Integrated Management of Neonatal and Childhood Illness (IMNCI) Chart Booklet

Fourth Edition : 2025

Child Health Program
Non-Communicable Disease Division,
Department of Public Health, Ministry of Health

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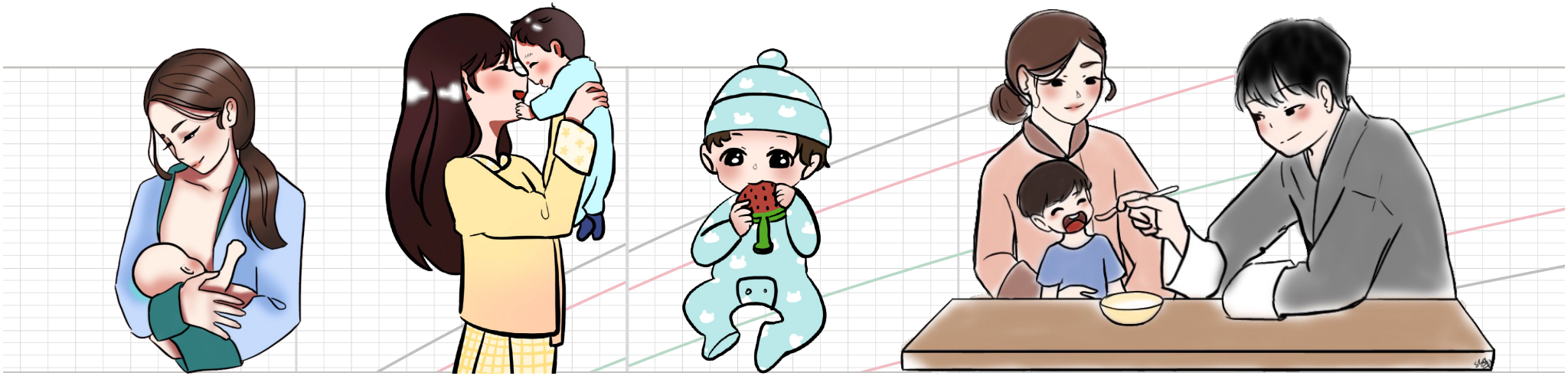

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First Edition : 2000
Second Edition : 2009
Third Edition : 2019
Fourth Edition : 2025

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SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ASSESS

ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

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

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

CHECK FOR GENERAL DANGER SIGNS		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
ASK: • Is the child able to drink or breast feed? • Does the child vomit everything? • Has the child had convulsion? ***LOOK:*** • See if the child is lethargic or unconscious • Is the child convulsing now?	Urgent attention	• Any general danger sign	**VERY SEVERE DISEASE**	• Give injection diazepam if convulsing now (pg. 16) • Quickly complete the assessment • Give first dose of IM injection Ampicillin and Gentamicin (pg. 15) • Give any pre-referal treatment immediately • Treat to prevent low blood sugar • Keep the child warm • Consult & Refer URGENTLY to hospital

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

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

Assess		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
If yes, ask: • For how long? ***Look, listen, feel:*** • Count the breaths in one minute • Look for chest In-drawing • Look and listen for stridor • Look and listen for wheezing **CHILD MUST BE CALM** • Check oxygen saturation (SpO_2): <90% or ≥ 90% If wheezing with either fast breathing or chest in-drawing: • Give a trial of rapid acting inhaled bronchodilator for up to three times 15-20 minutes apart • Count the breaths and look for chest in-drawing again, and then classify	Classify Cough or Difficult Breathing	• Any general danger sign **OR** • Stridor in calm child **OR** • SPO2 <90%	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	• Give first dose of IM injection Ampicillin and Gentamicin. (pg. 15) • Consult & Refer URGENTLY to hospital** • Provide O2 to all children on the way to hospital
		• Chest indrawing **OR** • Fast breathing	**PNEUMONIA**	• Give oral Amoxicillin for 5 days (pg. 11) • If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 day (pg. 13) • Soothe the throat and relieve the cough with a safe remedy if the child is 6 months and above • If coughing for more than 14 days, refer for possible TB assessment • Advise mother when to return immediately • Follow-up in 3 days (pg. 23)
		• No signs of pneumonia OR Severe Pneumonia/very severe disease	**NO PNEUMONIA: COUGH OR COLD**	• Soothe the throat and relieve the cough with a safe remedy if the child is 6 months and above (pg. 14) • If coughing for more than 14 days, refer for possible TB assessment (pg. 9) • Advise mother when to return immediately • Follow-up in 5 days if not improving
		• If only wheezing	**WHEEZE**	• Give nebulization for 5 days (pg. 13) • Advise mother when to return immediately • If wheezing (or disappeared after rapidly acting bronchodilator) give an inhaled bronchodilator for 5 days • Follow-up in 5 day • REFER, if recurrent wheezing for asthma assessment

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

**** If referral is not possible, manage the child as described in the pneumonia section of the Hospital based IMNCI guideline 2024.**

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Does the child have diarrhea?

Assess			SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
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	**Two of the following signs:** • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	**SEVERE DEHYDRATION**	• If child has no other severe classification: » Give fluid for severe dehydration (Plan C- pg. 19) • If child also has another severe classification: » Consult & Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way » Advise the mother to continue breastfeeding • If child is 2 years or older and there is cholera in your area, give antibiotic for cholera (pg. 11)
			Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	**SOME DEHYDRATION**	• Give fluid, zinc supplements, and food for some dehydration (Plan B- pg. 18) • 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 (pg. 24)
			• Not enough signs to classify as some or severe dehydration	**NO DEHYDRATION**	• Give fluid, zinc supplements, and food to treat diarrhoea at home (Plan A- pg. 17) • Advise mother when to return immediately • Follow-up in 5 days if not improving
		And if diarrhoea for 14 days or more	• Dehydration present	**SEVERE PERSISTENT DIARRHOEA**	• Treat dehydration before referral unless the child has another severe classification (pg. 18 & 19) • Consult & Refer to hospital
			• No dehydration	**PERSISTENT DIARRHOEA**	• Assess feeding problem • Give multivitamins and minerals (including zinc- pg. 17) for 14 days • Follow-up in 5 days (pg. 24)
		And if blood in stool	• Blood in the stool	**DYSENTERY**	• Give Cotrimoxazole for 5 days (pg. 11) • Give Zinc supplement for 14 days (pg. 17) • Follow-up in 3 days (pg. 23)

Does the child have fever? (by history/feels hot/temperature 37.5°C/99.5°F or above)

Assess			SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
If yes: **Decide Malaria Risk:** Low, Potential or No **Then ask:** • For how long? • If more than 7 days, has fever been present every day? • Has the child had measles within the last 3 months? ***Look and feel:*** • Look or feel for stiff neck • Look 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 If No Malaria Risk area then ask for Travel History to Low/Potential Malaria risk area within last 30 days	Classify fever	Low or Potential malaria risk, or travel history	• Any general danger sign **OR** stiff neck	**VERY SEVERE FEBRILE DISEASE**	• Give the first dose of antimalarial as per National Malaria Treatment Protocol (pg. 20 & 21) • Give the first dose of Injection Ampicilin and Gentamicin (pg. 15) • Treat the child to prevent low blood sugar (pg. 16) • Give one dose of Paracetamol in clinic for high fever (38.5°C /101.3°F or above- pg. 12) • Consult & Refer URGENTLY to hospital
			• Malaria test POSITIVE	**MALARIA**	• Give recommended first dose of antimalarial drugs as per National Malaria Treatment Protocol 2024 (pg. 20 & 21) • Give one dose of Paracetamol in clinic for high fever (38.5°C /101.3°F or above- pg. 12) • Give appropriate antibiotic treatment for an identified bacterial cause of fever • Consult & Refer URGENTLY to hospital
			• Malaria test NEGATIVE • Other causes of fever PRESENT	**FEVER: NO MALARIA**	• Give one dose of Paracetamol in clinic for high fever (38.5°C /101.3°F or above- pg. 12) • 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, refer for assessment (pg. 25)

Assess			SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
Do a malaria test (If NO VERY SEVERE FEBRILE DISEASE classification): • In low or Potential malaria risk if no obvious cause of fever present • Travel history present	Classify fever	No malaria risk & no T/H to risk area	• Any general danger sign **OR** • Stiff neck	**SEVERE FEBRILE DISEASE**	• Give the first dose of IM injection Ampicilin and Gentamicin (pg. 15) • Treat the child to prevent low blood sugar (pg. 16) • Give one dose of Paracetamol in the clinic for high fever (38.5°C/101.3°F or above- pg. 12) • Consult & Refer URGENTLY to the hospital
			• No general danger signs • No stiff neck	**FEVER**	• Give one dose of Paracetamol in the clinic for high fever (38.5°C/101.3 °F or above- pg. 12) • Give appropriate antibiotic treatment for any identified bacterial cause of fever • Advise mother when to return immediately • Follow-up in 3 days if fever persists, refer for assessment (pg. 25)
If the child has measles now or within the last 3 months: • Look for mouth ulcers. Are they deep and extensive? • Look for pus draining from eye • Look for clouding of the cornea		If measles now or within 3 months	• Any general danger sign **OR** • Clouding of cornea **OR** • Deep or extensive mouth ulcers	**SEVERE COMPLICATED MEASLES***	• Give Vitamin A treatment (pg. 12) • Give first dose of IM injection Ampicillin and Gentamicin (pg. 15) • If clouding of the cornea or pus draining from the eye, apply tetracycline eye ointment/ Chloramphenicol eye ointment (pg. 14) • Consult & Refer URGENTLY to hospital
			• Pus draining from the eye **OR** • Mouth ulcers	**MEASLES WITH EYE OR MOUTH COMPLICATIONS****	• Give Vitamin A treatment (pg. 12) • If pus draining from the eye, treat eye infection with tetracycline eye ointment/Chloramphenicol eye ointment (pg. 14) • If mouth ulcers, treat with nystatin oral paste (pg. 14) • Follow-up in 3 days (pg. 25)
			• Measles now **OR** • Within the last 3 months	**MEASLES**	• Give Vitamin A treatment (Day- 1, 2, & 14- pg. 12)

Note: Fever with rash is a notifiable disease through the NEWARS system.
***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.**
****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?

Assess		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
If yes: Is there ear pain? Is there ear discharge? If yes, for how long? ***Look and feel:*** • Look for pus draining from the ear • Feel for tender swelling behind the ear	Classify ear problem	• Tender swelling behind the ear	**MASTOIDITIS**	• Give first dose of IM Injection Ampicilin and Gentamicin (pg. 15) • Give first dose of paracetamol for pain (pg. 12) • Consult & Refer URGENTLY to hospital
		• Pus is seen draining from the ear and discharge is reported for less than 14 days **OR** • Ear pain	**ACUTE EAR INFECTION**	• Give an amoxicillin for 5 days (pg. 11) • Give paracetamol for pain (pg. 12) • Dry the ear by wicking • Follow-up in 5 days (pg. 25)
		• Pus is seen draining from the ear and discharge is reported for 14 days or more	**CHRONIC EAR INFECTION**	• Dry the ear by wicking • Treat with topical ciprofloxacin eardrops for 14 days (pg. 14) • Follow-up in 5 days (pg. 25)
		• No ear pain **AND** • No pus seen draining from the ear	**NO EAR INFECTION**	• No treatment for ear infection indicated. • Assess for other ear problems.

Then Check For Acute Malnutrition

Assess		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
CHECK FOR ACUTE MALNUTRITION LOOK AND FEEL: *Look for signs of acute malnutrition* • Look for oedema of both feet • Determine WFH/L* _____ Z-score • Measure MUAC**_____ cm in a child 6 months or older **If WFH/L Z-scores is <-3 SD or MUAC less than 11.5 cm, 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 less than 6 months, assess breastfeeding: » Does the child have a breastfeeding problem?	Classify nutrition status	• Oedema of both feet **OR** • WFH/L Z-score is <-3 SD **OR** • MUAC <11.5 cm **AND** • Any one of the following: » Medical complication present » Breastfeeding problem	**SEVERE ACUTE MALNUTRITION WITH MEDICAL COMPLICATION**	• Give first dose Injection Ampicillin and Gentamicin (pg. 15) • Treat the child to prevent low blood sugar (<54 mg/dL- pg. 16) • Keep the child warm • Consult & Refer URGENTLY to hospital
		• Oedema of both feet **OR** • WFH/L Z-score is <-3 SD **OR** • MUAC <11.5 cm **AND** • No medical complications or feeding problem	**SEVERE ACUTE MALNUTRITION WITHOUT MEDICAL COMPLICATION**	• Assess the child's feeding and counsel the mother on the feeding recommendations (pg. 28 & 29) • Consult & Refer to hospital on OPD basis
		• WFH/L between ≥-3 SD and <-2 SD **OR** • MUAC 11.5 cm up to 12.4 cm	**MODERATE ACUTE MALNUTRITION**	• Assess the child's feeding and counsel the mother on the feeding recommendations (pg. 28 & 29) • If feeding problem, follow up in 7 days (pg 26) • Assess for possible TB infection • Advise mother when to return immediately • Follow-up in 30 days (pg. 27)
		• WFH/L Z-scores is ≥-2 SD **OR** • MUAC ≥12.5 cm	**NO ACUTE MALNUTRITION**	• If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the feeding recommendations (pg. 28 & 29) • If feeding problem, follow-up in 7 days (pg. 26)

***WFH/L is Weight-for-Height or Weight-for-Length determined by using the WHO growth standards charts.**
****MUAC is Mid-Upper Arm Circumference measured using MUAC tape in all children 6 months or older.**

Then Check for Anaemia

Assess		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
Check for anaemia Look for palmar pallor. Is it: • Severe palmar pallor? • Some palmar pallor? Check hemoglobin level where feasible	Classify anaemia	• Severe palmar pallor (Hb <7 g/dL)	**SEVERE ANAEMIA**	• Consult & Refer URGENTLY to hospital
		• Some palmar pallor (Hb 7-10.9 g/dL)	**ANAEMIA**	• Give iron (pg. 12) • Give Albendazole if child is 15 months or older and has not had a dose in the previous 6 months (pg. 12) • Assess the child's feeding and counsel the mother according to the feeding recommendations (pg. 28 & 29) • Advise mother when to return immediately • Follow-up in 14 days (pg. 27)
		• No palmar pallor (Hb ≥11 g/dL)	**NO ANAEMIA**	• If child is less than 2 years old, assess the child's feeding and counsel the mother according to the feeding recommendations (pg. 28 & 29) » If feeding problem, follow-up in 7 days (pg. 26)

Then Check for Possible Tuberculosis (TB)

Assess			SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
Ask: • Cough ≥2 weeks • Unexplained fever ≥ 2 weeks • Not gaining weight in infant • Unexplained weight loss in spite of adequate nutrition • H/o contact with PTB in same household	***Look and feel:*** • Painless enlarged lymph nodes • Unexplained ascites • Moderate acute malnutrition (WFH/L Z- score ≥-3 SD and <-2 SD or MUAC 11.5 cm up to 12.4 cm)	Classify tuberculosis	**If yes to any of the following signs** • Cough ≥2 weeks • Unexplained fever ≥2 weeks • Not gaining weight in infant • Unexplained weight loss in spite of adequate nutrition • H/O contact with PTB in same household • Painless enlarged lymphnodes • Unexplained ascites • Moderate Acute Malnutrition (WFH/L Z-score ≥-3 SD and <-2 SD or MUAC 11.5 cm up to 12.4 cm)	**POSSIBLE TB**	• Consult & Refer for TB assessment
			• If no signs of TB	**NO POSSIBLE TB**	• Check for other causes

Assess Other Problems:

Then check the Child's Immunization, Vitamin A and Deworming Status

IMMUNIZATION SCHEDULE:				
AGE	**VACCINE**			
Birth	BCG*	OPV-0	Hep B-0	**VITAMIN A SUPPLEMENTATION** Give every child a dose of Vitamin A every six months from the age of 6 months. Record the dose on the MCH Handbook. **ROUTINE DE-WORMING** Give every child albendazole every 6 months from the age of 15 months. Record the dose on the MCH Handbook.
6 weeks	Penta-I	OPV-1	PCV-1	
10 weeks	Penta-2	OPV-2	PCV-2	
14 weeks	Penta-3	OPV-3	IPV-1	
8 months	-	-	IPV-2	
9 months	MMR-1	-	PCV-3	
24 months	MMR-2	DTP	-	
*Children who are HIV positive or of unknown HIV status with symptoms consistent with HIV should not be vaccinated with BCG.				

