INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS

SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

SICK YOUNG INFANT (BIRTH UP TO 2 MONTHS)

South Africa
Department of Health

World Health Organization
Division of Child Health and Development (CHD)

unicef

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

Do a rapid appraisal of all waiting children.
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 pages 25-29. ➢ If initial visit, assess the child as follows:

CHECK FOR GENERAL DANGER SIGNS

ASK: **Is the child able to drink or breastfeed?**
Does the child vomit everything?
Has the child had convulsions during this illness? (if convulsing now see p. 14)

LOOK: **Is the child:**
- **lethargic or unconscious**

A child with any general danger sign requires urgent attention: complete the assessment, start pre-referral treatment and refer urgently.
If the child is lethargic or unconscious give oxygen, test for low blood sugar then treat / prevent.

ASSESS **CLASSIFY AS:** **TREATMENT** **(Urgent pre-referral treatments are in bold)**

THEN ASK ABOUT MAIN SYMPTOMS:
Does the child have cough or difficult breathing?

IF YES, ASK:
- For how long?

LOOK, LISTEN, FEEL:
- Count the breaths in one minute.
- Look for chest indrawing.
- Look and listen for stridor or wheeze.

} CHILD MUST BE CALM

Classify COUGH or DIFFICULT BREATHING

• Any general danger sign or • Chest indrawing or • Stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of ceftriaxone IM (p. 14)** ➢ **Give first dose cotrimoxazole (p. 9)** ➢ **Give oxygen (p. 15)** ➢ **If stridor: give nebulised adrenaline and prednisone (p. 14)** ➢ **Test for low blood sugar, then treat or prevent (p. 15)** ➢ **Keep child warm, and refer URGENTLY**
• Fast breathing	**PNEUMONIA**	➢ Give amoxicillin for 5 days (p. 9) ➢ If coughing for more than 14 days, consider TB (p. 8) ➢ Soothe the throat and relieve the cough (p. 13) ➢ Advise mother when to return immediately (p. 23) ➢ Follow-up in 2 days (p. 25)
• No signs of pneumonia or very severe disease	**COUGH OR COLD**	➢ If coughing for more than 14 days, consider TB (p. 8) ➢ Soothe the throat and relieve cough (p. 13) ➢ Advise mother when to return immediately (p. 23) ➢ Follow up in 5 days if not improving (p. 25)

AND IF WHEEZE, ASK:
- Has the child had a wheeze before this illness?
- Does the child frequently cough at night?
- Has the child had a wheeze for more than 7 days?
- Is the child on treatment for asthma at present?

AND if WHEEZE Classify

• Yes to any question	**RECURRENT WHEEZE**	➢ **Give salbutamol and prednisone if referring for a severe classification (p. 14)** ➢ Give salbutamol via spacer for 5 days (p. 10) ➢ Give oral prednisone for 7 days (p. 10) ➢ Refer non-urgently for assessment
• All other children with wheeze	**WHEEZE (FIRST EPISODE)**	➢ **Give salbutamol if referring for a severe classification (p. 14)** ➢ Give salbutamol via spacer for 5 days (p. 10) ➢ Follow-up in 5 days if still wheezing (p. 25)

FAST BREATHING

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

South Africa 2010

Does the child have diarrhoea?

IF YES, ASK:

- For how long?
- Is there blood in the stool?
- How much and what fluid is mother giving?

LOOK OR 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:
  - slowly?
  - or very slowly? (more than 2 seconds).

Classify DIARRHOEA

for DEHYDRATION in all children with diarrhoea		
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**	➢ **Start treatment for severe dehydration (Plan C, p. 17)** ➢ **Refer URGENTLY** ➢ **Give frequent sips of ORS on the way** ➢ **Advise the mother to continue breastfeeding when possible**
Two of the following signs: • Restless, irritable. • Sunken eyes. • Drinks eagerly, thirsty. • Skin pinch goes back slowly.	**SOME DEHYDRATION**	➢ Give fluids to treat for some dehydration (Plan B, p.16) ➢ Advise mother to continue breastfeeding and feeding ➢ Give zinc for 2 weeks (p. 12) ➢ Follow-up in 2 days (p. 25) ➢ Advise the mother when to return immediately (p. 23)
• Not enough signs to classify as severe or some dehydration.	**NO VISIBLE DEHYDRATION**	➢ Give fluid and food for diarrhoea at home (Plan A, p. 16) ➢ Advise mother when to return immediately (p. 23) ➢ Give zinc for 2 weeks (p. 12) ➢ Follow up in 5 days if not improving (p. 25)
and if diarrhoea 14 days or more		
• Dehydration present. • Losing weight	**SEVERE PERSISTENT DIARRHOEA**	➢ **Start treatment for dehydration** ➢ **Refer URGENTLY** ➢ **Give frequent sips of ORS on the way** ➢ **Give additional dose of Vitamin A (p. 18)**
• No visible dehydration.	**PERSISTENT DIARRHOEA**	➢ Counsel the mother about feeding (p. 19 – 22) ➢ Give additional dose of Vitamin A (p. 18) ➢ Give zinc for 2 weeks (p. 12) ➢ Follow-up in 5 days (p. 25) ➢ Advise the mother when to return immediately (p. 23)
and if blood in stool		
• Dehydration present or • Age less than 12 months	**SEVERE DYSENTERY**	➢ **Refer URGENTLY**
• Age 12 months or more and • No dehydration	**DYSENTERY**	➢ Treat for 3 days with ciprofloxacin (p. 9) ➢ Advise when to return immediately (p. 23) ➢ Follow-up in 2 days (p. 25)

