are based on axillary temperature, Rectal temperature readings are approximately 0.5°C higher
** Other possible causes of bacterial infection may include urinary tract infection, typhoid, cellulitis and osteomyelitis Look for local tenderness, oral sores, refusal to use a limb, hot tender swelling, red tender skin or boils, lower abdominal pain or pain on passing urine in older children
*** Malaria Risk Areas: Rangamati, Khagrachari, Bandarban, Chattogram, Cox's Bazar, Kurigram, Sherpur, Mymensingh, Netrokona, Sunamganj, Sylhet, Habiganj, Moulvi Bazar
**** Fever may be due to diarrhoea, dysentery, respiratory infections, ear infection etc.
***** Other important complications of measles-pneumonia, stridor, diarrhoea, ear infection and malnutrition are classified in other tables
RDT=Rapid Diagnostic Test
ACT= Artemether Combination Therapy

DOES THE CHILD HAVE AN EAR PROBLEM?

IF YES, ASK:

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

LOOK AND FEEL:

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

Classify EAR ROBLEM

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Tender swelling behind the ear	*Pink:* MASTOIDITIS	➢ **Give first dose of an appropriate antibiotic** ➢ **Give first dose of Paracetamol for pain** ➢ **Refer URGENTLY to hospital**
• Ear pain or • Pus is seen draining from the ear and discharge is reported for less than 14 days	*Yellow:* ACUTE EAR INFECTION	➢ **Give an antibiotic for 5 days** ➢ **Give Paracetamol for pain** ➢ Dry the ear by wicking ➢ Advise mother when to return immediately ➢ Follow-up in 5 days
• Pus is seen draining from the ear and discharge is reported for 14 days or more	*Yellow:* CHRONIC EAR INFECTION	➢ Dry the ear by wicking ➢ Treat with topical quinolone ear drops for 14 days ➢ Advise mother when to return immediately ➢ Follow-up in 5 days
• No ear pain and • No pus seen draining from the ear	*Green:* NO EAR INFECTION	➢ No treatment

THEN CHECK FOR MALNUTRITION

CHECK FOR MALNUTRITION

LOOK AND FEEL:

- Look for signs of acute malnutrition
- Look for oedema of both feet
- Determine WFH/L*___ (z score)
  or
- Measure MUAC** _____mm in a child 6 months or older

If WFH/L less than -3 z-scores or MUAC less than 115 mm, then:

- **Check for any medical complication present:**
  - Any general danger signs
  - Any severe classification
  - Pneumonia with chest indrawing
- **If no medical complications present:**
  - **Child is 6 months or older, offer Nutrition therapy*** to eat. Is the child:**
    - Not able to finish Nutrition therapy?
    - Able to finish Nutrition therapy?
  - **Child is less than 6 months, assess breastfeeding:**
    - Does the child have a breastfeeding problem?

Classify NUTRITIONAL STATUS

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

• Oedema of both feet
or
• WFH/L less than –3 z-scores
or
• MUAC less than 115mm and any one of the following:
  • Medical complication present
  or
  • Not able to finish Nutritional therapy
  or
  • Breastfeeding problem
	Pink:
	COMPLICATED SEVERE ACUTE MALNUTRITION
		➢ **Give first dose of appropriate antibiotic**
		➢ **Treat the child to prevent low blood sugar**
		➢ **Keep the child warm**
		➢ **Refer URGENTLY to hospital**

• WFH/L less than –3 z-scores or • MUAC less than 115 mm and • Able to finish nutrition therapy	***Yellow:*** **UNCOMPLICATED SEVERE ACUTE MALNUTRITION**	➢ Give oral antibiotics for 5 days ➢ Give Nutrition Therapy for a child aged 6 months or more ➢ Counsel the mother on how to feed the child ➢ Assess for possible TB infection ➢ Advise mother when to return immediately ➢ Follow up in 7 days
• WFH/L between –3 and –2 z-scores or • MUAC 115 up to 125 mm	***Yellow:*** **MODERATE ACUTE MALNUTRITION**	➢ Assess the child's feeding and counsel the mother on the feeding recommendations ➢ If feeding problem, follow up in 7 days ➢ Assess for possible TB infection ➢ Advise mother when to return immediately ➢ Follow-up in 30 days
• WFH/L –2 z-scores or more or • MUAC 125 mm or more	***Green:*** **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 ➢ Advise mother when to return immediately ➢ If feeding problem, follow-up in 7 days

* WFH/L is Weight-for-Height or Weight-for-Length determined by using the WHO growth standard charts
** MUAC is Mid-Upper Arm Circumference measure using MUAC tape in all children 6 months or older
*** Give nutrition therapy as per National Nutrition guideline

THEN CHECK FOR ANAEMIA

LOOK :

- Look for palmar pallor*
  Is it:
  - Severe palmar pallor?
  - Some palmar pallor?

Classify ANAEMIA

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Severe palmar pallor	***Pink:*** **SEVERE ANAEMIA**	➢ **Refer URGENTLY to hospital**
• Some palmar pallor	***Yellow:*** **ANAEMIA**	➢ Give iron** or Multiple Micro-Nutrient ➢ Give Mebendazole/ Albendazole if child is 1 year or older and has not had a dose in the previous 6 months ➢ Advise mother when to return immediately ➢ Follow-up in 14 days
• No palmar pallor	***Green:*** **NO ANAEMIA**	➢ If child is less than 2 years old, assess the child's feeding and counsel the mother according to the feeding recommendations ➢ Provide Iron Folate (IFA) or Multivitamin Micronutrient (MMN) if the child is 6 months or older ➢ If feeding problem, follow-up in 5 days

* Assess for sickle cell anaemia if common in your area
** If child has severe acute malnutrition and is receiving Nutritional Therapy, DO NOT give iron because there is already adequate amount of iron in Nutritional Therapy

THEN CHECK THE CHILD'S IMMUNIZATION, VITAMIN 'A' SUPPLEMENTATION AND DEWORMING STATUS AND TAKE NECESSARY MEASURES

IMMUNIZATION SCHEDULE: *According to Bangladesh national guidelines*

AGE	VACCINE
Birth	BCG + OPV-0
6 weeks	Penta-1 + OPV-1 + PCV-1 + IPV
10 weeks	Penta-2 + OPV-2 + PCV-2
14 weeks	Penta-3 + OPV-3 + PCV-3 + IPV
9 months	MR-1
15 months	MR-2

DEWORMING

Give every child Mebendazole or Albendazole every 6 months from the age of one year. Record the dose on the child's card.

Give Mebendazole or Albendazole

Give Mebendazole or Albendazole as a single dose in clinic if the child is 1 year of age or older, and has not had a dose in previous 6 months.