MAKE SURE CHILD WITH ANY DANGER SIGN IS REFERRED AFTER first dose of an appropriate IM antibiotic and other treatment. Treat all children with a general danger sign to prevent low blood sugar.

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 and Acute Ear Infection:

- **First-Line Antibiotic: Oral Amoxicillin**

AGE or WEIGHT	Amoxicillin (Give 25 mg/kg/dose for two times daily for 5 days)	
	Syrup 125 mg/5 ml	Tablet 250 mg
2 months age up to 4 months (4-<6 kg)	5 ml	½ tablet
4 months up to 12 Months (6-<10 kg)	10 ml	1 tablet
12 Months up to 3 years (10-<14 kg)	15 ml	1½ tablet
3 years up to 5 years (14-<19 kg)	20 ml	2 tablets

- **Second-Line Antibiotic: Oral Cotrimoxazole**

AGE or WEIGHT	Cotrimoxazole (trimethoprim 80 mg+sulfamethoxazole400 mg) Give 4 mg trimethoprim/kg/dose two times daily for 5 day	
	Syrup (40 trimethropin + 200 mg Sulphamethaxozole per 5 ml)	TABLET (single strength 80/400 mg)
2 months age up to 12 months(4-<10 kg)	5 ml	½ tablet
12 months age up to 5 years (10-<19 kg)	10 ml	1 tablet

For Dysentery:

- **First Line Antibiotic: Oral Cotrimoxazole (Dosage As Above)**
- **Second Line Antibiotic: Oral Ciprofloxacin**

AGE or WEIGHT	Ciprofloxacin (15 mg/kg/day 2 times a day for 3 days)
	Tablet 500 mg
2 months age up to 4 months (4-<6 kg)	⅛
4 months age up to 12 months (6-<10 kg)	¼
12 months age up to 5 years (10-<19 kg)	½

For Cholera:

- **First Line Antibiotic: Oral Doxycycline**
- **Second-Line Antibiotic: Oral Erythromycin**

AGE or WEIGHT	Doxycycline as a single dose (2-4 mg/kg/dose)	Erythromycin 4 times a day for 3 days (12.5 mg/kg/dose)
	Tablet 100 mg	Tablet 250 mg
2 months age up to 4 months (4-<6 kg)		¼ tablet
4 months age up to 12 months (6-<10 kg)	¼ tablet	½ tablet
12 months up to 3 years (10- 14 kg)	⅓ tablet	½ tablet
3 years age up to 5 year (14-19)	½ tablet	1 tablet

Give vitamin A and Albendazole in clinic

Albendazole	
Child 15 months - 24 months old	200 mg
> 24 months old	400 mg

Vitamin A					
Indication	**Age group**			**Dosage**	
Supplement	6 months – 12 months			100000 IU	
	12 months to 5 years			200000 IU	
Measles	**Age group**	**Dosages**	**Treatment schedule**		
	< 6 months	50000 IU	Day 1	Day 2	Day 14
	6-<12 months	100000 IU			
	12 months and above	200000IU			

Give Oral treatment		
Give Paracetamol every 6 hours until high fever or ear pain is gone. PARACETAMOL (15 mg/kg/dose)		
AGE or WEIGHT	**SYRUP (125 mg/5 ml)**	**TABLET (500 mg)**
2 months age up to 4 months (4 - <6 kg)	3 ml	⅛ tablet (prefer syrup in these age group)
4 months up to 12 Months (6 - <10 kg)	5 ml	¼ tablet
12 Months up to 3 years (10 - <14 kg)	7 ml	¼ tablet
3 years up to 5 years (14 - <19 kg)	10 ml	½ tablet

AGE or WEIGHT	**Ibuprofen (5-10 mg/kg) 3 times a day to a maximum of 400 mg per day**
	TABLET (400 mg)
1 year to 2 years (<15 kg)	¼ (100 mg)
2 years to 5 years (15- 20 kg)	½ (200 mg)

Give Iron one dose daily for 14 days, 4-8 mg/kg/day		
AGE or WEIGHT	**IRON/FOLATE TABLET**	**IRON SYRUP Ferrous sulfate Folate 100 mg/5 ml (20 mg elemental iron/ml)**
	Ferrous sulfate-Folate (60 mg elemental iron)	
2 months up to 4 months (4 - <6 kg)	-	• The quantity (ml) of the syrup should be calculated depending on the doses of manufacturer's formulation
4 months up to 12 months (6 - <10 kg)	½ tablet	
12 months up to 3 years (10 - <14 kg)	1 tablet	
3 years up to 5 years (14 - 19 kg)	1½ tablet	
If there is no improvement after 2 months of treatment, refer for further assessment.		

Give Inhaled Salbutamol for Wheezing

(a) Nebulized salbutamol

- The driving source for the nebulizer must deliver air or oxygen at least 6-8 litres/minutes. When using an air pump, give oxygen simultaneously through nasal cannula
- Place the bronchodilator solution and add sterile saline in the nebulizer chamber to make a volume more than the minimal fill volume of the chamber (usually 3-4 ml). Nebulize until the liquid is all used up. The dose of salbutamol is 2.5 mg(i.e., 0.5 ml of 5 mg nebulizer solution) This can be given 1-4 hourly initially, reducing to 6-8 hourly once the childs condition improves. If necessary in severe cases, it can be given more frequently

(b) Salbutamol by metered-dose inhaler with a spacer device.

Spacer devices with a volume of 250-750 ml are commercially available. Homemade spacers using plastic bottles can also be used.

- Remove the cap and shake the Metered-Dose Inhaler (MDI)
- Place the child's mouth over the opening in the spacer. In a younger child, one may attached in slight extension. Release 2 puffs (200 micrograms of salbutamol) into the spacer chamber after attaching the MDI to the other end of the spacer
- Allow normal breathing for 3-5 breaths. A slow deep breath is preferred but drug delivery may be severely compromised
- Repeat the procedure till the required number of the puffs are given

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 a breastfed infant
- Warm tea with sugar
- Warm ginger tea
- Normal saline nasal drop, 1 drop each nostril

***Harmful remedies to discourage:**

- Syrups containing codeine, sedatives or anti-histamine, honey

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
- Apply Nystatin paste for four times a day. (To prepare Nystatin paste: Crush 4 Nystatin (500000 IU) tablets and mix in 10 ml Glycerin)
- 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 before and after feeds. If bottle fed advise change to cup and spoon
- Give Paracetamol if needed for pain

Clear the Ear by Dry Wicking and Give Eardrops

- Advise mother to lay the child on the affected sides to drain the discharges
- Dry the ear at least 3 times daily
- Roll clean absorbent cloth or cotton 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
- Instill 1 - 2 drops of Ciprofloxacin ear drop after dry wicking three times daily for two weeks
- Plug the ear with cotton soaked in Vaseline during bathing
- Do not use cotton bud, metals, sticks, feathers etc.

Treat Eye Infection with Tetracycline Eye Ointment/Chloramphenicol Eye Ointment

- Clean both eyes 4 times daily
- Wash hands
- Use clean cloth and water to gently wipe away pus
- Then apply tetracycline eye ointment in both eyes 4 times daily/ Chloramphenicol 3 times daily for 5 days
- Squirt a small amount of ointment on the inside of the lower lid
- Wash hands again
- Do not apply anything else in the eye

Give Intramuscular Antibiotics

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 child cannot be referred, follow the instructions provided

Give to children being referred urgently

Give Ampicillin:
Dilute 500 mg vial with 2.1 ml of sterile water (500 mg/2.5 ml).

IF REFERRAL IS NOT POSSIBLE OR DELAYED, repeat the ampicillin injection every 6 hours.

AGE or WEIGHT	AMPICILLIN 500 mg/2.5 ml (50 mg/kg/dose 6 hourly)	GENTAMICIN 80 mg/2 ml. (7.5 mg/kg/dose once daily)
2 months up to 4 months (4 - <6 kg)	1.25 ml	0.9 ml
4 up to 12 months (6 - <10 kg)	2 ml	1.5 ml
12 months up to 3 years (10 - <14 kg)	3 ml	2.3 ml
3 years up to 5 years (14 - 19 kg)	4 ml	3 ml

Give Diazepam (10 mg/2 ml) to stop convulsions

- Turn the child to his/her side and clear the airway. Avoid putting things in the mouth
- Give oxygen and monitor
- Give diazepam injection 0.3 mg/kg/dose (IV) **OR** 0.5 mg/kg/dose Per Rectum (PR). For PR administration use Nasogastric (NG) **OR** using a Foley catheter.
- After administration, hold the buttocks together for two minutes and then flush with 2 ml normal saline
- Check for low blood sugar (<45 mg/dL) and if low blood sugar, treat or prevent
- If convulsions have not stopped after 10 minutes repeat diazepam (maximum 2 doses including the first dose)
- If the convulsion still persists, consult with doctor
- REFER

AGE or WEIGHT	IV doses (0.3 mg/kg/dose)	Per Rectum doses (0.5 mg/kg/dose)
2 months up to 4 months (4 - <6 kg)	0.3 ml	0.5 ml
4 up to 12 months (6 - <10 kg)	0.5 ml	0.8 ml
12 months up to 3 years (10 - <14 kg)	0.7 ml	1.2 ml
3 years up to 5 years (14 - 19 kg)	1 ml	1.7 ml

Low blood sugar level for children	
Normal child	<45 mg/dL
Malnutrition child	<54 mg/dL

Treat the Child to Prevent Low Blood Sugar

- If the child is able to breastfeed:
  - » Ask the mother to breastfeed the child

- If the child is not able to breastfeed but is able to swallow:
  - » Give expressed breast milk or a breast-milk substitute
  - » If neither of these is available, give sugar water*
  - » Give 30 - 50 ml (10 ml/kg) of milk or sugar water* before departure

- If the child is not able to swallow:
  - » Give 50 ml of milk or sugar water* by nasogastric tube
  - » If no nasogastric tube available, give 1 teaspoon of sugar moistened with 1-2 drops of water sublingually and repeat doses every 20 minutes to prevent relapse.

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

Treatment For Diarrhoea

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 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:

ORS Doses	
Up to 2 years	50 – 100 ml after each loose stool
2 years or more	100 – 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)

- Tell the mother how much zinc to give (20 mg tab):

Zinc Sulphate Doses	
2 months up to 6 months	½ tablet daily for 14 days
6 months or more	1 tablet daily for 14 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 water

3. Continue feeding (exclusive breastfeeding if age less than 6 months)

4. When to return

- Child becomes sicker
- Notable to drink **OR** breastfeed **OR** drink poorly
- Blood in stool
- Develops fever

Plan B: Treat Some Dehydration with ORS

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

1. Determine amount of ORS to give during first 4 hours

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

* 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

2. 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

3. After 4 hours:

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

4. If the mother must leave before completing treatment:

- » Show her how to prepare ORS solution at home
- » Show her how much ORS to give to finish 4-hour treatment at home
- » Give her enough ORS packets to complete rehydration. Also give her 2 packets as recommended in Plan A

5. 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
   - ◆ Child becomes sicker
   - ◆ Not able to drink **OR** breastfeed **OR** drink poorly
   - ◆ Blood in stool
   - ◆ Develops fever

Oral Rehydration Solution (ORS) preparation:

- Check expiry date and damage of ORS packet
- Prepare 1 liter of boiled and cooled water or Mineral water
- Add one packet of ORS to the 1 liter water and stir well
- If the solution is not finished within 24 hours, discard and prepare new solution

Plan C: Treat Severe Dehydration Quickly

Follow the arrows

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 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*	2½ hours

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

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

No ↓

Is referral possible within 30 mins?

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 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/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 ↓

Can the child drink?

Yes →

No ↓

Refer URGENTLY to hospital for IV or NG treatment

Yes →

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

Formula for IV flow rate:

$$\frac{\text{Volume(ml) x drops factor (60)}}{\text{Time (min)}} = \text{Flow rate}$$

Treatment Protocol for Malaria

Protocol A: Treatment regimen for *P. vivax* malaria

Age Group	Name of Drug	Day 0	Day 1	Day 2	Day 3 to 7
<1 year	Chloroquine	½ tab (7.5 ml syrup)	½ tab (7.5 ml syrup)	¼ tab (3.75 ml syrup)	-
	Primaquine **(Only if >6 months old)**	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg
1 - 4 years	Chloroquine	1tab (15 ml syrup)	1tab (15 ml syrup)	½ tab (7.5 ml syrup)	-
	Primaquine	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg
5 - 8 years	Chloroquine	2 tablets	2 tablets	1 tablet	-
	Primaquine	2 tablets	2 tablets	2 tablets	2 tablets
Note: If the patient vomits within 1hr. of taking the drug, the dose should be repeated					

Source: *National Guideline for Diagnosis and Treatment of Malaria in Bhutan, 6th Edition, 2024*

Protocol B: Treatment regimen for uncomplicated *P. falciparum* malaria

Patient Category	Drugs	Daily Dose	No. of days of treatment
<15 kg	ART+ L (Coartem)	1 tablet at 0, 8, 24, 36, 48 and 60 hours	3
	Primaquine	Single dose (0.5 mg/kg) body weight **(Do not give to infants <6 months)**	Day 0
15 - 24 kg	ART+ L (Coartem)	2 tablets at 0, 8, 24, 36, 48 and 60 hours	3
	Primaquine	Single dose (0.5 mg/kg) body weight	Day 0

Source: *National Guideline for Diagnosis and Treatment of Malaria in Bhutan, 6th Edition, 2024*

Protocol C: Treatment regimen for mixed malaria

Patient Category	Drugs	Daily dose	No. of days of treatment
<15 kg	ART+ L (Coartem)	1 tablet at 0, 8, 24, 36, 48 and 60 hours	3
	Primaquine	0.5 mg/kg body weight daily **(Do not give to infants < 6 months)**	7
15 - 24 kg	ART+ L (Coartem)	2 tablets at 0, 8, 24, 36, 48 and 60 hours	3
	Primaquine	0.5 mg/kg body weight daily	7

Source: *National Guideline for Diagnosis and Treatment of Malaria in Bhutan, 6th Edition, 2024*

Regimen for second line antimalarial Dihydroartemisinin Piperaquine

Body weight in kg	Dihydroartemisinin (DHA) Piperaquine (PPQ) 40 mg/320 mg base tablets
5 - 7 kg	½ tablet
8 - 10 kg	¾ tablet
11 - 16 kg	1 tablet
17 - 24 kg	1¼ tablet
25 - 35 kg	2 tablets
Note: Dihydroartemisinin (DHA) /Piperaquine (PPQ) is given over three days at a dose of **DHA 4 mg/kg per day and PPQ 18 mg / kg per day PPQ once a day for 3 days for adults and children weighting more than 25 kgs.** Children weighing less than 25 kgs should receive 4 mg/kg of DHA and 24 mg/kg of PPQ.	

Source: *National Guideline for Diagnosis and Treatment of Malaria in Bhutan, 6th Edition, 2024*

Note: Severe malaria is defined as one or more of the following manifestations that occur without any alternative cause and in presence of a positive test (usually for Pf malaria). Severe malaria may present with impaired consciousness/coma, seizures, jaundice, severe anemia (Hb <7 gm/dL), acute respiratory distress, acidosis, acute renal failure, hypoglycemia, abnormal bleeding or DIC (Disseminated Intravascular Coagulation) and shock. The most important manifestations of severe malaria are cerebral malaria and severe anemia. The above severe manifestations may develop and can occur as single or more commonly, in combination in the same patient. Severe malaria is mainly caused by P. falciparum and is a medical emergency.