Does the child have fever?

By history, by feel, or axillary temp is 37.5°C or above

IF YES, DECIDE THE CHILD'S MALARIA RISK:
Malaria Risk means: Lives in malaria zone or visited a malaria zone during the past 4 weeks. If in doubt, classify for malaria risk.

ASK

For how long?

LOOK AND FEEL:

- Look and feel for:
  - stiff neck
  - bulging fontanelle

AND IF MALARIA RISK:

- Do a rapid malaria test

IF MALARIA TEST NOT AVAILABLE:

- Look for a cold with runny nose
- Look for another adequate cause of fever

Consider measles if:

- Generalized rash with either:
  - Runny nose, or
  - Red eyes, or
  - Cough

Use the Measles chart (p. 42)

Classify FEVER

For suspected meningitis

AND if Malaria Risk

• Any general danger sign. or • Stiff neck or bulging fontanelle.	**SUSPECTED MENINGITIS**	➢ **Give first dose of ceftriaxone IM (p. 14)** ➢ **Test for low blood sugar, then treat or prevent (p. 15)** ➢ **Give one dose of paracetamol for fever 38℃ or above (p. 12)** ➢ **Refer URGENTLY**
• None of the above signs.	**FEVER OTHER CAUSE**	➢ Give paracetamol for fever 38℃ or above (p. 12) ➢ If fever present for more than 7 days, consider TB (p. 8) ➢ Treat for other causes ➢ Advise mother when to return immediately (p. 23) ➢ Follow-up in 2 days if fever persists (p. 26)

• Any general danger sign. or • Stiff neck or bulging fontanelle.	**SUSPECTED SEVERE MALARIA**	➢ **If Malaria test positive and child older then 12 months, treat for Malaria (p. 10)** ➢ **Treat for SUSPECTED MENINGITIS** ➢ **Test for low blood sugar, then treat or prevent (p. 15)** ➢ **Give one dose of paracetamol for fever 38℃ or above (p. 12)** ➢ **Refer URGENTLY**
• Malaria test positive.	**MALARIA**	➢ **If age less than 12 months, refer URGENTLY (p. 10)** ➢ If older than 12 months, treat for malaria (p. 10) ➢ Give paracetamol for fever 38℃ or above (p. 12) ➢ Advise mother when to return immediately (p. 23) ➢ Notify confirmed malaria cases ➢ Follow-up in 2 days if fever persists (p. 26)
• Malaria test not done and PNEUMONIA or • Malaria test not done and no other adequate cause of fever found.	**SUSPECTED MALARIA**	➢ Refer child to facility where Malaria Rapid Test can be done ➢ Give paracetamol for fever 38℃ or above (p. 12) ➢ If fever present for more than 7 days, consider TB (p. 8)
• Malaria test negative. or • Malaria test not done and a cold with runny nose, or other adequate cause of fever found.	**FEVER OTHER CAUSE**	➢ Give paracetamol for fever 38℃ or above (p. 12) ➢ If fever present for more than 7 days, consider TB (p. 8) ➢ Treat for other causes ➢ Advise mother when to return immediately (p. 23) ➢ Follow-up in 2 days if fever persists (p. 26)

Does the child have an ear problem?