AGE	Mebendazole Dose	Albendazole Dose
1- 2 year	500 mg	200 mg
2- 5 year	500 mg	400 mg

VITAMIN 'A' SUPPLEMENTATION

Give every child a dose of Vitamin 'A' every 6 months from the age of 6 months. Record the dose on the child's card.

VITAMIN 'A' TREATMENT

- Give an extra dose* of Vitamin 'A' (same dose as for supplementation) as part of **treatment** if the child has:
  - **MEASLES or PERSISTENT DIARRHOEA**
- If the child has had a dose of Vitamin 'A' within the past month, DO NOT GIVE VITAMIN 'A'

AGE	VITAMIN 'A' Dose
6 months up to 12 months	100,000 IU
One year and older	200,000 IU

- Always record the dose of Vitamin 'A' given on the child's card

* *PROPHYLACTIC MMN/MNP*

(Multivitamin Micronutrient/ Iron Folic Acid)

Give 1 sachet of MMN or 20 mg elemental iron + 100 mcg folic acid (one tablet of Pediatric IFA or 5 ml of IFA syrup or 1 ml of IFA drops) for a total of 100 days in a year after the child has recovered from acute illness if :

- The child 6 months of age or older, and
- Has not recieved Pediatric IFA Tablet/syrup/drops for 100 days in last year

Multiple Micro-nutrient

AGE	MMN/MNP Sachets (Fe 12.5 mg, Zn 5 mg, Vitamin A 300 micro gram, Folic Acid 160 micro-gram and Vitamin C 50 mg)
6 months up to 5 years	1 sachet every alternate day – total 60 sachets in 4 months. May be repeated after 6 months to prevent recurrence.

Give Iron or Multiple Micro-nutrient

- Give one dose daily for 14 days

AGE or WEIGHT	IRON/FOLATE Tablet Ferrous Sulfate 200 mg + 250 µg Folate (60 mg elemental iron)	IRON Syrup Ferrous Fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 - <6 kg)		1.0 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	2.0 ml (<1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)

Give MULTIVITAMIN supplement for persistent diarrhoea

Give one dose of multivitamin mixture for 10 days and also give one dose of Vitamin A in health facility/hospital.

IMMUNIZE EVERY SICK CHILD, AS NEEDED

ASSESS OTHER PROBLEMS AND REFER IF NEEDED

*National Strategy on Prevention and Control of Micronutrient Deficiencies Bangladesh (2015-2024)

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 practise 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 tablets or syrup 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 SEVERE PNEUMONIA or VERY SEVERE DISEASE, PNEUMONIA, ACUTE EAR INFECTION, SEVERE MALNUTRITION, DYSENTERY and CHOLERA

SEVERE PNEUMONIA OR VERY SEVERE DISEASE, PNEUMONIA

AGE or WEIGHT	AMOXYCILLIN Give two times daily for 5 days	
	Tablet/ Dispersible Tablet 250 mg	Syrup 125 mg per 5 ml
2 months up to 12 months (4 - <10 kg)	1	6 - 15 ml
12 months up to 3 years (10 - <14 kg)	2	15 - 20 ml
3 years up to 5 years (14 - <19 kg)	3	20 - 30 ml

ACUTE EAR INFECTION

First line antibiotic: AMOXICILLIN
Second line antibiotic: COTRIMOXAZOLE

AGE or WEIGHT	AMOXYCILLIN Give Two times daily for 5 days	
	Tablet/ Dispersible Tablet 250 mg	Syrup 125 mg per 5 ml
2 months up to 12 months (4 - <10 kg)	1	6 - 15 ml
12 months up to 3 years (10 - <14 kg)	2	15 - 20 ml
3 years up to 5 years (10 - <19 kg)	3	20 - 30 ml

AGE or WEIGHT	COTRIMOXAZOLE (Trimethoprim + Sulphamethoxazole) Give two times daily for 5 days		
	Adult Tablet 80 mg Trimethoprim + 400 mg Sulphamethoxazole	Pediatric Tablet 20 mg Trimethoprim + 100 mg Sulphamethoxazole	Syrup 40 mg Trimethoprim + 200 mg Sulphamethoxazole per 5 ml
2 months up to 12 months (4 - <10 kg)	1/2	2	5.0 ml
12 months up to 5 years (10 - <19 kg)	1	3	7.5 ml

SEVERE MALNUTRITION

AGE or WEIGHT	AMOXYCILLIN Give two times daily for 5 days	
	Tablet/ Dispersible Tablet 250 mg	Syrup 125 mg per 5 ml
2 months up to 12 months (4 - <10 kg)	1	6 - 15 ml
12 months up to 3 years (10 - <14 kg)	2	15 - 20 ml
3 years up to 5 years (14 - <19 kg)	3	20 - 30 ml

DYSENTERY

AGE or WEIGHT	CIPROFLOXACIN (15 mg/kg) Give two times daily for 3 days
	Tablet 250 mg
2 months up to 4 months (4 - <6 kg)	1/4
4 months up to 3 years (6 - <14kg)	1/2
3 years up to 5 years (14 - <19 kg)	1

CHOLERA

First line Antibiotic: TETRACYCLINE
Second line Antibiotic : ERYTHROMYCINE

AGE or WEIGHT	TETRACYCLINE Give four times daily for 3 days	ERYTHROMYCINE Give four times daily for 3 days
	Capsule 250 mg	Tablet 250 mg
2 years up to 5 years (10 - 19 kg)	1	1

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

GIVE INHALED SALBUTAMOL for WHEEZING

USE OF A SPACER*

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

- From Salbutamol metered dose inhaler (100 µg/puff) give 2 puffs
- Repeat up to 3 times every 20 minutes before classifying pneumonia

Spacers can be made in the following way:

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

To use an inhaler with a spacer:

- Remove the inhaler cap. Shake the inhaler well
- Insert mouthpiece of the inhaler through the hole in the bottle or plastic cup
- The child should put the opening of the bottle into his mouth and breath in and out through the mouth
- A carer then presses down the inhaler and sprays into the bottle while the child continues to breath normally
- Wait for three to four breaths and repeat for total of five sprays
- For younger children place the cup over the child's mouth and use as a spacer in the same way
- If wheezing , give inhaled Salbutamol three times twenty minutes apart. If the baby does not respond, do not use inhaled Sulbutamol

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

AGE	SALBUTAMOL	
	Tablet 2 mg	Syrup 2 mg/5 ml
Up to 1 year	1/2	2.5 ml
1 year up to 5 years	1	5 ml

Note: Once the child has improved and there is no inhaled salbutamol available or affordable, then oral salbutamol (in syrup or tablets) can be given 6 to 8 hourly