Protocol E: Treatment Regimen options for Severe Malaria

Drug	Route	Schedule
1. Artesunate	IM / IV	1. Adults and older children >20 kg: 2.4 mg/kg body weight 2. Children <20 kg: 3.0 mg/kg body weight and Give at 0, 12, 24 hrs and thereafter every 24 hours until the patient is able to take orally. This should be followed by 3 days of ACT (Refer SOP for the preparation and administration of injection Artesunate- pg. 22)
2. Artemether	IM	3. 2 mg/kg body weight IM given on admission. Then 1.6 mg/kg IM once a day followed by a full course of combination therapy as soon as the patient can swallow.
3. Quinine	IV	• Loading dose of 20 mg/kg body weight of quinine dihydrochloride salt given over a 4-hour period in IV fluid (glucose 5% preferred to prevent hypoglycemia) then give maintenance dose of 10 mg/kg after 8 hours and repeated 8-hourly until the patient is able to take Quinine tablet orally • The oral dose of quinine is 10 mg/kg body weight given every eight hours • The total duration of treatment is 7 days including both IV and oral treatment. The infusion rate should not exceed 5 mg/kg body weight per hour. Quinine can be given by IM injections in the same dosage if IV infusion is not possible • It should be diluted in normal sali ne to a concentration of 60-100 mg/ ml salt, the dose divided equally and administered on the two anterior thighs (not on the buttock)
Note: Protocol D is for Treatment Regimen for Malaria during pregnancy which is not applicable for IMNCI. Also you need to refer National Guideline for Diagnosis and Treatment of Malaria in Bhutan ,2024 for adults.		

Source: *National Guideline for Diagnosis and Treatment of Malaria in Bhutan, 6th Edition, 2024*

SOP for the preparation and administration of injection

Injectable Artesunate

- Weigh the patient
- Determine the no. of vials needed according to body weight (Refer protocol E)

- Reconstitute
  - » Artesunate powder + 1 ml 5% sodium bicarbonate ampoule (immediately before use)

- Calculate the Artesunate solution according to route of administration:
  - » Reconstituted Artesunate + saline solution or 5% dextrose (5 ml for IV and 2 ml for IM)

- Administer:
  - » IV slow bolus 3-4 ml/min
  - » IM: Inject slowly, spread the doses if more than 2 ml over different sites for babies and 5 ml for adults
  - » The solution should be prepared freshly for each administration and should not be stored.

Source: *National Guideline for Diagnosis and Treatment of Malaria in Bhutan, 6th Edition, 2024*

GIVE FOLLOW UP CARE FOR THE CHILD

- 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.

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

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 are worse or the same: Give Ciprofloxacian for 3 days
- Advise the mother to return in 3 days
- If you do not have the second line antibiotic, REFER to hospital

Exceptions - if the child:

- Is less than 12 months old, or
- Was dehydrated on the first visit, or
- If he had measles within the last 3 months

} REFER to hospital

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.

PERSISTENT DIARRHOEA	MALARIA
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. Treat for dehydration if present. 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 and tell the mother to continue giving the child zinc supplement	• Advice when to return immediately • Follow National Guideline for Diagnosis and Treatment of Malaria in Bhutan 2024 for follow up

GIVE FOLLOW-UP CARE FOR ACUTE CONDITIONS	
FEVER: NO MALARIA If fever persists after 3 day: • 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	**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 wicking the ear and ciprofloxacin drops for 14 days

MEASLES WITH EYE OR MOUTH COMPLICATIONS

After 3 days:

- Look for red eyes and pus draining from the eyes
- Look at mouth ulcers or white patches in the mouth (thrush). 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 from the mouth, refer to hospital
- If mouth ulcers are the same or better, continue using half-strength nystatin paste for a total of 5 days

Treatment for thrush:

- If thrush is worse check that treatment is being given correctly. If the child has problems with swallowing, refer to hospital
- If thrush is the same or better, and the child is feeding well, continue nystatin paste for a total of 7 days

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

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 WFH/L
  - » If MUAC, measure using MUAC tape
  - » Check the child for edema 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 SD or more or MUAC is 12.5 cm or more.

Exception:

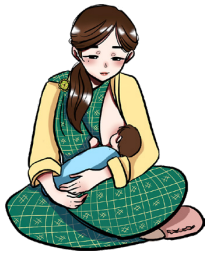
- If you do not think that feeding will improve, or if the child has lost weight or his or her MUAC has diminished, refer the child.

ASSESS CHILD'S FEEDING
Assess feeding if child is Less Than 2 Years Old, has MODERATE ACUTE MALNUTRITION or 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?
• If child is not breastfeeding, ASK: • What milk are you giving? » How many times during the day and night? » How much is given at each feed? » How are you preparing the milk? • Let the mother demonstrate or explain how a feed is prepared, and how it is given to the infant. » Are you giving any breast milk at all? » Are you able to get new supplies of milk before you run out? » How is the milk being given? Cup or bottle? » How are you cleaning the feeding utensils?

FEEDING COUNSELLING FOR BREASTFED CHILD

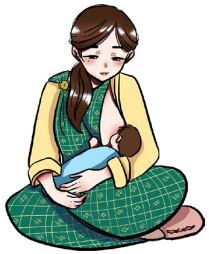
Feeding Recommendations

Feeding recommendations FOR ALL CHILDREN during sickness and health:
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.



Newborn, birth up to 1 week

- Immediately after birth, put your baby in skin to skin contact with you
- Allow your baby to take the breast within the first hour. Give your baby colostrum, the first yellowish, thick milk. It protects the baby from many Illnesses
- Breastfeed day and night, as often as your baby wants, at least 8 times In 24 hours. Frequent feeding produces more milk
- If your baby is small (low birth weight), feed at least every 2 to 3 hours. Wake the baby for feeding after 3 hours, if baby does not wake self
- DO NOT give other foods or fluids. Breast milk is all your baby needs. This is especially important for infants of HIV-positive mothers. Mixed feeding increases the risk of HIV mother-to-child transmission when compared to exclusive breastfeeding



1 week up to 6 months

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

6 up to 9 months

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

9 up to 12 months

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

12 months up to 2 years

- Breastfeed as often as your child wants
- Also give a variety of 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 your child to eat

2 years and older

- Give a variety of family foods to your child including animal-source foods and vitamin A-rich fruits and vegetables
- Give at least 1 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

FEEDING COUNSELLING FOR NON-BREASTFED CHILD

These feeding recommendations are for non-breastfed child

Up to 6 months

- Give FORMULA FEED only
- Other foods or fluids are not necessary
- Prepare correct strength and amount just before use.
- Use milk within 2 hours. Discard any leftover – a refrigerator can store formula for 24 hours
- Cup feeding is safer than bottle feeding
- Clean the cup and utensils with hot soapy water

Give the following amount of formula 8 to 6 times per day:

Age in months	Approx Amount and Times per day
0 to 1	60 ml x 8
2	90 ml x 7
3 to 4	120 ml x 6
5 to 6	150 ml x 6

6 up to 12 monts

- Give about 1-2 cups (500 ml) of full cream milk or infant formula per day.
- Give milk with a cup, not a bottle.
- If no milk is available, give 4-5 feeds per day.
- Give 3 adequate servings of nutritious complementary foods plus one snack per day (to include protein, mashed fruit and vegetables). Each meal should be 3/4 cup.
- If possible, give an additional animal-source food such as liver or meat.

12 months up to 2 years

- Give 3 adequate nutritious feeds plus 2 snacks per day (each meal should be 1 cup).
- If possible, give an additional animal-source food, such as liver or meat.
- Give fruit or vegetables twice every day
- Give about 2 cups (250 x 2=500 ml) of full cream milk or infant formula per day. If
- No milk is available, give 4-5 feeds per day
- Feed actively with own plate and spoon

2 years and older

- Give a variety of family foods to your child including animal-source foods and vitamin A-rich fruits and vegetables
- Give at least 1 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

Safe preparation of replacement feeding

Infant formula

- Always use a marked cup or glass and spoon to measure water and the scoop to measure the formula powder
- Wash your hands before preparing a feed. Bring the water to boil and then let it cool. Keep it covered while it cools
- Measure the formula powder into a marked cup or glass. Make the scoops level
- Put in one scoops for every 30 ml of water (also check the preparation instruction in the formula container)
- Add a small amount of the cooled boiled water and stir
- Fill the cup or glass to the mark with the water. Stir well
- Feed the infant using a cup
- Wash the utensils

Cow's milk

- Cow's or other animal milks are not Suitable for infants below 6 months of age (even modified)
- For a child between 6 and 12 months of age: boil the milk and let it cool (even if pasteurized)
- Feed the baby using a cup

FEEDING COUNSELLING

Stopping Breastfeeding

STOPPING 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.

- HELP MOTHER PREPARE
- Mother should discuss and plan in advance with her family, if possible
- 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

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
- 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 semi-solid 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

- **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 STI and AIDS prevention
  - » Check the mother's Vitamin A status and give her Vitamin A if needed

WHEN TO RETURN

Advise the Mother When to Return to Health Worker

FOLLOW-UP VISIT: Advice 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
• FEEDING PROBLEM	7 days
• ANAEMIA	14 days
• MODERATE ACUTE MALNUTRITION	30 days
• DIAGNOSED TB CASES	Every 7 days to ensure DOTs

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 COUGH or COLD	• Fast breathing • Difficult breathing
IF CHILD HAS DIARRHEA	• Blood in stool • Drinking poorly

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

SICK YOUNG INFANT AGE UP TO 2 MONTHS

IMNCI Process For All Young Infants (Birth Up To Two Months)

Do a rapid appraisal of all waiting infants and ask the mother what the young infant's problem are:

Has the infant just been delivered?	**YES**	• Provide Early Essential Newborn Care as per Midwifery Standard • Keep baby warm by skin to skin contact (Continue Kangaroo Mother Care if preterm or birthweight less than 2 kg) • ASSESS and CLASSIFY for POSSIBLE SERIOUS BACTERIAL INFECTION and provide treatment • Support mother to initiate breastfeeding • Refer to hospital if indicated by Young Infant assessment
	NO	• GREET THE CAREGIVER • ASK: Why has the caregiver brought the child to the health facility today? • DETERMINE IF THIS IS AN INITIAL, FOLLOW UP or ROUTINE VISIT • Ensure that an infant who has come for an INITIAL VISIT (i.e. because they are sick) is fast-tracked • Measure the infant's weight and temperature

IF THE INFANT BEEN BROUGHT TO THE FACILITY BECAUSE S/HE IS SICK (INITIAL VISIT):	**IF THIS IS A FOLLOW-UP VISIT:**	**IF THE YOUNG INFANT HAS BEEN BROUGHT FOR A ROUTINE POSTNATAL OR WELL-CHILD VISIT:**
• URGENTLY ASSESS and CLASSIFY for POSSIBLE SERIOUS BACTERIAL INFECTION • Then complete the YOUNG INFANT assessment using all boxes to classify the illness and identify the treatment • Provide treatment (including pre-referral treatment and referral if required) • Counsel the caregiver on Home Care for the Young Infant and When to Return • Assess breastfeeding and support the mother to successfully breastfeed the infant	• Complete the YOUNG INFANT assessment, including ASSESS and CLASSIFY for POSSIBLE SERIOUS BACTERIAL INFECTION • Provide FOLLOW-UP CARE • Counsel the caregiver on Home Care for the Young Infant and When to Return • Assess breastfeeding and support the mother to successfully breastfeed the infant	• Complete the YOUNG INFANT assessment, including ASSESS and CLASSIFY for POSSIBLE SERIOUS BACTERIAL INFECTION • TREAT (if necessary) • Counsel the caregiver on Home Care for the Young Infant and When to Return • Assess breastfeeding and support the mother to successfully breastfeed the infant • Record in MCH handbook as prescribed in MCH handbook guideline

CHECK FOR POSSIBLE SERIOUS BACTERIAL INFECTION, VERY SEVERE DISEASE OR LOCAL BACTERIAL INFECTION

ASK	LOOK, LISTEN, FEEL		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
Is the infant having difficulty in feeding? Has the infant had convulsions (fits)?	• Check breathing » Count the breaths in one minute Repeat the count if more than 60 breaths per minute » Look for severe chest indrawing » Listen for Grunting • Check appearance » Look at the young infant's movements » If the infant is sleeping, ask the mother to wake him/her If the young infant is not moving, gently stimulate him/her » Does the infant not move at all? » Does the infant move on his/her own? • Look for convulsion • Check blood sugar • Check skin colour • Check for Cyanosis • Check oxygen saturation if available • Check other signs or signs of bacterial infections » Measure axillary temperature » Look at the umbilicus ◆ Is it red or draining pus? ◆ Is the redness extending upto the skin? » Look for skin pustules » Look for ear discharge » Look for eye discharge	**YOUNG INFANT MUST BE CALM** Classify all young infants	Any of the following signs: • Movement only when stimulated **OR** • No movement at all **OR** • Not feeding well **OR** • Convulsions **OR** • Fast breathing (60 breaths per minute or more) **OR** • Severe chest indrawing **OR** • Fever (37.5 °C or above) **OR** • Low body temperature (less than 35.5°C **OR** • Grunting **OR** • Severe skin pustules (>10 in numbers) **OR** • Umbilical redness extending up to the skin **OR** • Cyanosis **OR** • Severely pale **OR** • SpO2 < 90% **OR** • RBS < 45 mg/dL	**POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE**	• Give first dose of IM injection ampicillin and gentamicin (pg. 43) • Treat to prevent low blood sugar (pg. 43) • Consult & Refer URGENTLY to hospital • Advise the mother on how to keep the infant warm on the way to the hospital • Provide oxygen if SpO_2 < 90%
			• Umbilicus red or draining pus **OR** • Skin pustules ≤10 in numbers **OR** • Ear discharge	**LOCAL BACTERIAL INFECTION**	• Give an appropriate oral antibiotic (pg. 45) • Teach the mother to treat local infections at home (pg. 51) • Advise mother to give home care for the young infant • Follow up in 2 days (pg. 52) • Advise the mother to give home care (pg. 50)
			• Unilateral or bilateral purulent eye discharge in the first 28 days of life	**NEONATAL CONJUNCTIVITIS**	• Give IM injection Ceftriaxone single dose (pg. 45) Plus • Azithromycin orally for 3 days (pg. 45) • Follow up in 2 days (pg. 51) • Advise the mother to give home care (pg. 50) • Care for neonatal conjunctivitis (pg. 51)
			• None of the signs of very severe disease or local bacterial infection	**NO SEVERE DISEASE OR SERIOUS or LOCAL BACTERIAL INFECTION**	Home care

THEN, CHECK FOR JAUNDICE

ASK	LOOK, LISTEN, FEEL		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
If jaundice present, ASK • How old is the baby? • When did jaundice first appear? • What is the colour of stool?	***LOOK AND FEEL:*** • Look for jaundice (yellow eyes or skin) • Look at the young infant's palms and soles. Are they yellow? • Check TCB if available	Classify JAUNDICE	• Any jaundice if age less than 24 hours **OR** • Yellow palms or soles at any age **OR** • TCB more than cut off as per age in the table (pg. 46) **OR** • Pale stool	**SEVERE JAUNDICE**	• Treat to prevent low blood sugar (pg. 43) • Consult & Refer URGENTLY to hospital • Advise the mother on how to keep the infant warm on the way to the hospital
			• Jaundice appearing after 24 hours of age **AND** • Yellow eyes or skin, but not in the soles and palms **AND/OR** • TCB less than the cutoff as per age in the table (pg. 46)	**JAUNDICE**	• Advise the mother to give home care for the young infant (pg. 50) • Advise mother to return immediately if palms and soles appear yellow. • If the young infant is older than 14 days, refer to a hospital for assessment • Follow-up in 2 days (pg. 52)
			• No jaundice	**NO JAUNDICE**	Advise the mother to give home care for the young infant (pg. 50)