IF YES, ASK:

- Is there ear pain?
- Does it wake the child at night?
- 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 ceftriaxone IM (p. 14)** ➢ **Give first dose of paracetamol (p. 12)** ➢ **Refer URGENTLY**
• Pus seen draining from the ear and discharge is reported for less than 14 days. or • Ear pain which wakes the child at night	**ACUTE EAR INFECTION**	➢ Give amoxicillin for 5 days (p. 9) ➢ If ear discharge: Teach mother to clean ear by dry wicking (p. 13) ➢ Give paracetamol for pain (p. 12) ➢ Follow-up in 5 days if pain or discharge persists (p. 26) ➢ Follow-up in 14 days (p. 26)
• Pus is seen draining from the ear. and • Discharge is reported for 14 days or more.	**CHRONIC EAR INFECTION**	➢ Teach mother to clean ear by dry wicking (p. 13) ➢ Then instil recommended ear drops, if available (p. 13) ➢ Tell the mother to come back if she suspects hearing loss ➢ Follow up in 14 days (p. 26)
• No ear pain or ear pain which does not wake the child at night. and • No pus seen draining from the ear.	**NO EAR INFECTION**	➢ No additional treatment

THEN CHECK FOR MALNUTRITION AND ANAEMIA

ASK:

Has the child lost weight?

LOOK and FEEL:

GROWTH:

- Plot the weight on the RTHC:
  - Is the child today:
    - Normal weight or
    - Low weight or
    - Very low weight
- Look at the shape of the weight curve:
  - Does it show:
    - Weight gain unsatisfactory (That is, flattening curve or weight loss), or
    - Gaining weight
- Look for visible severe wasting
- Feel for oedema of both feet

ANAEMIA

- Look for palmar pallor. Is there:
  - Severe palmar pallor?
  - Some palmar pallor?
- If any pallor, check haemoglobin (Hb) level.

Classify all children for NUTRITIONAL STATUS

• Very low weight. or • Visible severe wasting. or • Oedema of both feet.	**SEVERE MALNUTRITION**	➢ **Test for low blood sugar, then treat or prevent (p. 15)** ➢ **Keep the child warm** ➢ **Give first dose of amoxicillin (p. 9) - omit if child will receive Ceftriaxone for another severe classification** ➢ **Give additional dose Vitamin A (p. 18)** ➢ **Refer URGENTLY**
• Low weight. or • Weight gain unsatisfactory.	**NOT GROWING WELL**	➢ Assess feeding & counsel (p. 19 - 22). If feeding problem, follow-up in 5 days ➢ Treat for worms if due (p. 18) ➢ Give Vitamin A if due (p. 18) ➢ Advise when to return immediately (p. 23) ➢ If not feeding problem, follow up in 14 days (p. 27)
• Normal weight. and • Weight gain satisfactory	**GROWING WELL**	➢ If child is less than 2 years, assess and counsel on feeding (p. 19-22) ➢ If feeding problem, follow-up in five days (p. 27) ➢ Treat for worms if due (p. 18) ➢ Give Vitamin A if due (p. 18)

AND classify all children for ANAEMIA

• Severe palmar pallor. or • Hb < 6 g/dl.	**SEVERE ANAEMIA**	➢ **Refer URGENTLY**
• Some palmar pallor or • Hb 6 g/dl up to 10 g/dl.	**ANAEMIA**	➢ Give Iron (p. 12) and counsel on iron rich diet (p. 20) ➢ Assess feeding & counsel (p. 19-22) ➢ Treat for worms if due (p. 18 ➢ Follow-up in 14 days (p. 27)
• No pallor.	**NO ANAEMIA**	➢ If child is less than 2 years, assess feeding and counsel (p. 19-22)

THEN CONSIDER HIV INFECTION

Has the child been tested for HIV infection?

IF YES, ASK:

- What was the result?
- If the test was positive, is the child on ART?
- If the test was negative, was the child still breastfeeding at the time that the test was done, or had the child been breastfed in the six weeks before the test was done? Is the child still breastfeeding?

HIV testing in children:

- Below 18 months of age, use an HIV PCR test to determine the child's HIV status. Do not use an antibody test to determine HIV status in this age group.
- 18 months and older, use an rapid (antibody) test to determine HIV status. If the rapid test is positive then it should be repeated (using a confirmatory test kit). If the confirmatory test is positive, this confirms HIV infection (in a child older than 18 months). If the second test is negative, refer for ELISA test and assessment.

NOTE:
All children who have had a PCR test should have an HIV antibody test at 18 months of age.

Classify for HIV infection in the child

• Positive HIV test in child. or • Child on ART.	**HIV INFECTION**	➢ Follow the six steps for initiation of ART (p. S1) ➢ Give cotrimoxazole prophylaxis from 6 weeks (p. 9) ➢ Assess feeding and counsel appropriately (p. 19-22) ➢ Remember to consider for TB (p. 8) ➢ Ask about the mother's health, offer HCT and manage appropriately ➢ Provide long term follow-up (p. 28 or p. S5)
• Negative HIV test. and • Child still breastfeeding or stopped breastfeeding less than 6 weeks before test was done.	**POSSIBLE HIV INFECTION**	➢ If mother is HIV positive: give nevirapine if indicated (p. S7) **AND** give cotrimoxazole prophylaxis from 6 weeks (p.9) ➢ Assess feeding and counsel appropriately (p. 19-22) ➢ Repeat HIV testing 6 weeks after stopping breastfeeding to confirm HIV status ➢ Provide follow-up care (p. 28)
• Negative HIV test. and • Child no longer breastfeeding (stopped at least six weeks before test was done).	**HIV NEGATIVE**	➢ Stop cotrimoxazole ➢ Consider other causes if child has features of HIV infection (repeat HIV test if indicated). ➢ Provide routine care

If no test result available, check for features of HIV

ASK:

- Has the mother had an HIV test? If YES, was it negative or positive?