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

Give Oral Antimalarials

Give Oral Artemether Combination Therapy (ACT) or Other Recommended Antimalarial

FALCIPARUM MALARIA: If RDT or blood smear positive for *Plasmodium falciparum*

- Give the first dose of ACT in the clinic and observe for one hour. If child vomits within an hour repeat the dose. 2nd dose at home after 8 hours
- Then twice daily for further two days as shown below
- ACT should be taken with food

AGE or WEIGHT	Co-artemether (20 mg Artemether and 120 mg Lumefantrine)					
	Day-1		Day-2		Day-3	
WEIGHT	0 hr	8 hr	24 hr	36 hr	48 hr	60 hr
5 - <15 kg (5 months up to 3 years)	1	1	1	1	1	1
15 - <20 kg (3 years up to 5 years)	2	2	2	2	2	2

VIVAX MALARIA: If blood smear for PV positive

AGE or WEIGHT	Chloroquine						Primaquine
	Day 1		Day 2		Day 3		Give daily for 14 days
	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 2.5 mg
2 months up to 12 months (4 - <10 kg)	1/2	7.5 ml	1/2	7.5 ml	1/4	4 ml	0
12 months up to 5 yrs (10-19 kg)	1	15 ml	1	15 ml	1/2	7.5 ml	1

If both RDT and blood smear not available, give Chloroquine

AGE or WEIGHT	Day 1		Day 2		Day 3	
	Chloroquine		Chloroquine		Chloroquine	
	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml	Tablet 150 mg	Syrup 50 mg base per 5 ml
2 months up to 12 months (4 - <10 kg)	1/2	7.5 ml	1/2	7.5 ml	1/4	4 ml
12 months up to 5 yrs (10 - 19 kg)	1	15 ml	1	15 ml	1/2	7.5 ml

Note: RDT should be method of choice for definitive diagnosis. Presumptive treatment is discouraged.

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 for 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**
- **Check the mothers understanding before she leaves the clinic**

Soothe the Throat, Relieve the Cough with a Safe Remedy

➢ **Safe remedies to recommend**
- Breast milk for exclusively breastfed infant
- Warm water
- Tulsi leaf juice
- Lemon juice

➢ **Harmful remedies to discourage**
- Medicines containing codeine, anti-histamines and alcohol

Treat Thrush with Nystatin

➢ **Treat thrush four times daily for 7 days**
- Wash hands
- Wet a clean soft cloth with salt water and use it to wash the child's mouth
- Give 1 ml Nystatin four times a day
- Avoid feeding for 20 minutes after medication
- If breastfed check mother's breast for thrush. If present, treat with Nystatin
- Advise mother to wash breasts after feeds. If bottle fed advise change to cup and spoon
- Give Paracetamol if needed for pain

Treat Eye Infection with Tetracycline Eye Ointment

➢ **Clean both eyes four times daily**
- Wash hands
- Use clean cloth and water to gently wipe away pus

➢ **Then apply Tetracycline eye ointment in both eyes four times daily**
- Squirt a small amount of ointment on the inside of the lower lid
- Wash hands again

➢ **Treat until there is no pus discharge**

➢ **Do not put anything else in the eye**

Clear the Ear by Dry Wicking and Give Eardrops

➢ **Do the following three 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
- Instil Quinolone* eardrops for two weeks

➢ **Avoid swimming/entry of water in the ear**

* Quinolone eardrops may contain Ciprofloxacin, Norfloxacin, or Ofloxacin

Treat Mouth Ulcers with Nystatin and Riboflavin

➢ **Treat the mouth ulcers twice daily**
- Wash hands
- Wash the child's mouth with a clean soft cloth wrapped around the finger and wet with salt water
- Paint the mouth with Nystatin
- Wash hands again
- Give Riboflovin
- Give Paracetamol for pain relief

Give Paracetamol for High Fever (≥ 38.5°C or ≥101.5°F) or Ear Pain

- Give a single dose of Paracetamol in the clinic
- Give 3 additional doses of Paracetamol for use at home every six hours until high fever or ear pain is gone

PARACETAMOL		
AGE or WEIGHT	**Syrup** 125 mg	**Tablet** 500 mg
2 months up to 3 years (4 - <14 kg)	5 ml	1/4
3 years up to 5 years (14 - <19 kg)	10 ml	1/2

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:

1. Give Extra Fluid
2. Give Zinc Supplements (age 2 months up to 5 years)
3. Continue Feeding
4. 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 breast milk
- If the child is not exclusively breastfed, give one or more of the following: ORS solution, food-based fluids (such as rice water, chira pani, yogurt drink) 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:**

AGE	Amount of fluid
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 (age 2 months up to 5 years)

➢ For Severe Diarrhaoea, Persistent Diarrhoea and Dysentery, give Zinc Supplementation

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

AGE	ZINC Tablet	DURATION
	20 mg	
2 months up to 6 months (Persistent Diarrhoea)	1/2	10 days
6 months up to 5 years	1	10 days

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

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

3. CONTINUE FEEDING (exclusive breastfeeding if age less than 6 months)

4. WHEN TO RETURN

PLAN 'B': TREAT SOME DEHYDRATION WITH ORS

In clinic, recommended amount of ORS over 4-hour period

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

WEIGHT	< 6 kg	6 - < 10 kg	10 - < 12 kg	12 - < 20 kg
AGE*	Up to 4 months	4 months up to 12 months	12 months up to 2 years	2 years up to 5 years
Amount of fluid (ml) over 4 hours	200 - 450	450 - 800	800 - 960	960 - 1600

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

- If the child wants more ORS than shown, give more
- For infants under 6 months who are not breastfed, also give 100 - 200 ml clean water during this period if you use standard ORS. This is not needed if you use new low osmolarity ORS

➢ **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 instructions how to prepare salt and sugar/gur solutions at home (if ORS not available)
- Explain the 4 Rules of Home Treatment:

1. GIVE EXTRA FLUID
2. GIVE ZINC (age 2 months up to 5 years)
3. CONTINUE FEEDING (exclusive breastfeeding if age less than 6 months)
4. WHEN TO RETURN

GIVE THESE TREATMENTS IN THE CLINIC ONLY

(Give Extra Fluid for Diarrhoea and Continue Feeding)

PLAN C: TREAT SEVERE DEHYDRATION QUICKLY

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

START HERE

Can you give intravenous (IV) fluid immediately? — YES →

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

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

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

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

NO ↓

Is IV treatment available nearby (within 30 minutes)? — YES →

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

NO ↓

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

NO ↓

Can the child drink? — YES →

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

NO ↓

Refer URGENTLY to hospital for IV or NG treatment

NOTE:

- If the child is not referred to hospital, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth
- Provide maintenance fluid for ongoing purging

Give MULTIVITAMIN supplement for persistent diarrhoea

- Give one dose of Multivitamin mixture for 10 days and give also one dose of Vitamin 'A' in health facility/hospital