THEN, CHECK FOR DIARRHEA

ASK	LOOK, LISTEN, FEEL		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
IF YES, • How long did child have diarrhea? • Is there blood in stools? • Is child breastfeeding well?	***LOOK AND FEEL:*** • Look at the young infant's general condition: Infant's movements » Does the infant move on his/her own? » Does the infant move when stimulated but then stops? » Does the infant not move at all? » Is the infant restless and irritable? • Look for sunken eyes • Pinch the skin of the abdomen. Does it go back: » Very slowly (longer than 2 seconds)? » Or slowly?	Classify Diarrhoea for Dehydration	Two of the following signs: • Movement only when stimulated or no movement at all • Sunken eyes • Skin pinch goes back very slowly	**SEVERE DEHYDRATION**	• If infant has no other severe classification: Give fluid for severe dehydration (Plan C) **OR** • If infant also has another severe classification: » Consult & Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way » Advise the mother to continue breastfeeding
			Two of the following signs: • Restless and irritable • Sunken eyes • Skin pinch goes back slowly	**SOME DEHYDRATION**	• Give fluid and breast milk for some dehydration (Plan B) • If infant has any severe classification: » Consult & 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 2 days if not improving (pg. 52)
			Not enough signs to classify as some or severe dehydration	**NO DEHYDRATION**	• Give fluids to treat diarrhoea at home and continue breastfeeding (Plan A) • Advise mother when to return immediately • Follow-up in 2 days if not improving (pg. 52)
		Classify	If diarrhea persists >2 weeks	**SEVERE PERSISTENT DIARRHEA**	• Refer for cause analysis • Keep the infant warm on the way to the hospital
			If blood in stool	**SERIOUS ABDOMINAL PROBLEM**	• Consult & Refer URGENTLY to hospital • Keep the infant warm on the way to the hospital

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 FOR AGE IN BREASTFED YOUNG INFANTS (Refer growth chart- pg. 59 - 64)

ASK	LOOK, LISTEN, FEEL		SIGNS	CLASSIFY AS	IDENTIFY TREATMENT
Ask: • Is the infant breastfed? • If yes, how many times in 24 hours? • Does the infant usually receive any other foods or drinks? • If yes, how often? • If yes, what do you use to feed the infant?	***LOOK:*** • Determine weight for age. » Weight less than 2 kg? » Weight for age ___ Z-score • Look for ulcers or white patches in the mouth (Thrush).		• Weight <2 kg in young infants <7 days • Weight for age <-3 SD young infants 7 - 59 days	**VERY LOW WEIGHT FOR AGE**	• Consult & REFER to hospital for Kangaroo Mother care • Treat to prevent low blood sugar (pg. 43) • Advise the mother to keep the young infant warm on the way to hospital by KMC transport
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). Is the infant well attached? *Good attachment / Poor attachment / No attachment at all* **TO CHECK ATTACHMENT, LOOK FOR:** • Mouth wide open • Lower lip turned outwards • More areola visible above than below the mouth • Chin touching breast (All of these signs should be present if the attachment is good.) Is the infant suckling effectively (slow deep sucks, sometimes pausing)? Sucking effectively / not suckling effectively / not sucking at all Clear a blocked nose if it interferes with breastfeeding 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		Classify Feeding	• Not well attached to breast **OR** • Not suckling effectively **OR** • Less than 8 breastfeeds in 24 hours **OR** • Receives other foods or drinks **OR** • Low weight for age (≥-3 SD and <-2 SD) **OR** • Thrush (ulcers or white patches in mouth) **OR** • Breast or nipple problems	**FEEDING PROBLEM AND/OR LOW WEIGHT FOR AGE**	• If not well attached or not suckling effectively, teach correct positioning and attachment (pg. 47) • If not able to attach well immediately, teach the mother to express breast milk and feed by a cup (pg. 48) • If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding • Advise the mother to breastfeed as often and as long as the infant wants, day and night • If receiving other foods or drinks, counsel the mother about breastfeeding more, reducing other foods or drinks, and using a cup **If not breastfeeding at all:** • Refer for breastfeeding counselling and possible re-lactation • Advise about correctly preparing breast-milk substitutes and using a cup • Advise the mother how to feed and keep the low weight infant warm at home (pg. 47) • If thrush, teach the mother to treat thrush at home (pg. 51) • Advise mother to give home care for the young infant (pg. 50) • Follow-up any feeding problem or thrush in 2 days (pg. 53) • Follow-up low weight for age in 14 days (pg. 53)
			Not low weight for age ≥-2 SD and no other signs of inadequate feeding	**NO FEEDING PROBLEM OR NO LOW WEIGHT FOR AGE**	• Advise mother to give home care for the young infant (pg. 50) • Praise the mother for feeding the infant well

THEN, CHECK FOR FEEDING PROBLEM OR LOW WEIGHT FOR AGE IN YOUNG INFANT NOT RECEIVING BREASTMILK. (Refer to Growth Chart- 59 - 64)

ASK	LOOK, LISTEN, FEEL		SIGNS	CLASSIFY AS	TREATMENT
Ask: • What milk are you giving? • How many times during the day and night? • How much is given at each feed? • How are you preparing the milk? • Let mother demonstrate or explain how a feed is prepared, and how it is given to the infant • What foods and fluids in addition to replacement feeds is given? • How is the milk being given? • Cup or bottle? • How are you cleaning the feeding utensils?	***LOOK:*** • Determine weight for age » Weight less than 2 kg? » Weight for age ___SD • Look for ulcers or white patches in the mouth (thrush)	Classify Feeding	• Weight <2 kg in young infants <7 days • Weight for age <-3 SD young infants 7 - 59 days	**VERY LOW WEIGHT FOR AGE**	• Treat to prevent low blood sugar (pg. no.43) • First dose IM injection Ampicillin and Gentamicin (pg. no.43) • Warm the young infant by skin to skin contact if the temperature is less than 36.5°C/97.7°F (or feels cold to touch) while arranging referral. • Advise the mother to keep the young infant warm on the way to hospital by KMC transport. • Consult & REFER to hospital
			• Milk incorrectly or unhygienically prepared **OR** • Giving inappropriate replacement feeds **OR** • Giving insufficient replacement feeds **OR** • Using a feeding bottle **OR** • Low weight for age (≥-3 SD and <-2 SD) **OR** • Thrush (ulcers or white patches in mouth)	**FEEDING PROBLEM OR LOW WEIGHT FOR AGE**	• Counsel about feeding (pg. 31) • Explain the guidelines for safe replacement feeding (pg. 32) • Identify concerns of mother and family about feeding • If mother is using a bottle, teach cup feeding • 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 (pg. 51) • Advise mother to give home care for the young infant (pg. 50) • Follow-up any feeding problem or thrush in 2 days (pg. 53) • Follow-up low weight for age in 14 days (pg. 53)
			Not low weight for age (≥-2 SD) and no other signs of inadequate feeding	**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:

IMMUNIZATION SCHEDULE:	AGE	VACCINES*		
	Birth	BCG**	OPV-0	Hep B-0
	6 weeks	Penta-1	OPV-1	PCV-1

*** Vaccines should be given in line with the latest national EPI guideline.**
**** Young infants who are HIV positive or of unknown HIV status with symptoms consistent with HIV infection should NOT be given BCG.**

- Give all missed doses on this visit
- Advise the caregiver when to return for the next immunization

ASSESS OTHER PROBLEMS:
- Check if the infant has received post-natal care and/or routine growth monitoring according to MCH handbook guideline

ASSESS THE MOTHER'S HEALTH NEED:
Nutritional status and anemia, contraception, Check hygienic practices
- Give VITAMIN A 200,000 IU to the mother within 6 weeks of delivery, if she has not received it yet

TREAT THE SICK YOUNG INFANT AND COUNSEL THE MOTHER

TREAT THE YOUNG INFANT WITH SEVERE DISEASES OR SERIOUS BACTERIAL INFECTION

GIVE FIRST DOSE OF INTRAMUSCULAR ANTIBIOTICS AND REFER

Give first dose of both ampicillin and gentamicin intramuscularly

WEIGHT	AMPICILLIN Dosage: 50 mg per kg/dose To a vial of 500 mg add 2.1 ml sterile water = 500 mg/2.5 ml	GENTAMICIN Dosage: 4 mg/kg/dose No need to dilute (80 mg/2 ml vial)
1-<1.5 kg	0.3 ml	0.1 ml
1.5-<2 kg	0.4 ml	0.2 ml
2-<2.5 kg	0.6 ml	0.3 ml
2.5-<3 kg	0.7 ml	0.3 ml
3-<3.5 kg	0.8 ml	0.4 ml
3.5-<4 kg	0.9 ml	0.4 ml
4-<4.5 kg	1.1 ml	0.5 ml

Referral is the best option for a young infant classified with VERY SEVERE DISEASE. If referral is not possible, continue to give ampicillin and gentamicin for at least 5 days. Give ampicillin two times daily to infants less than one week of age and 3 times daily to infants one week or older. Give gentamicin once daily.

TREAT THE YOUNG INFANT FOR CONVULSION

If the infant is convulsing, give diazepam (10 mg/2 ml solution) in dose 0.3 mg/kg IV or 0.5 mg/kg per rectum; if convulsions continue after 10 minutes, give a second dose of diazepam.

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 breast milk before departure. If not possible to give expressed breast milk, 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 breast milk or sugar water by nasogastric tube

Give oxygen if;

- Pulse SpO_2 < 90% with a good pulse wave. (Pulse oximetry may be unreliable if the child's peripheral perfusion is poor)
- Give oxygen to all young infants with:
  - » Convulsions
  - » Apnoea or breathing <30 breaths per minute
  - » Fast breathing, severe chest indrawing, nasal flaring or grunting
- Use nasal prongs. It is the preferred method for delivering oxygen to pre-term and low-birth-weight infants, with a flow rate of 0.5-1 L/min, which can be increased to 2 L/min in severe respiratory distress
- Place them just inside the nostrils and secure with a piece of tape on the cheeks near the nose, and take care that the nostrils are kept clear of mucus, which could block the flow of oxygen
- Use 1mm prongs for small babies and 2mm prongs for term babies. If you have only adult-size prongs, and the outlet tubes are too far apart to fit into the child's nostrils, cut the outlet tubes off and direct the jet of oxygen into the nostrils

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

REFER URGENTLY

- Consult the receiving on-call clinician at referral hospital

TREAT THE YOUNG INFANT FOR LOCAL BACTERIA INFECTION

GIVE AN APPROPRIATE ORAL ANTIBIOTIC FOR LOCAL BACTERIAL INFECTION

- First-line antibiotic: Amoxicillin
- Second-line antibiotic: Cotrimoxazole

AGE	AMOXICILLIN 25 mg/kg per dose Give 2 times daily for 5 days		COTRIMOXAZOLE (trimethoprim + Sulphamethoxazole) 4 mg/kg per does Give 2 times daily for 5 days	
	Syrup 125 mg in 5 ml	Tablet 250 mg	Adult Tablet single strength (80 mg trimethoprim + 400 mg sulphamethoxazole)	Syrup (40 mg trimethoprim + 200 mg sulphamethoxazole)
Birth up to 1 month	2.5 ml	¼ (62.5 mg)	-	-
1 month up to 2 months	5 ml	½ (125 mg)	1/4 tablet	2.5 ml

OR

WEIGHT (kg)	Syrup Amoxicillin (125 mg/5 ml)	Tab Amoxicillin 250 mg
2 kg up to 3 kg	2.5 ml	1/4 tablet
3.0 kg up to 4 kg	3.5 ml	1/2 tablet
4.0 kg up to 5.0 kg	5 ml	1/2 tablet

Treat baby for Neonatal Conjunctivitis

Note: Add 2 ml sterile water to 250 mg ceftriaxone vial

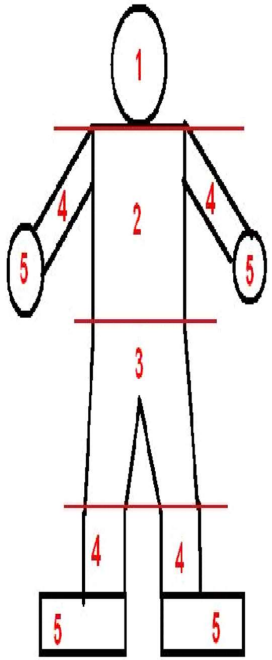
WEIGHT (kg)	Inj. Ceftriaxone 25-50 mg/kg IM stat plus Tab Azithromycin 20 mg/kg/day x 3 days
2.0 kg up to 3 kg	0.8 ml ceftriaxone plus Tab azithromycin 50 mg OD
3.0 kg up to 4 kg	1.0 ml ceftriaxone plus Tab azithromycin 70 mg OD
4.0 kg up to 5.0 kg	1.4 ml ceftriaxone plus Tab azithromycin 90 mg OD

Transcutaneous Bilirubin (TCB) Threshold in Newborn Babies born at Gestational Age ≥35 weeks

Day of Life	TCB Threshold	Action
Day 2 (before discharge)	≥ 12 mg/dL	Refer to check Total Serum Bilirubin (TSB)
Day 3-7	≥ 15 mg/dL	Refer to check TSB
Day 7 onwards	≥ 18 mg/dL	Refer to check TSB
Anytime	≥ 20 mg/dL	Urgent referral to the hospital

Source: National Newborn Screening Program 2024

Clinical assessment of Neonatal Jaundice (Kremer's Rule/Zones)



Kremer's Rule/Zones:

Zone	Bilirubin
1	5 mg/dl
2	10
3	12
4	15
5	>15

Source: Bhutan Facility-Based IMNCI 2023

COUNSEL THE MOTHER

TEACH CORRECT POSITIONING AND ATTACHMENT FOR BREASTFEEDING

Counsel the benefits of breastfeeding.
Refer to and show the MCH handbook (pg. 43 & 44) and teach her 4 signs of good positioning and attachment.

- Show the mother how to hold her infant
  - » With the infant's head and body in line
  - » With the infant approaching the breast with the nose opposite to the nipple
  - » With the infant held close to the mother's body
  - » With the infant's whole body supported, not just neck and shoulders

- Show her how to help the infant to attach. She should:
  - » Touch her infant's chin to her breast
  - » Make her infant's nose opposite to 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

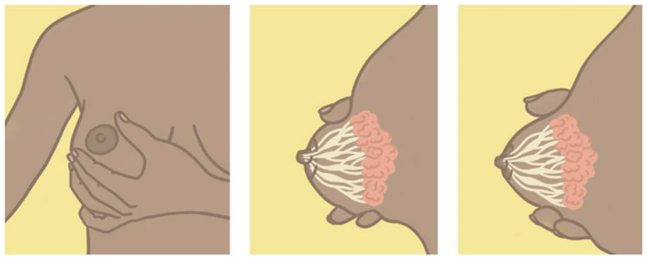
TEACH THE MOTHER HOW TO KEEP THE LOW WEIGHT YOUNG INFANT WARM AT HOME

- Keep the room warm (at least 25°C) with home heating 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 her breasts. Secure the baby with the mother
  - » 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 the infant frequently (or give expressed breast milk by cup)

TEACH THE MOTHER HOW TO EXPRESS BREAST MILK

Ask the mother to:

- Wash her hands thoroughly
- Make herself comfortable and relax
- Hold a clean wide opening container under her nipple and areola
- Trigger the release of the milk by asking mother to feel relaxed and feel connected to her baby:Hearing or seeing her baby, Smelling baby's blanket or clothing
- Massage her breast by light stroking from the outer part of the breast towards her nipple. Gentle circular motions around her whole breast
- **Place her hands and fingers:**
  - » A few finger widths away from the nipple, ask her to place her thumb on one side of the breast, and place her fingers exactly on the opposite side of her thumb. (at least 4 cm from the tip of the nipple) like c-shape
- Press her fingers back towards the chest wall
- Press and roll the fingers together towards the nipple, and release
- Compress and release the breast tissue between her fingers and thumb a few times. As mother repeats these steps, the milk will start to come
- 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



Source: *IMCI in* South Africa

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
- Spoon-feeding can also be done as the same way

TEACH MOTHER FOR STORING AND USING EXPRESSED BREAST MILK

- Fresh breastmilk has the highest quality
- If breastmilk must be stored, advise the mother and family to:
  - » Use either a glass or hard plastic container with a large opening and a tight lid to store the breastmilk
  - » Boil the container and lid for 10 minutes before use to sterilise them
  - » Store only enough for one feed in one container
  - » If several containers are used, label each container with date and time of breastmilk expression

- Store expressed breastmilk in the coolest possible place in the house
  - » Clean milk can be kept in normal room temperature for 6 hours before it spoils
  - » Breastmilk can be stored in a refrigerator for up to 5 days.
  - » Breastmilk can be stored for up to 2 weeks if it is frozen solid in the deep freezer of the fridge

- Use the oldest expressed breastmilk first
  - » Defrost frozen breastmilk in a fridge or at room temperature over 12 hours, or by letting the container with frozen breastmilk stand in cold water to defrost
  - » To warm the milk, put the container in a bowl of warm water
  - » The milk should not be heated on a stove or microwaved

The containers should be cleaned with soap and water, and allowed to dry completely before using again

- Make sure that the person who will feed the baby has been taught to cup feed correctly

TEACH MOTHER THE CORRECT VOLUMES AND FREQUENCY OF EXPRESSED BREAST MILK OR FORMULA FEEDS

Age	Weight	Approximate amount of feed needed in 24 hours
Birth	3 kg	400 ml
2 weeks	3 kg	400 ml
6 weeks	4 kg	600 ml
10 weeks	5 kg	750 ml
14 weeks	6.5 kg	900 ml
4 months	7 kg	1050 ml
5 months	7 kg	1050 ml
6 months	8 kg	1200 ml

NOTE:
Above table is just to give a rough idea, and the right amount should be determined by each baby if the baby is well. For formula feeding preparations, advise the mother to always use the correct amount of water and formula according to the product instructions. Over dilution may lead to undernutrition and under-dilution may lead to overweight and cause constipation. Always add the boiled water to the bottle before adding formula powder.