FEATURES OF HIV INFECTION

ASK:

- Does the child have PNEUMONIA now?
- Is there PERSISTENT DIARRHOEA now or in the past three months?
- Has the child ever had ear discharge?
- Is there low weight?
- Has weight gain been unsatisfactory?

LOOK and FEEL:

- Any enlarged lymph glands in two or more of the following sites - neck, axilla or groin?
- Is there oral thrush?
- Is there parotid enlargement?

Classify

• 3 or more features of HIV infection.	**SUSPECTED SYMPTOMATIC HIV INFECTION**	➢ Give cotrimoxazole prophylaxis (p. 9) ➢ Counsel and offer HIV testing for the child ➢ Counsel the mother about her health, offer HCT and treatment as necessary. ➢ Assess feeding and counsel appropriately (p. 19-22) ➢ Provide long-term follow-up (p. 28)
• Mother HIV positive	**HIV EXPOSED**	➢ Give prophylactic nevirapine if indicated (p. S7) ➢ Give cotrimoxazole prophylaxis (p. 9) - unless child is older than one year and clinically well ➢ Counsel and offer HIV testing for the child ➢ Counsel the mother about her health, and provide treatment as necessary. ➢ Assess feeding and counsel appropriately (p. 19-22) ➢ Provide long-term follow-up (p. 28)
• One or two features of HIV infection	**POSSIBLE HIV INFECTION**	➢ Counsel and offer HIV testing for the child ➢ Counsel the mother about her health, offer HCT and treatment as necessary. ➢ Reclassify the child based on the test results
• No features of HIV infection	**HIV INFECTION UNLIKELY**	➢ Provide routine care. Including HCT for the mother. ➢ If mother not available, offer to test child for HIV exposure. ➢ Reclassify the child based on the test results.

THEN CONSIDER (SCREEN FOR) TB

Does the child have a close TB contact* OR Cough for more than two weeks OR Fever for more than seven days OR NOT GROWING WELL? IF YES:

ASK ABOUT FEATURES OF TB:

- Persistent, non-remitting cough or wheeze for more than 2 weeks.
- Documented loss of weight or unsatisfactory weight gain during the past 3 months (especially if not responding to deworming together with food and/or micronutrient supplementation).
- Fatigue/reduced playfulness.
- Fever every day for 14 days or more.

Classify for TB

• A close TB contact. and • Two or more features of TB.	**TB**	➢ Treat for TB, as per National TB guidelines (p. 11) ➢ Register in TB register ➢ Notify ➢ Trace contacts and manage according to TB guidelines ➢ Counsel and test for HIV if HIV status unknown ➢ Follow-up monthly to review progress (p. 29)
• A close TB contact. and • No features of TB	**TB EXPOSURE**	➢ Treat with INH for 6 months (p. 11) ➢ Trace other contacts ➢ Follow-up monthly (p. 29)
• All other children.	**POSSIBLE TB**	➢ Perform a Tuberculin Skin Test (TST) ➢ Follow-up in two days to read TST (p. 29)

NOTE:
* A close TB contact is an adult who has had pulmonary TB in the last 12 months, who lives in the same household as the child, or someone with whom the child is in contact for long periods of time.

Chest X-rays can assist in making the diagnosis of TB in children. Decisions as to how they are used in your area should be based on the availability of expertise for taking and interpreting good quality Xrays in children. Follow local guidelines in this regard - in some cases these may require that all children with TB have a chest Xray before treatment is started.

If you are unsure about the diagnosis of TB, refer the child for assessment and investigation.

THEN CHECK THE CHILD'S IMMUNIZATION STATUS AND GIVE ROUTINE TREATMENTS

IMMUNIZATION SCHEDULE:

Birth	BCG	OPV0			
6 weeks	DaPT-Hib-IPV1	OPV1	HepB1	PCV1	RV1
10 weeks	DaPT-Hib-IPV2		HepB2		
14 weeks	DaPT-Hib-IPV3		HepB3	PCV2	RV2
9 months			Measles1	PCV3	
18 months	DaPT-Hib-IPV4		Measles2		
6 years	Td				
12 years	Td				

- Give all missed immunizations on this visit (observing contraindications).
- This includes sick children and those without cards.
- If the child has no RTHC, give a new one today.
- Advise mother when to return for the next immunization.
- Give routine Vitamin A (p. 18) and record it on the RTHC.
- Give routine treatment for worms (p. 18) and record it on the RTHC.