- **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 THESE TREATMENTS IN THE 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 when giving an injection**
- **Measure the dose accurately**
- **Give the drug as an intramuscular injection**
- **If the child cannot be referred, follow the instructions provided**

Give Intramuscular Antibiotic

GIVE TO CHILDREN BEING REFERRED URGENTLY

GENTAMICIN

- **Use undiluted 2 ml vial (80 mg/ 2 ml)**
- **Of the dose range provided below, use lower dose for children with weight at lower end of the category, and higher dose for children at the higher end of the category**

IF REFERRAL IS NOT POSSIBLE OR DELAYED, repeat the Gentamicin injection once daily for 2 days

AGE	WEIGHT	GENTAMICIN 2 ml vial at 80 mg/ 2 ml
2 up to 4 months	4 – <6 kg	0.5 - 1.0 ml
4 up to 12 months	6 – <10 kg	1.1 - 1.8 ml
1 year up to 3 years	10 – <15 kg	1.9 - 2.7 ml
3 years up to 5 years	15 – 20 kg	2.8 - 3.5 ml

Treat the Child to Prevent Low Blood Sugar during transportation/referral

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 breast-milk substitute
- If neither of these is available give sugar water
- Give 30-50 ml of milk or sugar water before departure

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

If the child is not able to swallow:

- Give 50 ml of milk or sugar water by Naso-Gastric tube
- If NG tube is not available, give one teaspoon of sugar moistened with 1-2 drops of water sublingually and repeat doses every 20 minutes to prevent relapse

Give Diazepam to Stop Convulsions

- Give 0.5 mg/kg Diazepam injection solution per rectum using a small syringe (like a tuberculin syringe) without a needle, or using a catheter
- If convulsions have not stopped after 10 minutes repeat Diazepam dose

WEIGHT	AGE	DOSE OF DIAZEPAM (10 mg/ 2 ml)
< 5 kg	<6 months	0.5 ml
5 - <10 kg	6 months up to 12 months	1.0 ml
10 - <14 kg	12 months up to 3 years	1.5 ml
14 - 19 kg	3 years up to 5 years	2.0 ml

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
MEASURE:
- Is the oxygen saturation (SpO_2) < 90%?

ASK:
- Is the child breathing slower?
- Is there a chest indrawing?
- Is there less fever?
- Is the child eating better?

} ***See ASSESS & CLASSIFY chart***

Treatment:

- If ***any general danger sign or stridor or oxygen saturation (SpO_2) < 90%***, give intramuscular Gentamycin and oral Amoxicillin. Then **refer URGENTLY to hospital**
- If chest indrawing and/or ***breathing rate, fever and eating are the same***, **refer URGENTLY to hospital**
- If ***breathing slower, no chest indrawing, less fever, or eating better***, complete the **5** days of antibiotic

PERSISTENT DIARRHOEA

After 5 days:

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

Treatment:

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

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 for dehydration
- If ***number of stools, amount of blood in the stools, fever, abdominal pain, or eating is worse or the same:*** **Refer to hospital**
- If ***fewer stools, less blood in stools, less fever, less abdominal pain, and eating better,*** continue giving Ciprofloxacin until finished

Ensure that the 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

MALARIA

If fever persists after 3 days:

- Do a full reassessment of the child. > *See ASSESS & CLASSIFY chart*
- DO NOT REPEAT the rapid diagnostic test if it was positive on the initial visit

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 there is ***no other apparent cause of fever:***
  - If fever has been present for 7 days, **refer** for assessment
  - Do microscopy to look for malaria parasite. If parasite 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 the hospital
  - If there is no other apparent cause of fever or you do not have a microscopy to check for parasites, **refer** the child to the hospital

FEVER: NO MALARIA

If fever persists after 3 days:

- Do a full reassessment of the child. > *See ASSESS & CLASSIFY chart*
- Repeat the malaria test (RDT/ other 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 fever persists
- If the child has any ***cause of fever other than malaria***, provide treatment
- If ***malaria is the only apparent cause of fever:***
  - Treat with oral Antimalarial. Advise the mother to return again in 3 days if the fever persists
- If there is ***no other apparent cause of fever:***
  - If fever has been present for 7 days, **refer** for assessment

MEASLES WITH EYE OR MOUTH COMPLICATIONS, GUM OR MOUTH ULCERS, OR THRUSH

After 3 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 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 coming from the mouth***, **refer** to hospital
- If ***mouth ulcers are the same or better***, continue using Nystatin and Riboflovin for a total of 7 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 Nystatine for total of 7 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
- ***Acute ear infection:***
  - 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
  - If ***no ear pain or discharge,*** praise the mother for her careful treatment. If she has not yet finished the 5 days of antibiotic, tell her to use all of it before stopping
- ***Chronic ear infection:***
  - Check that the mother is wicking the ear correctly and giving Ciprofloxacin drops three times a day. Encourage her to continue

FEEDING PROBLEM

After 7 days:

Reassess feeding. > See questions in the *COUNSEL THE MOTHER* 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

ANAEMIA

After 14 days:

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

UNCOMPLICATED SEVERE ACUTE MALNUTRITION

After 14 days or during regular follow up:

- Do a full reassessment of the child. > See *ASSESS & 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 nutrition therapy if the child is 6 months or older

Treatment:

- If the child has **COMPLICATED SEVERE ACUTE MALNUTRITION** (WFH/L less than -3 z-scores or MUAC is less than 115 mm 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 **UNCOMPLICATED SEVERE ACUTE MALNUTRITION** (WFH/L less than -3 z-scores or MUAC is less than 115 mm or oedema of both feet but NO medical complication and passes appetite test), counsel the mother and encourage her to continue with appropriate Nutritional therapy feeding. Ask mother to return again in 14 days
- If the child has **MODERATE ACUTE MALNUTRITION** (WFH/L between -3 and -2 z -scores or MUAC between 115 and 125 mm), advise the mother to continue Nutritional therapy. Counsel her to start other foods according to the age appropriate feeding recommendations (see COUNSEL THE MOTHER chart). Tell her to return again in 14 days .continue to see the child every 14 days until the child's WFH/L is –2-Z scores or more and/or MUAC is 125 mm or more
- If the child has **NO ACUTE MALNUTRITION** (WFH/L is -2 z-scores or more, or MUAC is 125 mm or more), praise the mother, STOP Nutritional therapy and counsel her about the age appropriate feeding recommendations (see COUNSEL THE MOTHER chart)

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

COUNSEL THE MOTHER

FEEDING COUNSELLING

Assess Child's Appetite

All children aged 6 months or more with SEVERE ACUTE MALNUTRITION (oedema of both feet or 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 Nutritional therapy. Usually the child eats the Nutritional therapy portion in 30 minutes.