COUNSEL THE MOTHER

ADVISE THE MOTHER TO GIVE HOME CARE FOR THE YOUNG INFANT

1. EXCLUSIVELY BREASTFEED THE YOUNG INFANT
- Ensure good communication with the mother to promote early and exclusive breastfeeding
- Give only breastfeeds to the young infant
- Give replacement feeding only if it is medically indicated
- Breastfeed frequently, as often and for as long as and as often as the infant wants

2. MAKE SURE THAT THE YOUNG INFANT IS KEPT WARM AT ALL TIMES
- In cool weather cover the infant's head and feet and dress the infant with extra clothing
- Keep the baby in skin-to-skin contact using the Kangaroo Mother Care method if the weight is less than 2 kg

3. MAINTAIN A HYGIENIC ENVIRONMENT
- Advise the caregiver to wash her hands with soap and water after going to the toilet, changing the infant's nappy and before each feed

4. SUPPORT THE FAMILY TO CARE FOR THE INFANT
- Help the mother, family and caregiver to ensure the young infant's needs are met
- Assess any needs of the family and provide or refer for management

5. WHEN TO RETURN

Follow up visit	
If the young infant has:	**Return for first follow up in:**
• Jaundice • Local Bacterial infection • Feeding problem • Thrush • Diarrhea	2 days
• 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:	
• Irritable • Vomits everything • Convulsions • Reduced activity or lethargy • Breastfeeding poorly • Becomes sicker	• Develops a fever • Feels unusually cold • Fast breathing • Difficult breathing • Palms and soles appear yellow • Blood in stool

Teach the Caregiver to treat Local Infections at home

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

Treat for Oral Thrush

- Apply nystatin paste 6 hourly after feeds for 7 days
- If breastfed, check mother's breasts for thrush. If present treat mother's breasts with nystatin
- Advise mother to wash nipples and areolae after feeds
- If bottle fed, change to cup and make sure that caregiver knows how to clean utensils used to prepare and administer the milk

If there are thick plaques the caregiver should:

- Wash her hands with soap and water
- Wet a clean soft cloth with normal saline, wrap this around the little finger, then gently wipe away the plaques
- Wash hands again

Treat for Skin Pustules or Umbilical Infection

The caregiver should:

- Wash hands with soap and water
- Gently wash off pus and crusts with soap and water
- Dry the area
- Apply NFT ointment three times daily
- Wash hands again

Care for neonatal conjunctivitis

The caregiver should:

- Wash hands with soap and water
- Gently wash off discharge and clean the eye with saline or cooled boiled water at least 4 times a day
- Continue until the discharge disappears
- Wash hands again after washing the eye

FOLLOW-UP

GIVE FOLLOW-UP CARE FOR THE YOUNG INFANT
ASSESS EVERY YOUNG INFANT FOR "VERY SEVERE DISEASE" DURING FOLLOW-UP VISIT

LOCAL BACTERIAL INFECTION

After 2 days:
- Look at the umbilicus. Is it red or draining pus?
- Look at the skin pustules
- Look at the eyes discharge

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

DIARRHOEA

After 2 days:
Ask: Has the diarrhoea stopped?
If diarrhoea persists, Assess the young infant for diarrhoea (see ASSESS & CLASSIFY chart) and manage as per initial visit
If diarrhoea stopped—reinforce exclusive breastfeeding

JAUNDICE

After 2 days: ASK
- Look for jaundice. Are palms and soles yellow?
- If palms and soles are yellow or age 14 days or more refer to hospital
- If palms and soles are not yellow and age less than 14 days, advise home care and when to return immediately
- Reassess feeding

GIVE FOLLOW-UP CARE FOR THE 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 of this follow up visit
- Continue follow-up until the infant is gaining weight well

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

LOW WEIGHT FOR AGE

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"
- 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 14 days or when she returns for immunization, whichever is the earlier
- 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 14 days). Continue to see the young infant every few weeks until the infant is feeding well and gaining weight regularly and 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 the hospital

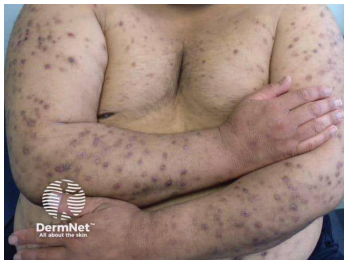
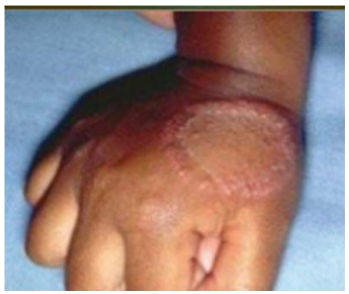
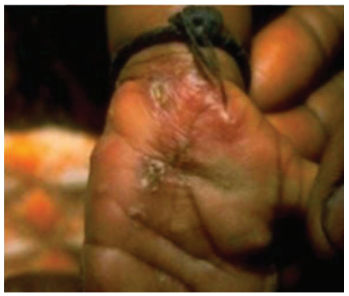
THRUSH

After 2 days:
Look for ulcers or white patches in the mouth (thrush).

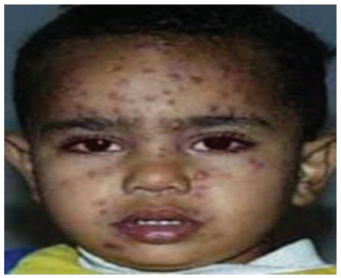
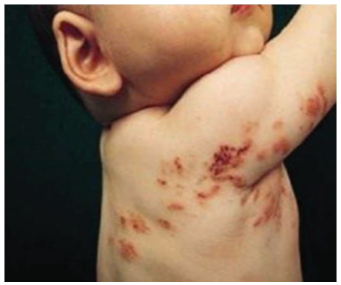
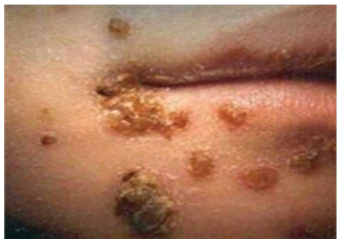
Reassess feeding. See "Then Check for Feeding Problem or Low Weight".
- If the thrush is worse check that treatment is being given correctly
- If the infant has problems with attachment or suckling, refer to the hospital
- If thrush is the same or better, and if the infant is feeding well, continue Nystatin oral paste for a total of 7 days

SKIN PROBLEM

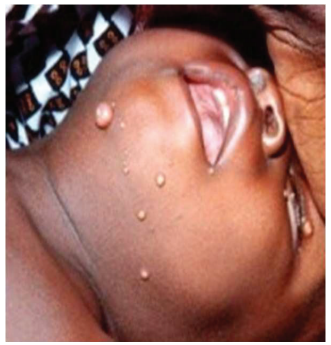
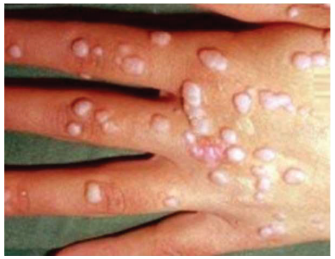
IDENTIFY SKIN PROBLEM: ITCHY

Photo	Features	Skin Problems	Treatment	Unique Features in HIV
	Itchy rash with small papules and scratch marks. Dark spots with pale centers	PAPULAR ITCHY RASH (PRURIGO)	**Treat itching:** Apply calamine ointment bd for 5 days Tablet cetirizine: • 2 to 5 years : 2.5 mg bd for 3 days • 6 month to 2 years : 2.5 mg hs for 3 days **OR** Tablet promethazine (2 to 5 years) 5 mg bd for 3 days If not improved 1% hydrocortisone (age 0-5 years apply thinly 2-to-3-time a day max for 7 days) Can be early sign of HIV and needs assessment for HIV	• Is a clinical stage 2 defining case
	An itchy circular lesion with a raised edge and fine scaly area in the centre with loss of hair. May also be found on body or web on feet	RING WORM (TINEA)	Whitfield ointment, apply 2 to 3 times daily for 14 days **OR** Miconazole cream 2% apply bd 2 to 4 times for 14 days, continue for another 10 days if lesion does not improve. If extensive refer	• Extensive: There is a high incidence of co-existing nail infection which has to be treated adequately to prevent recurrence of tinea infections of skin. • Fungal nail infection is a clinical stage 2 defining diseases
	Itchy rash and excoriations on torso; burrows in web space and wrists. face spared	SCABIES	Permethrin 5% cream (2 months to 5 years)- apply to the whole body once and leave it for 8 to 14 hours, then wash off. Repeat in 7 days If crusted scabies (Thick crusted plaque)-Refer For children < 6 months, apply Sulphur ointment every morning and evening (after regular bath) for 7 days wash daily with soap and water. Wash inner clothing regularly and change into washed clothes after regular baths	• In HIV positive individuals' scabies may manifest as crusted scabies • Crusted scabies presents as extensive areas of crusting mainly on the scalp, face, back and feet. Patients may not complain of itching. The scales will be teeming with mites

IDENTIFY SKIN PROBLEM: BLISTERS

Photo	Features	Skin Problems	Treatment	Unique Features in HIV
	Itchy vesicles over body. Vesicles appear progressively over days and form scabs after they rupture	CHICKENPOX	Treat itching with antihistamine Refer URGENTLY if pneumonia or jaundice appear. Give 1st dose of antibiotics for Pneumonia	• Presentation atypical only if child is immunocompromised • Duration of disease longer • Complications more frequent • Chronic infection with continued appearance of new lesions for >1 month; typical vesicles evolve into nonhealing ulcers that become necrotic, crusted, and hyperkeratotic
	Vesicles in one area on one side of body with intense pain or scars plus shooting pain. Herpes zoster is uncommon in children except where they are immuno-compromised, for example if infected with HIV	HERPES ZOSTER	Keep lesions clean and dry. Give paracetamol for pain relief Follow-up in 7 days If eye involvement, Refer to higher center.	• Duration of disease longer • Hemorrhagic vesicles, necrotic ulceration • Rarely recurrent, disseminated or multi-dermatomal • Is a Clinical stage 2 defining disease
	Red, tender, honey colour crusts or small lesions	IMPETIGO OR FOLLICULITIS	Clean sores with normal saline. Drain pus if fluctuant Start Cloxacillin (25-50 mg/kg every 6 hours) or Amoxicillin or Co-trimoxazole for 7 days. Apply Nitrofurazone ointment 0.2% tid for 5 days Refer URGENTLY if the child has fever and/or if infection extends to the muscle.	

IDENTIFY SKIN PROBLEM: NON-ITCHY

Photo	Features	Skin Problems	Treatment	Unique Features in HIV
	Skin coloured pearly white papules with a central umbilication. It is most commonly seen on the face and trunk in children. It usually takes a few months to a year to disappear on its own.	MOLLUSCUM CONTAGIOSUM	If there is superimposed infection: treat infection with amoxicillin or cotrimoxazole. • Consider referral for extensive/ refractory cases	• Incidence is higher • Giant molluscum (>1cm in size), or coalescent double or triple lesions may be seen • More than 100 lesions may be seen. • Lesions often chronic and difficult to eradicate Extensive molluscum contagiosum is a Clinical stage 2 defining disease
	The common wart appears as papules or nodules with a rough (verrucous) surface	WARTS	Topical salicylic acid 2%, weekly local application till flattening of the lesion Apply Vaseline on the normal skin around the warts before application of salicylic acid	• Lesions more numerous and recalcitrant to therapy • Extensive viral warts are a clinical stage 2 defining disease

IDENTIFY SKIN PROBLEM: ECZEMA

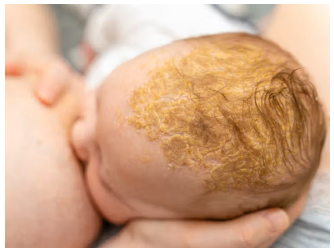
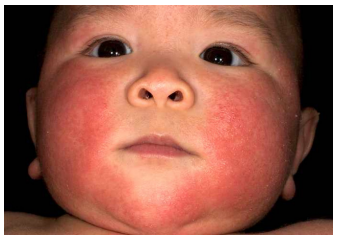
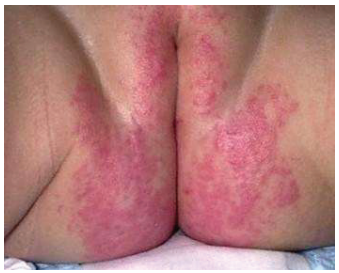
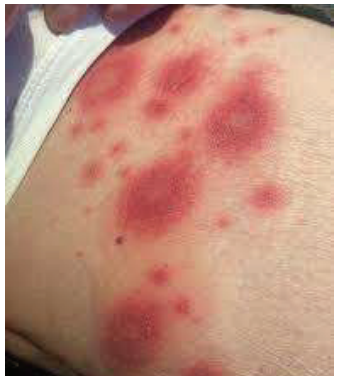
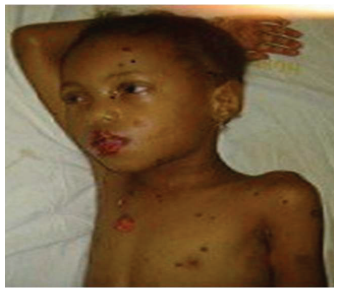
Photo	Features	Skin Problems	Treatment	Unique Features In HIV
	Greasy scales and redness on central face, body folds and scalp. It usually takes a few months to disappear on its own.	SEBORRHEIC DERMATITIS	Clean the area. Oil the scalp Apply hydrocortisone cream 1% to the areas other than scalp If there is superimposed infection: treat infection with amoxicillin or cotrimoxazole If severe or no improvement Refer to hospital	• Seborrheic dermatitis may be severe in HIV infection. • Secondary infection may be common