ASSESS ANY OTHER PROBLEM

e.g. skin rash or infection, scabies, mouth ulcers, eye infection, sore throat

CHECK MOTHER'S HEALTH

MAKE SURE A CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after urgent treatments have been given.

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 general instructions below for every oral drug to be given at home
Also follow the instructions listed with the dosage table for each drug

- **Determine the appropriate drugs and dosage for the child's weight or age.**
- **Tell the mother the reason for giving the drug to the child.**
- **Demonstrate how to measure a dose.**
- **Watch the mother practise measuring a dose by herself.**
- **Explain carefully how to give the drug.**
- **Ask the mother to give the first dose to her child.**
- **Advise the mother to store the drugs safely.**
- **Explain that the course of treatment must be finished, even if the child is better.**

Give Cotrimoxazole (40/200 mg per 5 ml)

- Give from 6 weeks to all infants and children of HIV+ve mothers unless child is HIV NEGATIVE to prevent pneumocystis pneumonia (PCP).
- Give to all children with HIV INFECTION (criteria for stopping in children on ART are shown on p. S5 Step 4.)
- Give one dose before referral for SEVERE PNEUMONIA in children older than one month of age

Give once every day for Prophylaxis		
AGE	**WEIGHT**	**COTRIMOXAZOLE**
1 month up to 2 months	2.5 - < 5 kg	2.5 ml
2 up to 12 months	5 - < 10 kg	5 ml
12 up to 24 months	10 - < 15 kg	7.5 ml
2 up to 5 years	15 - < 25 kg	10 ml

Give Amoxicillin* for Pneumonia and Acute Ear Infection

Give three times daily for 5 days.
* If the child is allergic to penicillins, or amoxicillin is out of stock, use Erythromycin

AGE	**WEIGHT**	**AMOXICILLIN SYRUP**	
		(125 mg per 5 ml)	(250 mg per 5 ml)
2 up to 6 months	< 7 kg	7.5 ml	4 ml
6 up to 12 months	7 - < 10 kg	10 ml	5 ml
12 up to 24 months	10 - < 15 kg	15 ml	7.5 ml
2 up to 5 years	15 - < 25 kg	20ml	10 ml

Give Erythromycin if allergic to Penicillin

Give 4 times daily for 5 days

AGE	**WEIGHT**	**ERYTHROMYCIN SYRUP** (125 mg per 5 ml)
2 up to 36 months	6 - < 10 kg	2.5 ml
	10 - < 18 kg	5 ml
3 up to 5 years	18 - < 25 kg	10 ml

Give Ciprofloxacin for Dysentery

Give 12 hourly for 3 days

AGE	**WEIGHT**	**CIPROFLOXACIN** (250mg per 5ml)
12 up to 24 months	7 - < 15 kg	1ml
2 up to 5 years	15 - < 25 kg	3ml

TEACH THE MOTHER TO GIVE DRUGS AT HOME

- **Follow the general instructions for every oral drug to be given at home.**
- **Also follow the instructions listed with the dosage table of each drug.**

Treat for Malaria

- Give the current malaria treatment recommended for your area. See the Malaria Treatment Guidelines.
- **Treat only test-confirmed malaria. Refer if unable to test, or if the child is unable to swallow, or is under one year of age.**
- Record and notify malaria cases.

In all provinces combination therapy (Co-Artem^{R}) must be used.
It is advisable to consult the provincial guidelines on a regular basis.

Artemether + Lumefantrine (Co-Artem^{R})

- Watch mother give the first dose of Co-Artem^{R} in the clinic and observe for one hour**.** If the child vomits within an hour repeat the dose.
- Second dose should be taken at home 8 hours later. Then twice daily for two more days.
- Give Co-Artemether with food.

WEIGHT	CO-ARTEMETHER TABLET (20mg/120mg)	
	Day 1: First dose and repeat this after 8 hours (2 doses)	**Days 2 and 3: take dose twice daily (4 doses)**
< 15 kg	1 tablet	1 tab twice a day
15 - 25 kg	2 tablets	2 tabs twice a day

Give Salbutamol for Wheeze

- Home treatment should be given with an MDI and spacer.
- Teach mother how to use it.
- If you do not have a spacer, although not ideal, you can make one with a 500 ml plastic cold drink bottle. Hold the top opening in very hot water to make it soft. Push the Metered Dose Inhaler (MDI) into it. When the bottle cools, the opening will stay the right shape. Then cut off the bottom of the bottle with a sharp knife. Put tape over this cut edge to avoid hurting the child. Place this end over the child's face like a mask. While the child breathes, spray 1 puff into the bottle. Allow the child to breathe for 4 breaths per puff.