Explain to the mother:

- The purpose of assessing the child's appetite
- What is Nutritional therapy?
- How to give Nutritional therapy:
  - Wash hands before giving the Nutritional therapy
  - Sit with the child on the lap and gently offer the child Nutritional therapy to eat
  - Encourage the child to eat the Nutritional therapy without feeding by force
  - Offer plenty of clean water to drink from a cup when the child is eating the Nutritional therapy

Offer appropriate amount of Nutritional therapy to the child to eat:

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

FEEDING COUNSELLING

Assess Child's Feeding

Assess feeding if child is Less Than 2 Years Old, Has MODERATE ACUTE MALNUTRITION, ANAEMIA. 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.

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?
- **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?
- **If Moderate Acute Malnutrition, ASK:**
  - How large are servings?
  - Does the child receive his own serving?
  - Who feeds the child and how?
  - What foods are available in the home?
- **During this illness, has the child's feeding changed?**
  - If yes, how?

FEEDING COUNSELLING

Feeding Recommendations

Feeding recommendations FOR ALL CHILDREN during sickness and healthy

Newborn, birth up to 1 week	1 week up to 6 months	6 months up to 9 months	9 months up to 12 months	12 months up to 2 years	2 years and older
					
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. Exclusively breastfeed day and night, as often as your baby wants, at least 8 times in 24 hours. Frequent feeding produces more milk. If your baby is small (low birth weight), feed at least every 2 to 3 hours. Wake the baby for feeding after 3 hours, if baby does not wake self. DO NOT give other foods or fluids. Breast milk is all your baby needs.	Exclusively breastfeed as often as your child wants. Look for signs of hunger, such as beginning to fuss, sucking fingers, or moving lips. Exclusively 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.	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 to3 tablespoons of food. Gradually increase to 1/2 cups (1 cup = 250 ml). Give 2 to 3 meals each day. Offer 1 or 2 snacks each day between meals when the child seems hungry.	Breastfeed as often as your child wants. Also give a variety of mashed or finely chopped family food, including animal source foods and vitamin A-rich fruits and vegetables. Give 1/2 cup at each meal(1 cup = 250 ml). Give 3 to 4 meals each day. Offer 1 or 2 snacks between meals. The child will eat if hungry. For snacks, give small chewable items that the child can hold. Let your child try to eat the snack, but provide help if needed.	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 = 250 ml). Give 3 to 4 meals each day. Offer 1 to 2 snacks between meals. Continue to feed your child slowly, patiently. Encourage —but do not force— your child to eat.	Give a variety of family foods to your child, including animal source foods and vitamin A-rich fruits and vegetables. Give at least 1 full cup (250 ml) at each meal. Give 3 to 4 meals each day. Offer 1 or 2 snacks between meals. If your child refuses a new food, offer "tastes" several times. Show that you like the food. Be patient. Talk with your child during a meal, and keep eye contact.

** A good quality food 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*

FEEDING COUNSELLING

Stopping Breastfeeding

Stop Breastfeeding means changing from all breast milk to no breast milk.
This should happen gradually over one month. Plan in advance for a safe transition.

1. Help Mother Prepare

- Mother should discuss and plan in advance with her family, if possible
- Express milk and give by cup
- Find a regular supply or formula or other milk (e.g. full cream cow's milk)
- Learn how to prepare a store milk safely at home

2. Help Mother Make Transition

- Teach mother to cup feed (See chart booklet Counsel part in Assess, classify and treat the sick young infant aged up to 2 months)
- Clean all utensils with soap and water
- Start giving only formula or cow's milk once baby takes all feeds by cup

3. Help Stop Breastfeeding Completely

- Express and discard enough breast milk to keep comfortable until lactation stops

Feeding Recommendations for a Child who has PERSISTENT DIARRHOEA

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

EXTRA FLUIDS AND MOTHER'S HEALTH

Advise the Mother to Increase Fluid During Illness

For Any Sick Child:

- 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. For example, give soup, rice water, yoghurt drinks or clean water. Give frequently energy-given food; but small in quantity

For Child with Diarrhoea:

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

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:
  - Family planning
  - Counselling on STD and AIDS prevention

WHEN TO RETURN

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
• PNEUMONIA • DYSENTERY • MALARIA, if fever persists • FEVER- NO MALARIA, if fever persists • MEASLES WITH EYE OR MOUTH COMPLICATIONS • MOUTH OR GUM ULCERS OR THRUSH	3 days
• PERSISTENT DIARRHOEA • ACUTE EAR INFECTION • CHRONIC EAR INFECTION • COUGH OR COLD, if not improving	5 days
• UNCOMPLICATED SEVERE ACUTE MALNUTRITION • FEEDING PROBLEM	14 days
• ANAEMIA	14 days
• MODERATE ACUTE MALNUTRITION	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 fever
If child has COUGH OR COLD, also return if:	• Fast breathing • Difficult breathing
If child has Diarrhoea, also return if:	• Blood in stool • Drinking poorly

NEXT WELL-CHILD VISIT: Advise mother when to return for next immunization according to immunization schedule.

ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT AGED UP TO 2 MONTHS

RAPIDLY APPRAISE ALL WAITING INFANTS

ASSESS

ASK WHAT THE CHILD'S PROBLEMS ARE

- **Determine if this is an initial or follow-up visit for this problem**
  - if a follow-up visit, use the follow-up instructions
  - if an initial visit, assess the child as follows:

CLASSIFY

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

IDENTIFY TREATMENT

IMCI Chart Booklet-2019

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World Health Organization unicef Save the Children. icddr,b

CHECK FOR VERY SEVERE DISEASES

ASK:

- Is the infant unconscious/drowsy?
- Is the infant unable to feed?
- Has the infant had convulsion (fits)?
- Has the infant had persistent vomiting?
- Has the infant had apnea?
- Has the infant had major bleeding?
- Is the infant having difficulty in feeding?

LOOK, LISTEN, FEEL:

- Look for bulging fontanels
- Look for central cyanosis
- Look for convulsion
- Look for major congenital malformation
- Look for major bleeding/surgical condition required hospitalization
- Count the breaths in one minute – Repeat the count if elevated } **YOUNG INFANT MUST BE CALM**
- Look for severe chest indrawing
- Measure axillary temperature
- Look at the young infant's movements

If infant is sleeping, ask the mother to wake him/her.

– Does the infant move on his/her own?

If the infant is not moving, gently stimulate him/her.

– Does the infant move only when stimulated but then stops?

– Does the infant not move at all?