Photo	Features	Skin Problems	Treatment	Unique Features In HIV
	Erythematous, Wet, oozing sores or excoriated, thick patches which are usually seen on the cheeks and flexural surface of the extremities	ATOPIC DERMATITIS	Soak sores with clean water to remove crusts Dry skin gently Regular use of moisturizer Short term use of topical steroid as above Treat itching with oral antihistamine; Tablet cetirizine: • 2 to 5 years : 2.5 mg bd for 3 days • 6 month to 2 years : 2.5 mg hs for 3 days Cotton clothing	
 *Diaper Rash and Perianal Dermatitis*	Redness & irritation in diaper area (buttocks, thighs, genitals) Shiny or scaly patches on the skin Small red bumps or pimples (sometimes merging into larger patches) Discomfort or fussiness (especially during diaper changes) **If Candida (yeast) infection is present:** • Bright red rash with sharp borders • Satellite lesions (small red spots around the main rash) • Rash often involves skin folds	DIAPER RASH	**General care** Keep the diaper area clean and dry Change diapers frequently Wash with mild soap and lukewarm water or plain water; avoid harsh wipes Air exposure: let the baby spend some time without a diaper **Topical treatments** If moderate/severe irritation: Apply topical steroid 1% hydrocortisone If Candida suspected: miconazole cream **Avoid** Strong/harsh soaps, scented wipes, talcum powder Plastic Diapers	

IDENTIFY SKIN PROBLEM: DRUG AND ALLERGIC REACTIONS

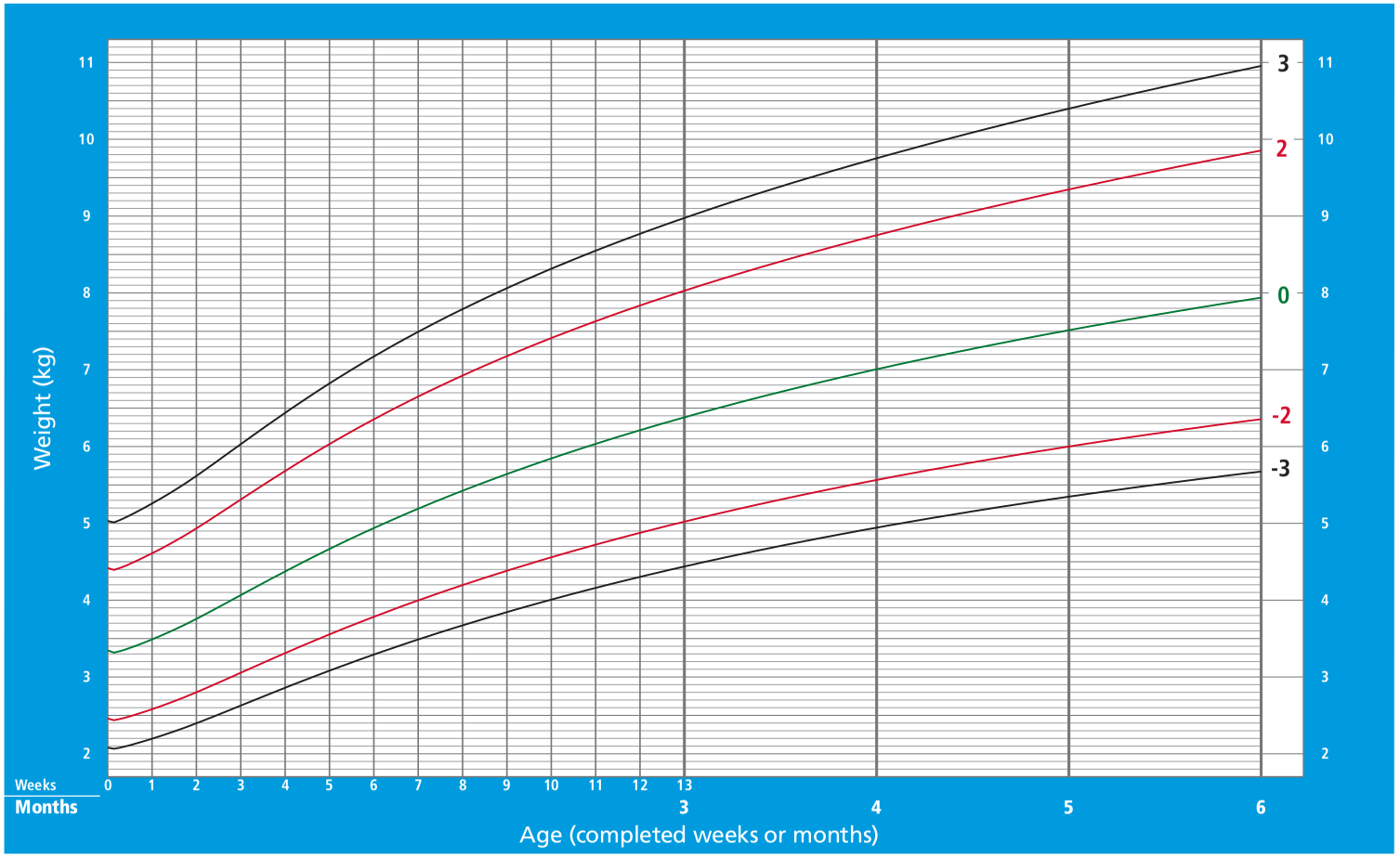
Photo	Features	Drug and Allergic Reactions	Treatment	Unique Features In HIV
	**Uncommon in children,rare in infants** They are sharply marginated, rou nd,erythematous to violaceous, 2 to 10cm papules occurring at the same place after ingestion of the drugs every time. Common drugs causing this reactions are: cotrimazole, ciprofloxacin,paracetamol and anti epileptic drugs	FIXED DRUG REACTIONS	STOP MEDICATION Tablet cetirizine: • 2 to 5 years : 2.5 mg bd for 3 days • 6 month to 2 years : 2.5 mg hs for 3 days If peeling rash, refer to hospital	• Could be a sign of reactions to ARVs
	Severe reaction due to cotrimoxazole or NVP involving the skin as well as the eyes and the mouth. Might cause difficulty in breathing A sore mouth and throat. Blisters over the skin and the mucous membranes of the mouth, nose, eyes and genitals Common drugs causing this reactions are: penicillin, antiepileptic drugs and paracetamol.	STEVEN JOHNSON SYNDROME (SJS)	Identify SJS as early as possible Stop medication refer urgently	• The most lethal reaction to NVP, Cotrimoxazole or even Efavirens

Annexure1: Weight-for-age BOYS; Birth to 6 months (Z-score)

Weight-for-age BOYS

Birth to 6 months (z-scores)

World Health Organization



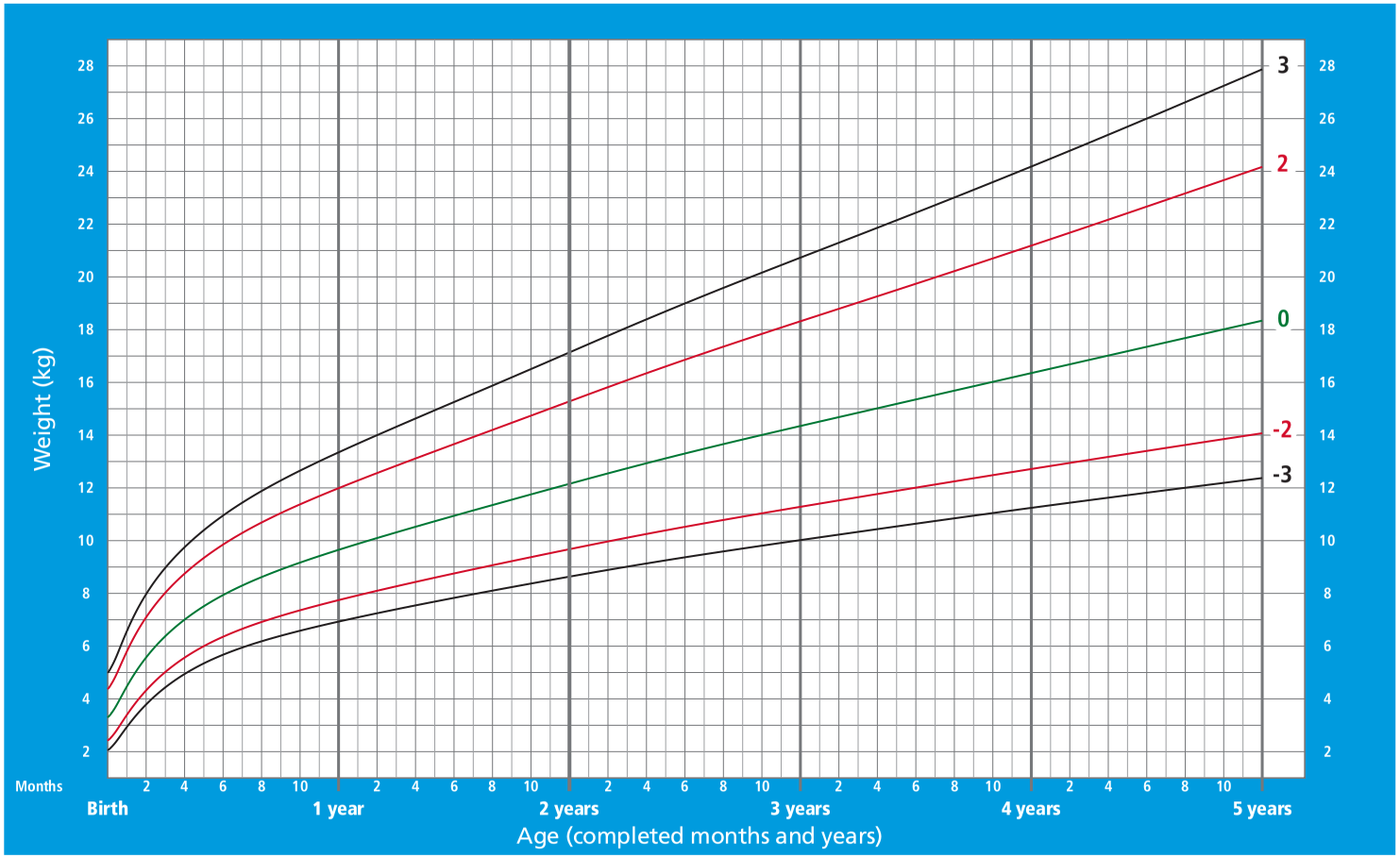
WHO Child Growth Standards

Annexure 2: Weight-for-age BOYS; Birth to 5 years (Z-score)

Weight-for-age BOYS

Birth to 5 years (z-scores)

World Health Organization



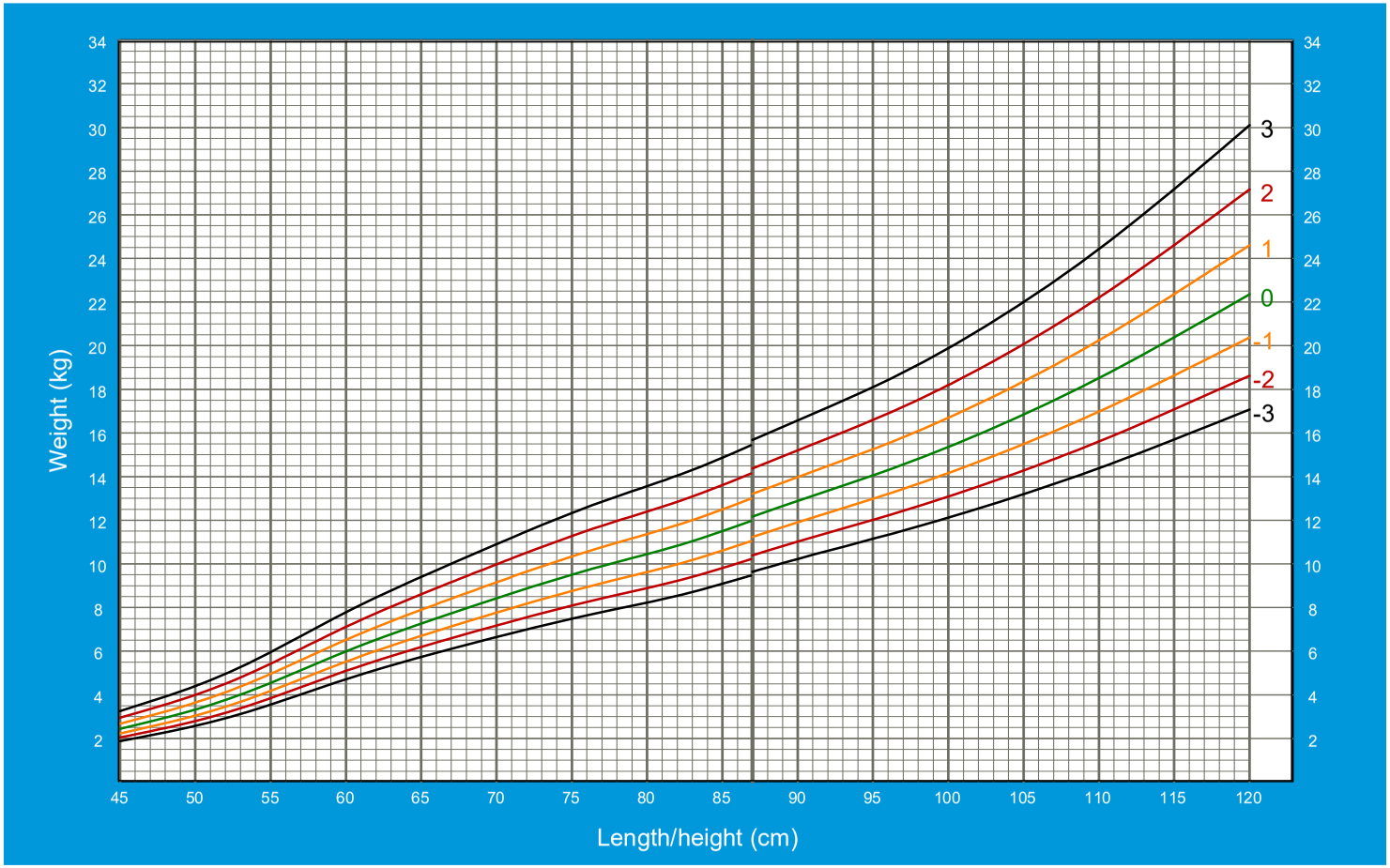
WHO Child Growth Standards

Annexure 3: Weight-for-length/height BOYS; Birth to 5 years (Z-score)

Weight-for-length/height BOYS

World Health Organization

Birth to 5 years (z-scores)



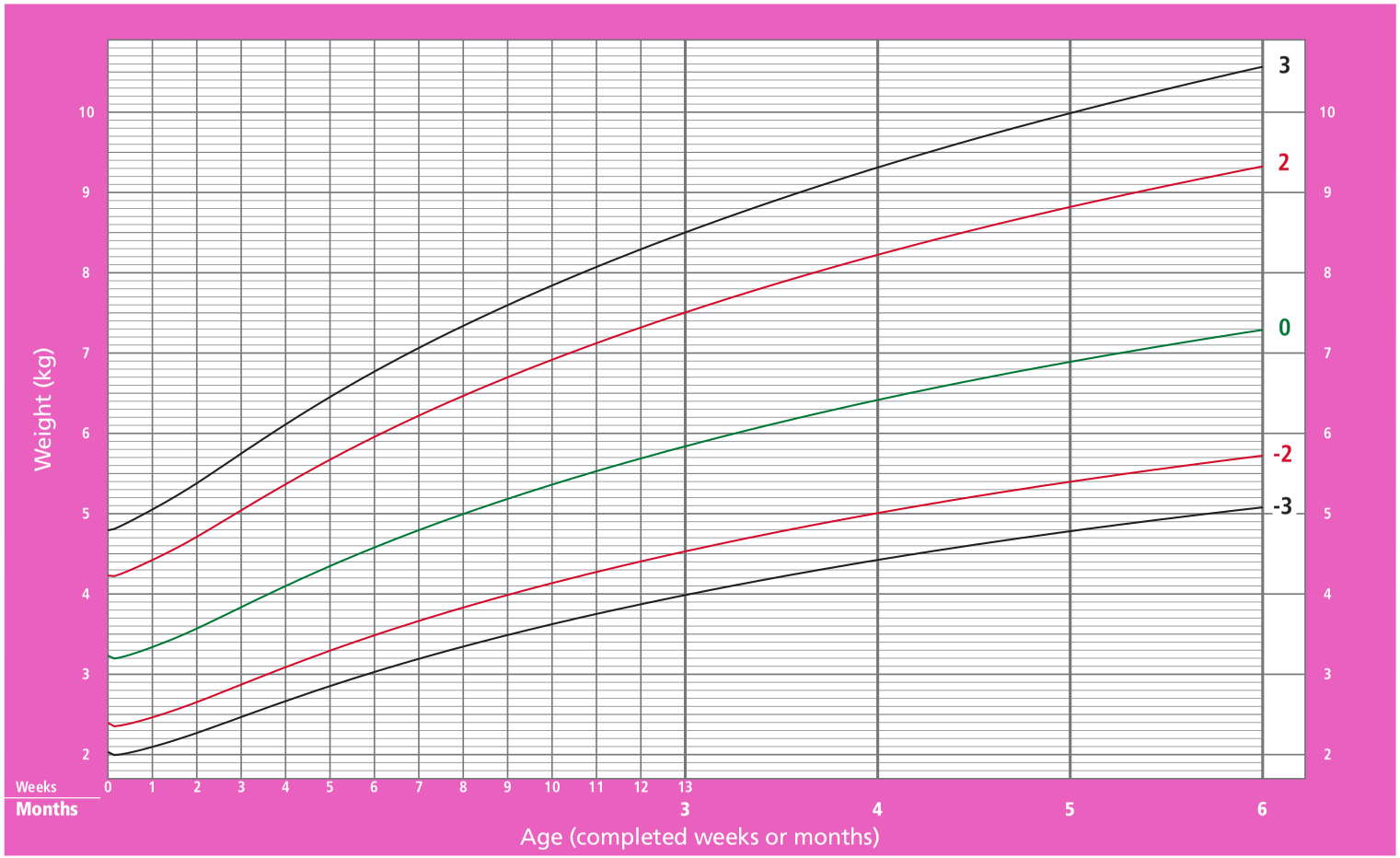
WHO Child Growth Standards

Annexure 4: Weight-for-age GIRLS; Birth to 6 months (Z-score)