SALBUTAMOL	
MDI - 100 ug per puff:	1-2 puffs using a spacer. Allow 4 breaths per puff. Repeat 3 to 4 times a day.

Give Prednisone for RECURRENT WHEEZE

- Add prednisone treatment to salbutamol if the wheeze is recurrent.
- Give prednisone once daily for 7 days.
- If necessary teach the mother to crush the tablets.

WEIGHT	AGE	PREDNISONE 5 mg
Up to 8 kg	-	2 tabs
> 8 kg	Up to 2 years	4 tabs
	2 - 5 years	6 tabs

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

- **Follow the general instructions for every oral drug to be given at home.**
- **Also follow the instructions listed with the dosage table of each drug.**

INH Preventive therapy for TB EXPOSURE or TB INFECTION

- Crush the tablet(s) and dissolve in water.
- Treatment must be given for 6 months.
- Follow-up children each month (p. 29) to check adherence and progress, and to provide medication.

WEIGHT	ISONIAZID (INH) 100mg tablet Once daily
2 - < 3.5 kg	¼ tab
3.5 - < 7 kg	½ tab
7 - < 10 kg	1 tab
10 - < 15 kg	1½ tabs
15 - < 20 kg	2 tabs
20 - < 25 kg	2 ½ tabs
25 - 30 kg	3 tabs

Treat for TB

- Use Regimen 3A (National TB Guidelines) for treating uncomplicated TB - see table below.
- Children with complicated TB (smear positive or cavitatory TB) use Regimen 3B.
- Older children (more than 8 years) or children who have been treated with TB need to be treated with different regimens (see National TB guidelines and/or refer).
- Do not change the regimen of children referred from hospital or a TB clinic without consulting the referring doctor.
- Treatment should be given as Directly Observed Treatment (DOT) 7 days a week.
- Follow-up children each month (p. 29) to check adherence and progress.

REGIMEN 3A	INTENSIVE PHASE TWO MONTHS Once daily			CONTINUATION PHASE FOUR MONTHS Once daily	
WEIGHT	RHZ (60,30,150)	RH (150,75)	Z 400mg	RH (60,30)	RH (150,75)
5 - < 8 kg	1 tab			1 tab	
8 - < 15 kg	2 tabs			2 tabs	
15 - < 20 kg	3 tabs			3 tabs	
20 - < 30 kg		2 tabs	2 tabs		2 tabs

REGIMEN 3B	INTENSIVE PHASE TWO MONTHS Once daily			CONTINUATION PHASE FOUR MONTHS Once daily	
WEIGHT	RHZ (60,30,150)	E (100mg)	RHZE (150, 75, 400, 275)	RH (60,30)	RH (150,75)
5 - < 8 kg	1 tab	1 tab		1 tab	
8 - < 15 kg	2 tabs	2 tabs		2 tabs	
15 - < 20 kg	3 tabs	3 tabs		3 tabs	
20 - < 30 kg			2 tabs		2 tabs

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

- **Follow the general instructions for every oral drug to be given at home.**
- **Also follow the instructions listed with the dosage table of each drug.**

Give Paracetamol for Fever 38℃ or above, or for Ear Pain

- Give one dose for fever 38°C or above.
- For ear pain: give paracetamol every 6 hours until free of pain (maximum one week)
- In older children, ½ paracetamol tablet can replace 10 ml syrup.

PARACETAMOL			
WEIGHT	**AGE**	**SYRUP (120 mg per 5 ml)**	**TABLET (500 mg)**
3 - < 6 kg	0 up to 3 months	2 ml	
6 - < 10 kg	3 up to 12 months	2.5 ml	
10 - <1 8 kg	12 up to 18 months	5 ml	
18 - < 25 kg	18 months up to 5 years	10 ml	½

Give Elemental Zinc

(zinc sulphate, gluconate, acetate or picolinate)

- Give all children with diarrhoea zinc for 2 weeks.

WEIGHT	ELEMENTAL ZINC Once daily
Up to 10 kg	10 mg
> 10 kg	20mg

Give Iron for Anaemia

- Give three doses daily. Supply enough for 14 days.
- Follow-up every 14 days and continue treatment for 2 months.
- Each dose is 2 mg *elemental* iron for every kilogram weight. Elemental iron content depends on the preparation you have.
- Check the strength and dose of the iron syrup or tablet very carefully.
- Tell mother to **keep Iron out of reach of children**, because an overdose is very dangerous.
- Give Iron with food if possible. Inform the mother that it can make the stools look black.