- Look at the umbilicus. Is it red or draining pus?
- Look for skin pustules

Classify ALL YOUNG INFANTS

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Any one or more of the following signs: • Unconsciousness/drowsy • Convulsion or H/O Convulsion • Unable to feed • Persistent Vomiting • Bulging fontanels • Apnoea • Central Cyanosis • Major Bleeding • Weight < 1500 gm • Major congenital malformation • Surgical condition requiring hospitalization	*Pink:* **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CRITICAL ILLNESS (VSD-CI)**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Treat to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital**
Any one or more of the following signs • Severe chest indrawing • Fever (37.5°C* or above) or low body temperature (less than 35.5°C*) • Not feeding well • Movement only when stimulated/ no movement at all	*Pink:* **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE–CLINICAL SEVERE INFECTION (VSD-CSI)**	➢ **Give first dose of intramuscular Gentamicin and first dose of oral Amoxicillin** ➢ **Treat to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital** ➢ **If referral is REFUSED or NOT FEASIBLE, continue intramuscular Gentamicin for 2 days and oral Amoxicillin for 7 days** ➢ **Advice mother when to return immediately** ➢ **Follow up in 4 days**
• Fast breathing (60 breaths per minute or more) for age 0-6 days	*Pink:* **POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE- FAST BREATHING PNEUMONIA (0-6 DAYS)**	➢ **Give first dose of oral Amoxicillin** ➢ **Treat to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital** ➢ **If referral is REFUSED or NOT FEASIBLE, continue oral Amoxicillin for 7 days** ➢ **Advice mother when to return immediately** ➢ **Follow up in 4 days**
• Fast breathing (60 breaths per minute or more) for age 7-59 days	*Yellow:* **FAST BREATHING PNEUMONIA (7-59 DAYS)**	➢ Give oral Amoxicillin for 7 days ➢ Treat to prevent low blood sugar ➢ Advice mother when to return immediately ➢ Follow up in 4 days
• Umbilicus red or draining pus • Skin pustules	*Yellow:* **LOCAL BACTERIAL INFECTION**	➢ Give oral Amoxicillin for 5 days ➢ Teach mother to treat local skin infections at home ➢ Advise mother to give home care ➢ Advice mother when to return immediately ➢ Follow up in 2 days
• None of the signs of very severe	*Green:* **INFECTION UNLIKELY**	➢ Advise mother to give home care for the young infant

** These thresholds are based on axillary temperature. The thresholds for rectal temperature readings are approximately 0.5 °C higher*
*** If referral is not possible, see **Integrated Management of Childhood Illness**, Treat the Child, Annex: "Where Referral Is Not*

THEN CHECK FOR JAUNDICE

ASK:	LOOK:	
• When did jaundice first appear?	• Look for jaundice (yellow eyes or skin) • Look at the young infant's palms and soles. Are they yellow?	**Classify JAUNDICE**

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any jaundice if age less than 24 hours or • Yellow palms and soles at any age	***Pink:*** **SEVERE JAUNDICE**	➢ **Treat the young infant to prevent low blood sugar** ➢ **Advise mother how to keep the infant warm on the way to the hospital** ➢ **Refer URGENTLY to hospital**
• Jaundice appearing after 24 hours of age and • Palms and soles not yellow	***Yellow:*** **JAUNDICE**	➢ Advise the mother to give home care for the young infant ➢ Advise mother to return immediately if palms and soles appear yellow ➢ If the young infant is older than 3 weeks, **refer** to a hospital for assessment ➢ Advice mother when to return immediately ➢ Follow-up in 1 day
• No jaundice	***Green:*** **NO JAUNDICE**	➢ Advise the mother to give home care for the young infant

THEN ASK: DOES THE YOUNG INFANT HAVE DIARRHOEA? *

IF YES, LOOK AND FEEL:

- Look at the young infant's general condition:
  - Is the infant restless and irritable?
- Infant's movements:
  - Does the infant move on his/her own?
  - Does the infant move only when stimulated but then stops?
  - Does the infant not move at all?
- Look for sunken eyes
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (longer than 2 seconds)?
  - Slowly?

Classify DIARRHOEA FOR DEHYDRATION

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
Two of the following signs: • Movement only when stimulated or no movement at all • Sunken eyes • Skin pinch goes back very slowly	***Pink:*** **SEVERE DEHYDRATION**	➢ **If infant do not have other severe classification:** – **Give fluid for severe dehydration (Plan C)** **or** ➢ **If infant also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way** – **Advise mother how to keep the infant warm on the way to the hospital** – **Advise mother to continue breastfeeding**
Two of the following signs: • Restless, irritable • Sunken eyes • Skin pinch goes back slowly	***Yellow:*** **SOME DEHYDRATION**	➢ **Give fluid and food for some dehydration (Plan B)** **or** ➢ **If infant also has another severe classification:** – **Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way and advise mother how to keep the infant warm on the way to the hospital** – **Advise mother to continue breastfeeding** ➢ Advice mother when to return immediately ➢ Follow-up in 2 days if not improving
• Not enough signs to classify as some or severe dehydration	***Green:*** **NO DEHYDRATION**	➢ Give fluids to treat diarrhoea at home (Plan A) ➢ Advice mother when to return immediately ➢ Follow-up in 2 days if not improving

* ***What is diarrhoea in a young infant?***

A young infant has diarrhoea if the stools 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 diarrhoea.

THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT

ASK:

- Is the infant breastfed? If yes, how many times in 24 hours?
- Does the infant usually receive any other food or drink?
  - If yes, how often?
  - What do you use to feed the infant?

LOOK AND FEEL:

- Determine weight for age.
  - weight less than 2 kg
  - weight for age less than -2 Z score
- Look for ulcers or white patches in mouth (Thrush)

Classify Feeding

If an Infant: **Has any difficulty feeding,**
Is breastfeeding less than 8 times in 24 hours,
If not taking any other foods or drinks, or
Is low weight for age,
and
Has no indications to refer urgently to hospital

ASSESS BREASTFEEDING:

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

1. Is the infant able to attach?

No attachment at all *Not well attached* *Good attachment*

To Check Attachment Look for:

– Chin touching breast	Yes__	No__
– Mouth wide open	Yes__	No__
– Lower lip turned outward	Yes__	No__
– More areola above than below the mouth	Yes__	No__

(All of these signs should be present if the attachment is good)

2. Is the infant well positioned?

To Chick Position Look for:

– Straight head and body.	Yes__	No__
– Body close to the mother.	Yes__	No__
– The whole body fully supported.	Yes__	No__
– Facing breast, nose opposite to nipple	Yes__	No__

Well positioned *Not well positioned*

3. Is the infant sucking effectively?

Slow deep sucks, sometimes pausing

Not suckling at all *Not suckling effectively* *Suckling effectively*

Clear a blocked nose if it interferes with breastfeeding

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

5. Does the mother have pain while breastfeeding?
If yes, look and feel for:
- Flat or inverted nipples, or sore nipples
- Engorged breasts or breast abscess