Weight-for-age GIRLS

Birth to 6 months (z-scores)

World Health Organization



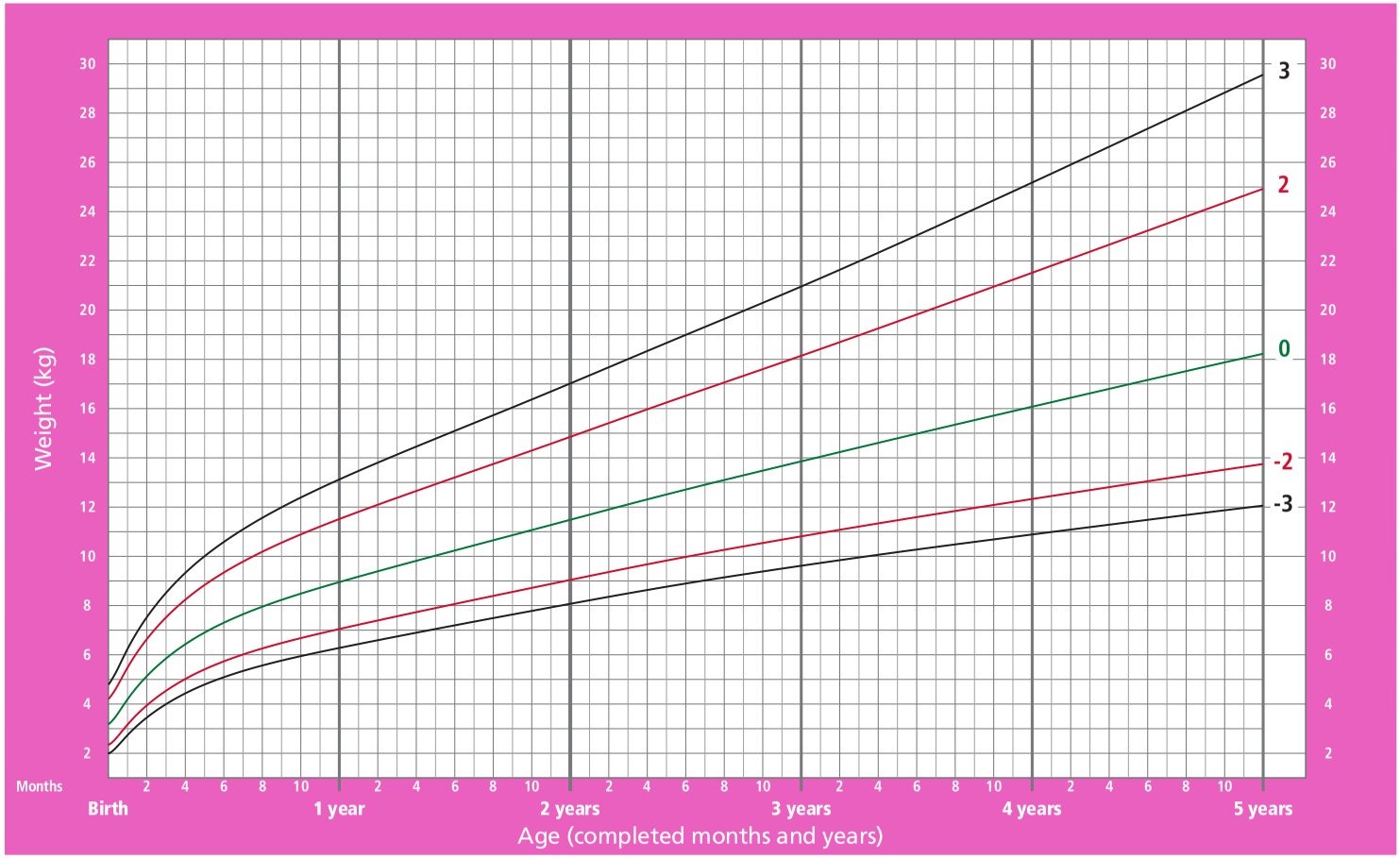
WHO Child Growth Standards

Annexure 5: Weight-for-age GIRLS; Birth to 5 years (Z-score)

Weight-for-age GIRLS

Birth to 5 years (z-scores)

World Health Organization



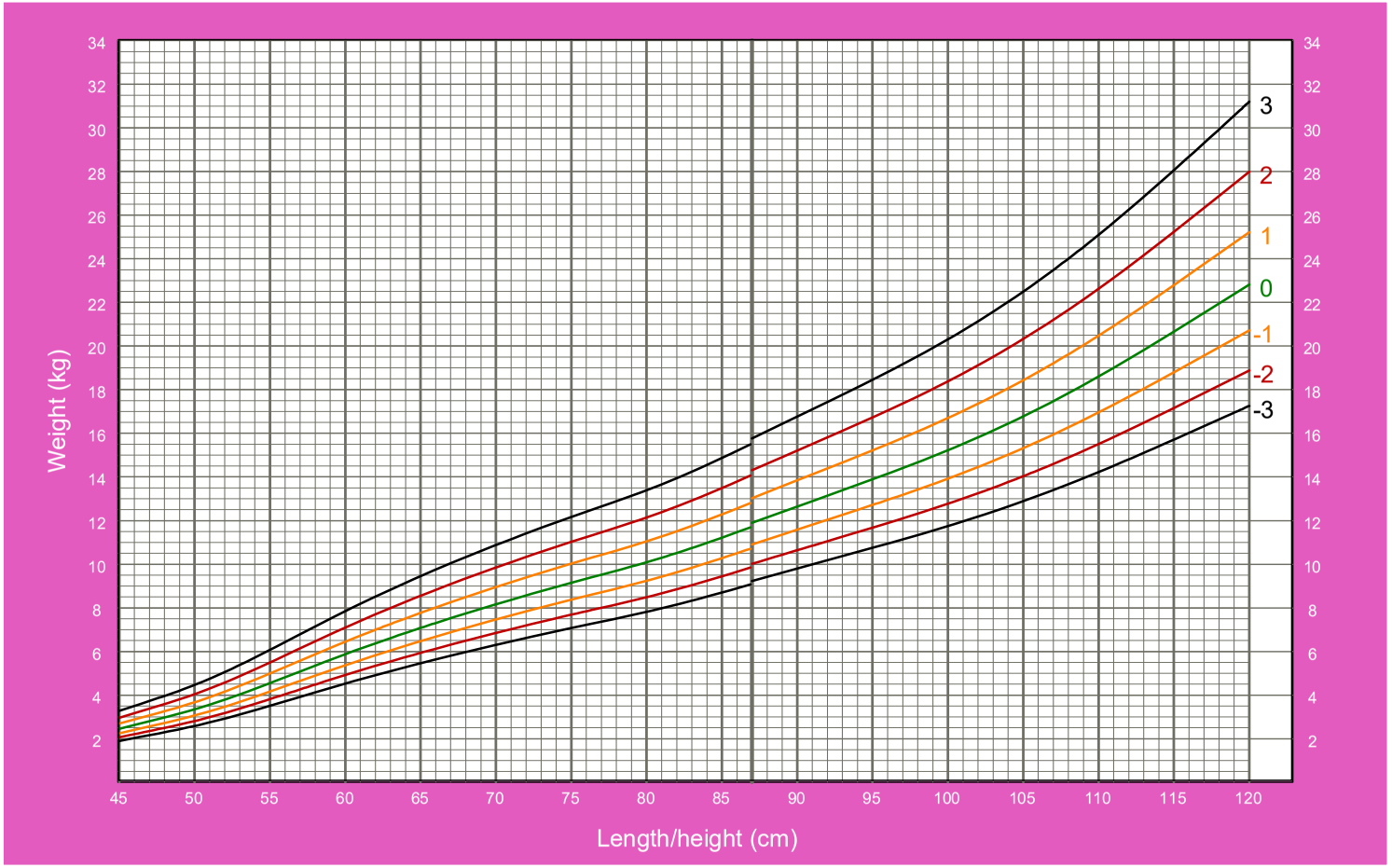
WHO Child Growth Standards

Annexure 6: Weight-for-length/height GIRLS; Birth to 5 years (Z-score)

Weight-for-length/height GIRLS

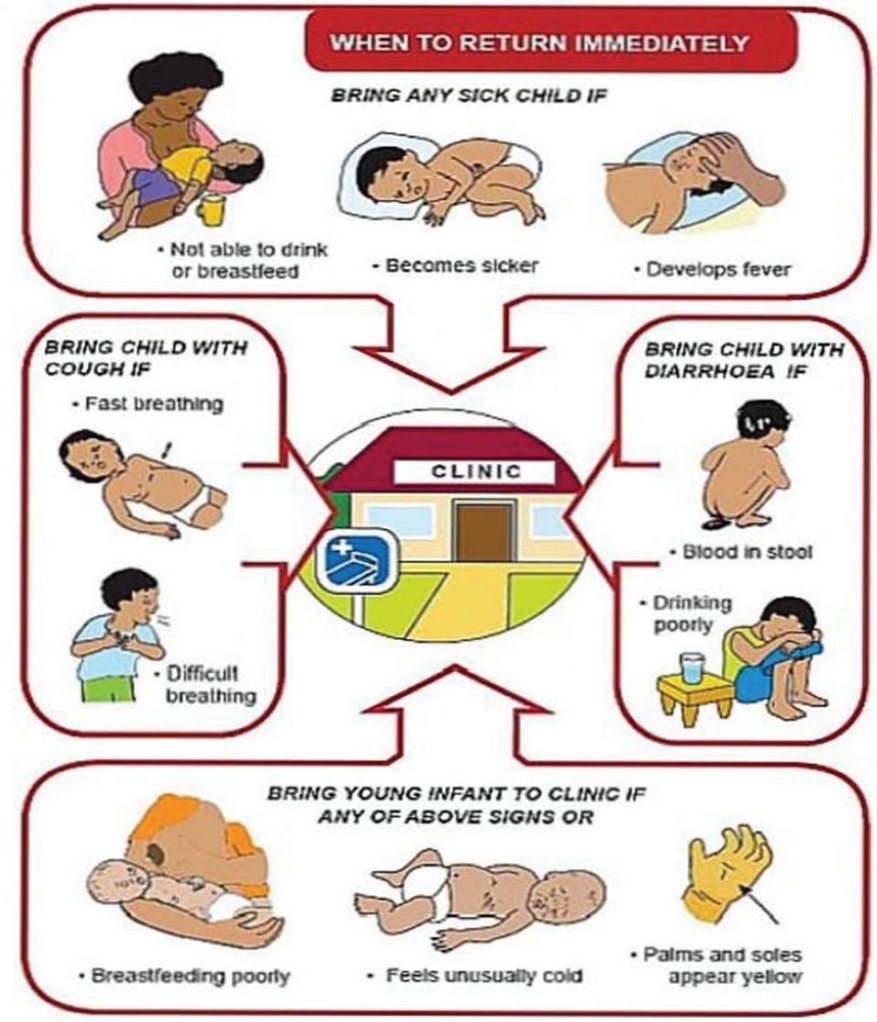
World Health Organization

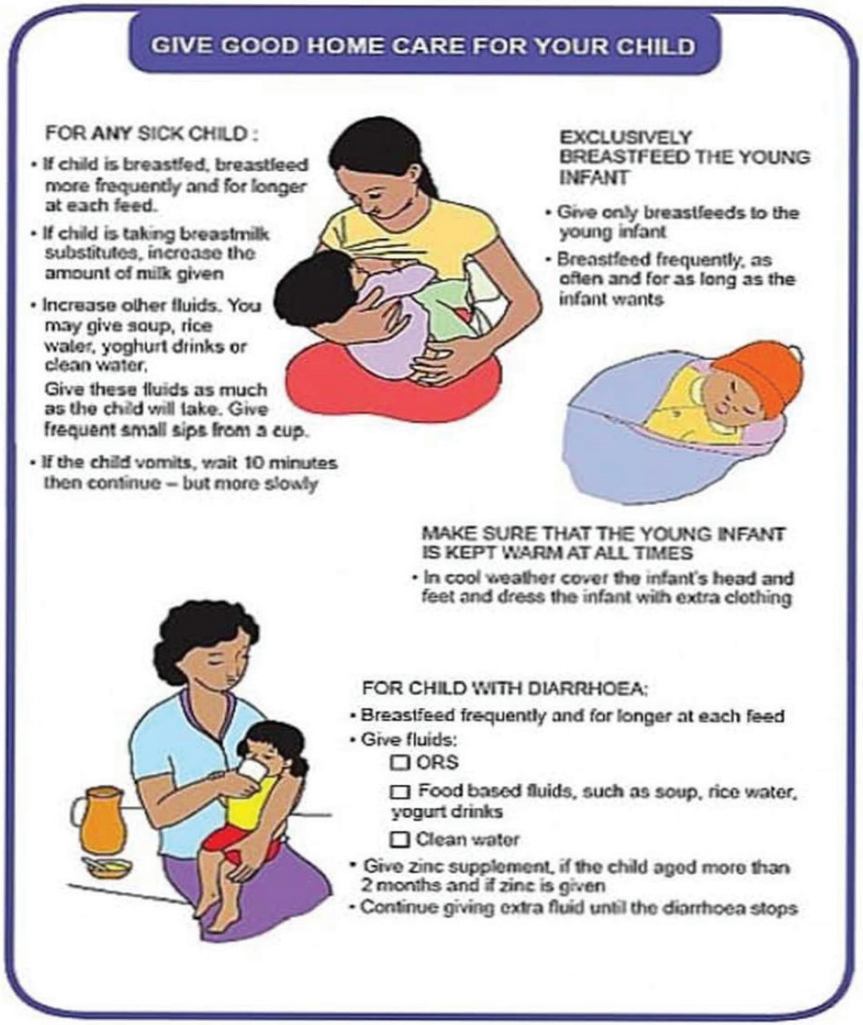
Birth to 5 years (z-scores)