Weight	**Age** Only if you do not know the weight	**Ferrous Gluconate (Kiddivite®) (40 mg elemental iron per 5 ml)** OR	**Ferrous Lactate drops (25 mg elemental iron per ml)** OR	**Ferrous Sulphate tablet (60 mg elemental iron)**
		Give 3 times a day with meals		
3 - < 6 kg	0 up to 3 months	1.25 ml	0.3 ml (½ dropper)	
6 - < 10 kg	3 up to 12 months	2 .5 ml	0.6 ml (1 dropper)	
10 - < 25kg	One up to 5 years	5.0 ml	0.9 ml (1½ dropper)	½ tablet

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 home remedy for cough or sore throat).**
- **Tell her how often to administer the treatment at home.**
- **If needed for treatment at home, give mother a small bottle of nystatin.**
- **Check the mother's understanding before she leaves the clinic.**

If child has any other local infection causing fever e.g. infected scabies, consult the EDL for correct drug and dosage

For Chronic Ear Infection, Clear the Ear by Dry Wicking and give ear drops

- Dry the ear at least 3 times daily
  - Roll clean absorbent cloth or soft, strong tissue paper into a wick.
  - Place the wick in the child's ear.
  - Remove the wick when wet.
  - Replace the wick with a clean one and repeat these steps until the ear is dry.
  - Instil recommended ear drops (if available) after dry wicking.
  - The ear should not be plugged between dry wicking.

Soothe the Throat, Relieve the Cough with a Safe Remedy

- **Safe remedies to encourage:**
  - Breastmilk
  - If not exclusively breastfed, give warm water or weak tea: add sugar or honey and lemon if available
- **Harmful remedies to discourage:**
  - Herbal smoke inhalation
  - Vicks drops by mouth
  - Any mixture containing vinegar

Treat for Eye Infection

- The mother should:
  - Wash hands with soap and water
  - Gently wash off pus and clean the eye with saline at least 4 times a day. Continue until the discharge disappears.
  - Apply chloramphenicol ointment 4 times a day for seven days.
  - Wash hands again after washing the eye.

Treat for Mouth Ulcers

- Treat for mouth ulcers 3 - 4 times daily for 5 days:
  - Give paracetamol for pain relief (p. 12) at least 30 minutes before cleaning the mouth or feeding the child.
  - Wash hands.
  - Wet a clean soft cloth with chlorhexidine 0.2% and use it to wash the child's mouth. Repeat this during the day.
  - Apply a thin layer of tetracaine 1% ointment to affected areas (if available).
  - Wash hands again.
- Advise mother to return for follow-up in two days if the ulcers are not improving.

Treat for Thrush

- Clean the mouth as described above using a cloth dipped in salt water.
- Use nystatin or gentian violet to treat the infection.
  - Nystatin (1 ml) should be instilled after feeds for 7 days.
  - Gentian violet, (0.5%) should be applied to the inside of the mouth three times daily. Continue for 48 hours after cure.
- 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.
- If severe, recurrent or pharyngeal thrush consider HIV infection (p. 7).
- Give paracetamol if needed (p. 12).

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).**
- **Measure the dose accurately.**

Give Ceftriaxone IM

- **GIVE TO CHILDREN BEING REFERRED URGENTLY.**
- Wherever possible use the weight to calculate the dose.
- Dose of ceftriaxone is 50 mg per kilogram.
- If the child has a bulging fontanelle or a stiff neck, give double the dose (100mg/kg).
- **Dilute 250 mg vial with 1 ml of sterile water, or 500 mg with 2 ml sterile water (250 mg per ml).**
- **Give the injection in the upper thigh, not the buttocks.**
- **IF REFERRAL IS NOT POSSIBLE OR DELAYED, repeat the ceftriaxone injection every 24 hours.**

WEIGHT	AGE	Ceftriaxone dose in mg	Ceftriaxone dose in ml
3 - < 6 kg	0 up to 3 months	250 mg	1.0 ml
6 - < 10 kg	3 up to 12 months	500 mg	2.0 ml
10 - < 15 kg	12 up to 24 months	750 mg	3.0 ml
15 - 25 kg	2 up to 5 years	1 g	4.0 (give 2 ml in each thigh)

Give Diazepam to stop Convulsions

- Turn the child to the side and clear the airway. Avoid putting things in the mouth.
- Give 0.5 mg per kg diazepam injection solution per rectum. Use a small syringe without a needle or a catheter.
- Test for low blood sugar, then treat or prevent (p. 15).
- **Give oxygen (p. 15).**
- **REFER URGENTLY.**
- If convulsions have not stopped after 10 minutes, repeat the dose once while waiting for transport.