SIGNS	CLASSIFY	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Weight < 2 kg in infants less than 7 days	***Pink:*** **VERY LOW WEIGHT FOR AGE**	➢ **REFER to hospital for kangaroo mother care** ➢ **Treat to prevent low blood sugar** ➢ **Advice the mother to keep the young infant warm on the way to hospital**
• Not well attached to breast • Not suckling effectively • Less than 8 breastfeeds in 24 hours • Receives other foods or drinks • Low weight for age • Thrush (ulcers or white patches in mouth)	***Yellow:*** **FEEDING PROBLEM or LOW WEIGHT**	➢ If not well attached or not suckling effectively, teach correct positioning and attachment ➢ If not able to attach well immediately, teach the mother to express breast milk and feed by a cup ➢ If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding. Advise her to breastfeed as often and for as long as the infant wants, day and night ➢ If receiving other foods or drinks, counsel mother about breastfeeding more, reducing other foods or drinks, and using a cup ➢ If not breastfeeding at all: - **Refer** for breastfeeding counselling and possible relactation - Advise about correctly preparing breastmilk substitutes and using a cup ➢ Advise the mother how to feed and keep the low weight infant warm at home ➢ If Thrush, teach the mother to treat Thrush at home ➢ Advise mother to give home care for the young infant ➢ Advise mother when to return immediately ➢ Follow-up any feeding problem or Thrush in 2 days ➢ Follow-up low weight for age in 14 days
• Not low weight for age and no other signs of inadequate feeding	***Green:*** **NO FEEDING PROBLEM**	➢ Advise mother to give home care for the young infant ➢ Praise the mother for feeding the infant well

THEN CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS:

	Age	Vaccine			
Immunization Schedule:	Birth	BCG	OPV-0		
	6 weeks	Penta - 1	OPV-1	PCV-1	+IPV

- **Check the mother's immunization status and give her tetanus toxoid if needed**
- **Check the mother's Vitamin A status and give her Vitamin A if needed**

ASSESS OTHER PROBLEMS

Problems of Eye, Ear and Mouth

ASSESS THE MOTHER'S HEALTH NEEDS

Nutritional status and anaemia, contraception, check hygiene practices

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

Treat the Young Infant to Prevent Low Blood Sugar

If the young infant is able to breastfeed:

- Ask the mother to breastfeed the young infant

If the young infant is not able to breastfeed but is able to swallow:

- Give 20-50 ml (10 ml/kg) expressed breastmilk before departure
- If not possible to give expressed breastmilk, give 20-50 ml (10 ml/kg) sugar water **(To make sugar water: Dissolve 4 level teaspoons of sugar (20 grams) in a 200-ml cup of clean water)**

If the young infant is not able to swallow:

- Give 20-50 ml (10 ml/kg) of expressed breastmilk or sugar water by nasogastric tube

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

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 with extra clothing including hat, gloves, socks and wrap the infant in a soft dry cloth and cover with a blanket

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 do the treatment twice daily for 5 days:

- Wash hands
- Gently wash off pus and crusts with soap and water
- Dry the area
- Paint the skin or umbilicus/cord with full strength Gentian Violet (0.5%)
- Wash hands again

To Treat Thrush (ulcers or white patches in mouth)

The mother should do the treatment four times daily for 7 days:

- Wash hands
- Paint the mouth with Nystatin
- Wash hands again

➢ **To Treat DIARRHOEA, See Treat the Young Infant Chart**

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 on to 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

Teach the Mother How to Express Breast Milk

Ask the mother to:

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

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 to the breast
- If nipple is sore, apply breast milk for soothing effect and ensure correct positioning and attachment of the baby. If mother continues to have 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 milk and then put the young infant to the breast. Putting a warm compress on the breast may help
- If breast abscess, advise mother to feed from the other breast and refer to a surgeon. If the young infant wants more milk, feed diluted cow/goat milk with added sugar by cup and spoon

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

Teach the Mother How to Feed by a Cup

- Put a cloth on the infant's front to protect his clothes as some milk can spill
- Hold the infant semi-upright on the lap
- Put a measured amount of milk in the cup
- Hold the cup so that it rests lightly on the infant's lower lip
- Tip the cup so that the milk just reaches the infant's lips
- Allow the infant to take the milk himself. Do not pour the milk into the infant's mouth
- Measured amount of milk should be put in the cup

Teach the Mother How to Keep the Low Weight Infant Warm at Home

At first refer for Kangaroo Mother Care. If REFUSED or NOT FEASIBLE, then continue the following advices at home:

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

GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

If the young infant has NO DEHYDRATION, use Plan A. If the young infant has SOME DEHYDRATION, use Plan B

PLAN 'A': TREAT DIARRHOEA AT HOME

Counsel the mother on home treatment for the young infant with diarrheoa:

1. **Give Extra Fluid**
2. **Continue exclusive breastfeeding**
3. **Know when to return to hospital**

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

➢ **Tel the mother to:**

- Breastfeed frequently and for longer at each feed
- Give ORS or clean water in addition to breastmilk

It is especially important to give ORS at home when the young infant:

- has been treated according to Plan B or Plan C during this visit
- 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, 50–100 ml after each loose stool

➢ **Tell the mother to:**

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

2. CONTINUE EXCLUSIVE BREASTFEEDING

3. KNOW WHEN TO RETURN

PLAN 'B': TREAT SOME DEHYDRATION WITH ORAL REHYDRATION SALT (ORS)

At the clinic, give the recommended amount of ORS over 4-hours

DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS

WEIGHT	< 6 kg
AGE	**Up to 4 months**
ORS	200 - 450 mL
Note: The approximate amount of ORS required (in mL) is calculated by multiplying the young infant's weight (in kg) by 75	

- If the young infant wants more ORS than shown, give more

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

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

➢ **AFTER 4 HOURS:**

- Reassess young infant, and classify him or her for dehydration
- Select the appropriate plan to continue treatment
- Begin feeding the child in clinic

➢ **IF THE MOTHER HAS TO 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 rules of home treatment for the young infant:

1. **GIVE EXTRA FLUIDS**
2. **CONTINUE EXCLUSIVE BREASTFEEDING**
3. **WHEN TO RETURN**

GIVE FIRST DOSE OF INTRAMASCULAR ANTIBIOTIC IN THE CLINIC ONLY

Give First Dose of Antibiotics

- ***For Possible Serious Bacterial Infection- Very Severe Disease - Critical illness***
  - Give first dose of both intramuscular Gentamicin and oral Amoxicillin. **Refer URGENTLY** to hospital
- ***For Possible Serious Bacterial Infection- Very Severe Disease- Clinical Severe Infection***
  - Give first dose of both intramuscular Gentamicin and oral Amoxicillin. **Refer URGENTLY** to hospital
  - If **REFUSED** or **NOT FEASIBLE**, continue intramuscular antibiotic once daily for 2 days along with oral antibiotic twice daily for 7 days
- ***For Possible Serious Bacterial Infection- Very Severe Disease- Fast Breathing Pneumonia (0-6 days)***
  - Give first dose of oral Amoxicillin. **Refer URGENTLY** to hospital
  - If referral is **REFUSED** or **NOT FEASIBLE**, continue twice daily for 7 days
- ***For Fast Breathing Pneumonia (7-59 days)***
  - Give first dose of oral Amoxicillin, continue twice daily for 7 days
- ***For Local Bacterial Infection***
  - Give first dose of oral Amoxicillin, continue twice daily for 5 days

WEIGHT (kg)	GENTAMICIN	GENTAMICIN
	Injection 80 mg/2 ml	Injection 20 mg/2ml
	Volume per dose (ml)	Volume per dose (ml)
1.5– 2.4	0.2	0.8
2.5– 3.9	0.4	1.6
4.0– 5.9	0.6	2.4

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

GIVE THESE TREATMENTS IN THE CLINIC

PLAN C: TREAT SEVERE DEHYDRATION QUICKLY

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

START HERE

Can you give intravenous (IV) fluid immediately? — YES →

- **Start IV fluid immediately**
- If the young infant can drink, give ORS by mouth while the drip is set up
- Give 100 ml/kg of Ringer's lactate solution (or, if not available, Normal Saline), divided as follows:

AGE	First give 30 ml/kg over:	Then give 70 ml/kg over:
Infants (under 12 months)	1 hour*	5 hours

- Reassess the young infant every 1–2 hours. If hydration is not improving, give the intravenous drip more rapidly
- Also give ORS (about 5 ml/kg body weight per hour) as soon as the young infant can drink: usually after 3–4 hours

NO ↓

Is IV treatment available nearby (within 30 minutes)? — YES →

- **Refer URGENTLY** for intravenous treatment
- If the infant can drink, give the mother ORS solution, and show her how to give frequent sips during the trip, or give ORS by nasogastric tube

NO ↓

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

- **Start rehydration by tube (or mouth) with ORS solution: Give 20 ml/kg body weight per hour for 6 hours (total, 120 ml/kg body weight)**
- **Reassess the young infant every 1–2 hours while waiting for transfer:**
  - If the infant vomits repeatedly or has abdominal distension, give the fluid more slowly
  - If hydration is not improving after 3 hours, send the young infant for intravenous therapy
- After 6 hours, reassess the young infant. Classify dehydration. Then, choose the appropriate plan (A, B or C) to continue treatment

NO ↓

Can the young infant drink?

NO ↓

Refer URGENTLY to hospital for IV or NG treatment

NOTE: If the young infant is not referred to hospital, observe him or her for at least 6 hours after rehydration to be sure that the mother can maintain hydration by giving the infant ORS solution by mouth.

COUNSEL THE MOTHER

ADVISE THE MOTHER TO GIVE HOME CARE FOR THE YOUNG INFANT

1. Exclusively Breastfeed the Young Infant
- Give only breastfeeds to the young infant
- Breastfeed frequently, as often and for as long as the infant wants

2. Make Sure That the Young Infant is Kept Warm at All Time
- In cool weather cover the infant's head and feet and dress the infant with extra clothing

3. When to Return:

Follow-up Visit:

If the infant has:	Return for follow-up in:
• JAUNDICE	1 day
• LOCAL BACTERIAL INFECTION • DIARRHOEA • FEEDING PROBLEM • THRUSH	2 days
• POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE– CLINICAL SEVERE INFECTION (VSD-CSI) • POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE– FAST BREATHING PNEUMONIA (0-6 DAYS) • FAST BREATHING PNEUMONIA (7-59DAYS)	4 days
• LOW WEIGHT FOR AGE in an infant not receiving breastmilk	7 days
• LOW WEIGHT FOR AGE in breastfed infant	14 days

When to Return Immediately:

Advise the mother to return immediately if the young infant has any of these signs:
- Unconsciousness
- Convulsion
- Vomiting persistently
- Bulging fontanells
- Central cyanosis
- Bleeding excessively
- Severe chest indrawing
- Breastfeeding or drinking poorly
- Reduced activity
- Becomes sicker
- Develops a fever
- Feels unusually cold
- Fast breathing
- Difficult breathing
- Palms and soles appear yellow

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-CLINICAL SEVERE INFECTION (VSD-CSI), POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE-FAST BREATHING PNEUMONIA (0-6 DAYS) OR FAST BREATHING PNEUMONIA (7-59 DAYS)

After 4 days:

Reassess the young infant for POSSIBLE SERIOUS BACTERIAL INFECTION or VERY SEVERE DISEASE or FAST BREATHING PNEUMONIA (7-59 DAYS) > See *ASSESS & CLASSIFY THE SICK YOUNG INFANT* chart

Treatment:

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

LOCAL BACTERIAL INFECTION

After 2 days:

- Look at the umbilicus. Is it red or draining pus?
- Look at the skin pustules

Treatment:

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

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

JAUNDICE

After 1 day:

LOOK for jaundice. Are palms and soles yellow?

Treatment:

- If **palms and soles are yellow, refer** to hospital
- If **palms and soles are not yellow, but jaundice has not decreased,** advise the mother home care and ask her to return for follow up in 1 day
- If jaundice has **started decreasing**, reassure the mother and ask her to continue home care. Ask her to return for follow up at three weeks of age
- If jaundice continues beyond three weeks of age, **refer** the young infant to a hospital for further assessment

DIARRHOEA

After 2 days:

ASK: Has the diarrhoea stopped?

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

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"

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

LOW WEIGHT FOR AGE

After 14 days (or 7 days if the infant is not receiving breastmilk):

- 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"
  - If the infant is **no longer has a low weight for age**, praise the mother and encourage her to continue
  - If the infant is **still has a 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 has a 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 think that feeding will not 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"
  - If **thrush is worse** check that treatment is being given correctly
  - If 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 giving Nystatin Ointment for a total of 7 days

Temperature Conversion Table °C / °F

°F	to	°C
0	=	-17.7
95	=	35.0
97	=	36.1
98	=	36.6
98.6	=	37.0
99	=	37.2
100	=	37.7
101	=	38.3
102	=	38.8
103	=	39.4
104	=	40.0
105	=	40.5
106	=	41.1

THE END

[Send me your feedback to drfahim38@gmail.com. Any constructive criticism/suggestion will be highly appreciated]