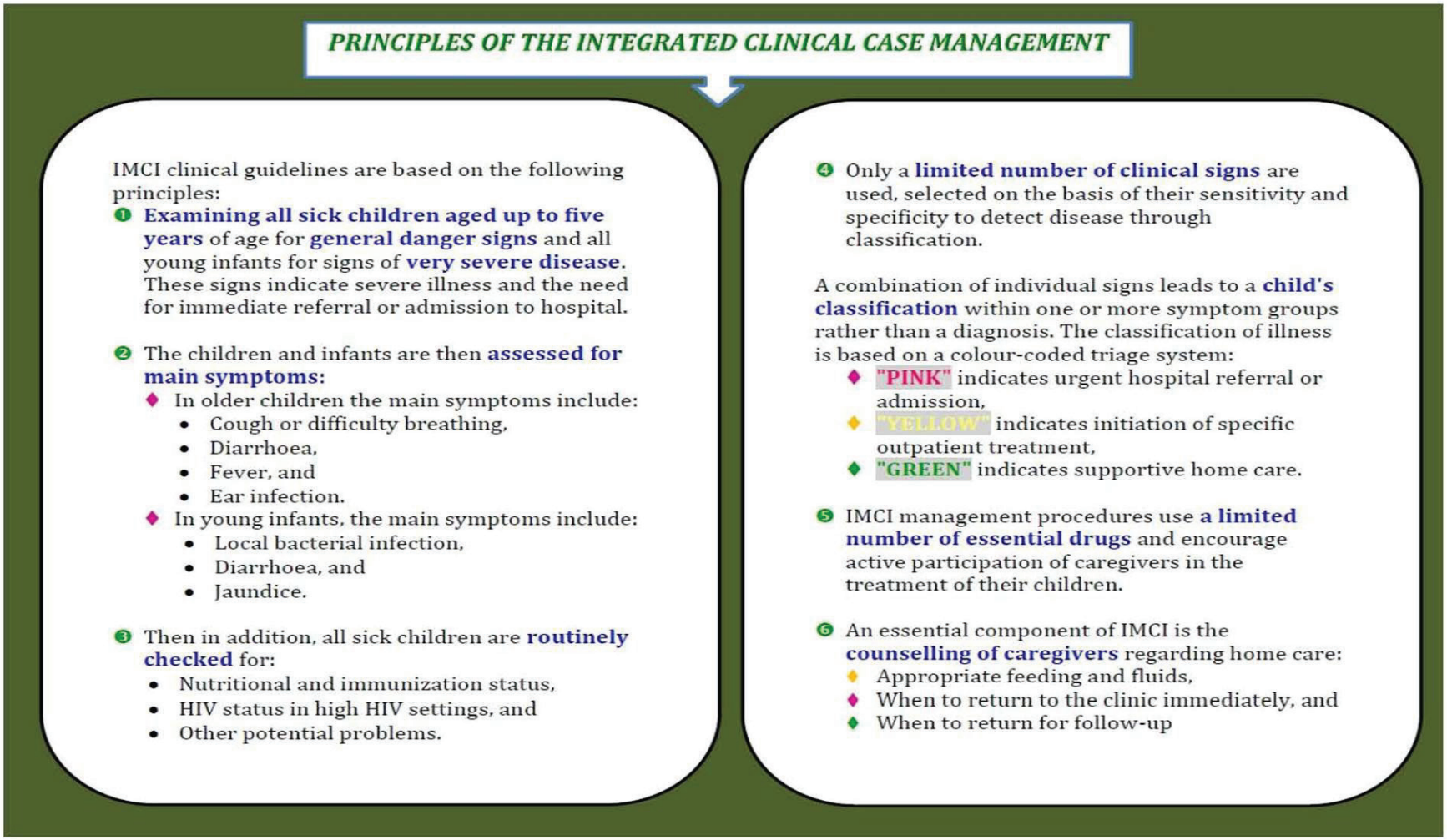
WHO Child Growth Standards

Annexure 7: When to Return Immediately and Home Care





Annexure 8: IMNCI principles



Annexure 9: Management Of Sick Child Aged 2 Months Upto 5 Years Form

MANAGEMENT OF SICK CHILD AGED 2 MONTHS UPTO 5 YEARS FORM

Name of the Health Facility:_____ Reg./UHID/CID no. _____

Name of the child:_____ Age/sex:____ Weight____ kg. Height/Length:____CM. Temp:____ °C/°F

ASK: What is the child's problem:_____. Initial visit:_____ Follow-up visit:_____ Date:_____

ASSESS (Circle all signs present)	CLASSIFY
CHECK FOR GENERAL DANGER SIGN • Check for general danger sign • Not able to drink or breastfeed • Vomits everything • Convulsions • Lethargic or unconscious • Convulsing now **General danger sign present?** Yes ___ No ___	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes __ No __ • For how long? ___ Days • Count the breaths in one minute:____ breaths per minute. Fast breathing? • Look for chest indrawing • Look and listen for stridor • Look and listen for wheezing • Check SpO_2: >90% Yes__No__ OR <90% Yes__No__	
DOES THE CHILD HAVE DIARRHOEA? Yes __ No __ • For how long? ___ Days • Is there blood in stool? Yes___ No___ • Look at the child's general condition. Is the child: » Lethargic or unconscious? » Restless or 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?	
DOES THE CHILD HAVE FEVER? **(by history/feels hot/temperature 37.5 °C/99.5°F or above) Yes ___ No___** Decide malaria risk: High/Low/No • Decide malaria risk: High/Low/No • For how long? ___ Days • If more than 7 days, has fever been present every day? • Has child had measles within the last 3 months? • Travel history in the malaria area within the last 30 days? • Do a malaria test, if NO SEVERE FEBRILE DISEASE classification : in all cases in high malaria risk or NO obvious cause of fever in low malaria risk or travel history to malaria area: • Test POSITIVE? P. falciparum P. vivax • NEGATIVE? • Look or feel for stiff neck • Look for any bacterial cause of fever • Look for signs of MEASLES: » Generalized rash and » One of these: cough, runny nose, or red eyes	
If the child has measles now or within the last 3 months: • Look for mouth ulcers. If yes, are they deep and extensive? • Look for pus draining from the eye • Look for clouding of the cornea	
DOES THE CHILD HAVE EAR PROBLEM Yes ____ No ____ • Is there ear pain? • Is there ear discharge? If Yes, for how long? _____ Days • Look for pus draining from the ear • Feel for tender swelling behind the ear	
THEN CHECK FOR ACUTE MALNUTRITION: • Look for oedema of both feet • Determine WFH/L Z-score » <-3 SD? » ≥-3 SD and <-2 SD? » ≥-2 SD ? • Child 6 months or older measure MUAC _____ cm	

If child has WFH/L <-3 SD or MUAC <11.5 cm:

- Is there any medical complications?
  - » Any general danger sign
  - » Any severe classification
  - » Pneumonia with chest indrawing
- Child less than 6 months: Is there a breastfeeding problem?

THEN CHECK FOR ANAEMIA

- Look for palmar pallor. Is it:
  - » Severe palmar pallor?
  - » Some palmar pallor?

THEN CHECK FOR POSSIBLE TUBERCULOSIS:

ASK:
- Cough ≥2 weeks
- Unexplained fever ≥2 weeks
- Not gaining wt. in infant
- Unexplained wt. loss in spite of adequate nutrition
- H/O contact with PTB in same household

Look, listen & feel for:
- Painless enlarged lymph nodes
- Unexplained ascites
- Moderate malnutrition (Z-score ≥-3 SD and <-2 SD?) or MUAC 11.5cm to 12.4cm) Yes___No___

CHECK THE CHILD'S IMMUNIZATION STATUS
(Tick if already immunized & circle immunizations needed today)

BCG	PENTA-1	PENTA-2	PENTA-3	IPV-2	MMR-1	MMR-2	Vitamin A
OPV-0	OPV-1	OPV-2	OPV-3		PCV-3	DTP	Albendazole
Hep B-0	PCV-1	PCV-2	IPV-1				

Return for next immunization on:
_____
(Date)

ASSESS FEEDING PROBLEM (if the child is less than 2 years old, has MODERATE ACUTE MALNUTRITION or ANAEMIA)
- Do you breastfeed your child? Yes __No _ If yes, how many times in 24 hours? ____ times
- Do you breastfeed during the night? Yes __No __
- Does the child take any other foods or fluids? Yes __No __
  - » A- What food or fluids? _____
  - » B- How many times per day? ____ times
  - » C- What do you use to feed the child? _____
- If moderate acute malnutrition: how large are servings? _____
  - » A- Does the child receive his own serving? Yes__No__
  - » B-Who feeds the child and how? _____
- During this illness, has the child's feeding changed? Yes ____ No ____
- If Yes, how? _____

FEEDING PROBLEMS

Yes__ No__

ASSESS OTHER PROBLEM: Yes__No__. If yes

ASK ABOUT MOTHER HEALTH: Is she healthy?
Yes ___ No ___

TREATMENT AND ADVICES (Home care, etc...)

ANY COUNSELLING IF GIVEN (Feeding, VCT, Immunization, etc...)

FOLLOW UP ADVICE ACCORDING TO THE CASE (Write no. of days)

EXPLAIN WHEN TO RETURN IMMEDIATELY

Signature & Name of Health Worker:

Annexure 10: Management Of The Sick Young Infant Aged Upto 2 Months Form

MANAGEMENT OF THE SICK YOUNG INFANT AGED UP TO 2 MONTHS FORM

Name of the Health Facility:_____ Reg./UHID/CID no. _____

Name of the child:_____ Age/sex:_____ Weight_____ kg. Height/Length:_____CM. Temp:_____ °C/°F

ASK: What is the child's problem:_____. Initial visit:_____ Follow-up visit:_____ Date:_____

ASSESS (Circle all signs present)		CLASSIFY
CHECK FOR SEVERE DISEASE AND LOCAL BACTERIAL INFECTION:		
• Is the infant having difficulty in feeding? • Has the infant had convulsions(fits)?	• Count the breaths in one minute._____ breaths per minute. Repeat if elevated_____ » Fast breathing? • Look for severe chest in drawing • Fever (Temperature 37.5°C/99.5°F or above) or low body temperature (below 35.5°C/95.9°F) • Movement only when stimulated or no movement at all? • Listen for grunting • Look for skin pustules. Are there many or severe pustules? • Look for skin pustules. Are there <10 or >10 (severe skin pustules)? • Look at the umbilicus. Is it red or draining pus? Redness extending up to the skin? • Look for ear discharge • Check skin colour: » Severely pale; Yes__No___ » Cynosis; Yes__No___ » SpO_2; <90% Yes___No___ OR >90%; Yes__No__ • Look for eye discharge	
THEN CHECK FOR JAUNDICE: • When did the jaundice appear first? _____ (age in days)	**LOOK:** • Look for jaundice (yellow eyes or skin) • Look at the young infant's palms and soles. Are they yellow? • Colour of stool: Pale? Yes__No__ • TCB reading: » > cutoff as per age; Yes__No__ » < cutoff as per age Yes__No__	
DOES THE YOUNG INFANT HAVE DIARRHOEA? Yes ___ No ___ • How long did the child have diarrhoea?___days • Is there blood in stool? Yes___No___	• Look at the young infant's general condition. Does the infant: • Move only when stimulated? • Does not move at all? • Is the infant restless and irritable? • Look for sunken eyes • Pinch the skin of the abdomen. Does it go back » Very slowly (longer than 2 seconds)? » Slowly?	
THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT FOR AGE: (If the infant has no indication to refer urgently to hospital) • Is the infant breastfed? Yes ___ No ___ If yes, how many times in 24 hours? _____ times • Does the infant usually receive any other foods or drinks? Yes __ No __ If yes, how often? _____ • What do you use to feed the child? _____ • Determine weight for age. Low ___ Not low ___	• Weight<2 kg in young infants <7days? Yes_____ No_____ • Determine weight for age (WFA): » <-3 SD in young infants age 7-59 days » ≥-3 SD and <-2 SD » ≥-2 SD • Look for ulcers or white patches in the mouth	

ASSESS BREAST FEEDING

- Has the infant breastfed in the previous hour? Yes ___ No ___
- Does the mother have pain while breastfeeding? If yes Look and Feel for:
  - » Flat or inverted nipples or sore nipples Yes__ No_____
  - » Engorged breast or breast abscess Yes___ No_____

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.

- Is the infant able to feed? Able__ Not able___
- Is the infant well attached? 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__
    - ◆ Not well attached
    - ◆ Good attachment
- Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)?
  - ◆ Not suckling effectively
  - ◆ Suckling effectively

CHECK THE CHILD'S IMMUNIZATION STATUS (Tick if already immunized & circle the immunizations needed today)

- BCG
- OPV-0
- Hep B-0
- PENTA 1 200,000IU vitamin A to mother within 6
- OPV-1 weeks of delivery.
- PCV-1

Return for next immunization on:

_____

(Date)

ASSESS OTHER PROBLEM:
Yes_____No_____If yes.....

ASK ABOUT THE MOTHER'S HEALTH. Is the mother's health good?
Yes_____ No_____ If no. _____

ANY COUNSELING IF GIVEN(Feeding,VCT, Immunization, etc)

FOLLOW UP ADVICE ACCORDING TO THE CASE (Write no. of days)

EXPLAIN WHEN TO RETURN IMMEDIATELY

Signature & Name of Health Worker:

Annexure 11: Schedule for vaccine Missed Dose

Vaccine	Schedule	Interrupted primary series	Doses for interruption		Remarks
	Age		≤12 months	>12 months	
BCG	At birth	-	1 dose (0.05ml)	1 dose (0.1 ml)	For > 2 years, do test for TB
OPV '0' dose	0 - 14 days of age	-	Give at 9 months	NA	-
Hepatitis B birth dose	Within 24 hours of birth	Hepatitis B birth dose if not given within 24 hours the baby will not get the Vaccine			-
OPV	At 6, 10 and 14 weeks	Resume without repeating previous dose	3 doses with an interval of 4 weeks between doses		-
IPV	At 14 weeks and 8 months	Resume without repeating previous dose	**2 doses** **If >14 weeks but less than 8 months old:** • 1st dose as soon as possible and • 2nd dose at 8 months as scheduled • Keep a minimum gap of 8 weeks between 1st and 2nd dose **If >8 months old:** • 1st dose as soon as possible • 2nd dose after 8 weeks		3 dose bOPV and 2 dose IPV Keeping the gap of 8 weeks between 1st and 2nd dose
Penta	At 6, 10, 14 weeks	Resume without repeating previous dose	**3 doses** • Interval between two dose should be at least 4 weeks	**3 doses** • Interval between 1st and 2nd dose should be at least 4 weeks • Interval between 2nd and 3rd dose should be at least 6 months	**If child is >4 years:** • Give Hepatitis B as (0, 1, 6 months) • Td 1st dose as soon as possible • 2nd dose after 4 weeks (Need to get acellular Pertussis and Hib vaccines) Hib vaccine not recommended for >5 years

Vaccine	Schedule	Interrupted primary series	Doses for interruption		Remarks
	Age		≤12 months	>12 months	
PCV	At 6, 10 weeks and 9 months	Resume without repeating previous dose	**3 doses** • Interval between dose as per routine schedule	2 doses or 1 dose depending on the age 1 - 2 years: 2 doses 2 - 5 years: 1 dose	**1 - 5 years high-risk*:** 2 doses keeping gap of 8 weeks between 1st and 2nd dose *High risk (HIV infection or sickle cell disease)
MMR	At 9 months and 2 years	Resume without repeating previous dose	**2 doses** **If child is >9 months but less than 2 years:** • 1st dose as soon as possible and • 2nd dose at 2 years **If the child is >2years:** • 1st dose today and • 2nd dose after 4 weeks		Between the dose there should be minimum of 4 weeks gap
DTP	At 2 years one dose	-	Give up to 4 years one dose		
HPV	Class VI students one dose	-	NA	9 - 14 years give today	15 years and above, give 2nd dose today
Flu	**Target groups:** • 6 months to 8 years is 2 dose • ≥9 years is one dose	Resume without repeating previous dose	2nd dose missed For 6 months to 8 years give the 2nd dose today		Previously vaccinated children 6 months to 8 years will get only one dose

Reference : Recommendations* for Interrupted or Delayed Routine Immunization -Summary of WHO Position Papers 2024

Note : In general, the dose for infants and children (<15years) is half the recommended adult dose for Hepatitis B vaccine.

: Follow the specific manufacturer's instructions on the doses for all vaccines.

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