Weight	Age	Diazepam (10 mg in 2 ml)
3 - < 4 kg	0 up to 2 months	2 mg (0.4 ml)
4 - < 5 kg	2 up to 3 months	2.5 mg (0.5 ml)
5 - < 15 kg	3 up to 24 months	5 mg (1 ml)
15 - 25 kg	2 up to 5 years	7.5 mg (1.5 ml)

Give Nebulized Adrenaline for STRIDOR

- Add 1 ml of 1:1000 adrenaline (one vial) to 1 ml of saline and administer using a nebulizer.
- Always use oxygen at flow-rate of 6 - 8 litres.
- Repeat every 15 minutes, until the child is transferred (or the stridor disappears)
- **Give one dose of prednisone as part of pre-referral treatment for stridor (see below).**

Give Salbutamol for WHEEZE with severe classification

SALBUTAMOL	
Nebulised salbutamol (2.5 ml nebule)	Dilute 1 ml in 3 ml saline. Nebulise in the clinic. Always use oxygen at flow rate of 6-8 litres. If still wheezing repeat every 15 minutes in first hour and 2 - 4 hourly thereafter. Add Ipratorpium bromide 0.5 ml if available
OR	
MDI - 100 ug per puff	4 - 8 puffs using a spacer. Allow 4 breaths per puff. If still wheezing repeat every 15 minutes in first hour and 2 - 4 hourly thereafter.

Give Prednisone for STRIDOR or RECURRENT WHEEZE with severe classification

WEIGHT	AGE	PREDNISONE 5 mg
Up to 8 kg	-	2 tabs
> 8 kg	Up to 2 years	4 tabs
	2 - 5 years	6 tabs

GIVE THESE TREATMENTS IN THE CLINIC ONLY

- **Explain to the mother why the treatment is being given**

Prevent Low Blood Sugar (hypoglycaemia)

- **If the child is able to swallow:**
  - If breastfed: ask the mother to breastfeed the child, or give expressed breastmilk.
  - If not breastfed**:** give a breastmilk substitute or sugar water. Give 30 - 50 ml of milk or sugar water before child leaves facility.
    - To make sugar water: Dissolve 4 level teaspoons of sugar (20 grams) in a 200 ml cup of clean water.

- **If the child is not able to swallow:**
  - Insert nasogastric tube and check the position of the tube.
  - Give 50 ml of milk or sugar water by nasogastric tube (as above).

Treat for low blood sugar (hypoglycaemia)

Low blood sugar < 3 mmol/L in a child OR < 2.5 mmol/L in a young infant

- Suspect low blood sugar in any infant or child that:
  - is convulsing, unconscious or lethargic; OR
  - has a temperature below 35ºC.
- Children with severe malnutrition are particularly likely to be hypoglycaemic.

- Confirm low blood sugar using blood glucose testing strips.
- Treat with:
  - 10% Glucose - 5 ml for every kilogram body weight - by nasogastric tube OR intravenous line.
  - Keep warm.
- Refer urgently and continue feeds during transfer.

If only 50% glucose is available, make up 10% solution:

Fill a 20 ml syringe:
- with 2 ml of 50% glucose + 18 ml of 5% glucose, or
- with 4 ml of 50% glucose + 16 ml sterile water or saline.

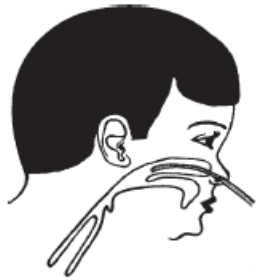
OR add 5 vials (each containing 20 ml) of 50% glucose to 1000 ml (1 litre) of 5% glucose.

Give Oxygen

- Give oxygen to all children with:
  - severe pneumonia, with or without wheeze
  - lethargy or if they are unconscious
  - convulsions

- Use nasal prongs or a nasal cannula. Oxygen flow rate should be 1-2 litres per minute.

- The picture below shows the correct placement of a nasal cannula. This method delivers a higher concentration of oxygen.



GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

(See FEEDING advice on COUNSEL THE MOTHER chart)

Plan A: Treat for Diarrhoea at Home

Counsel the mother on the 3 Rules of Home Treatment:

1. Give Extra Fluid 2. Continue Feeding 3. When to Return

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

- **COUNSEL THE MOTHER:**
  - Breastfeed frequently and for longer at each feed.
  - If the child is exclusively breastfed, give sugar-salt solution (SSS) or ORS in addition to breastmilk.
  - If the child is not receiving breastmilk or is not exclusively breastfed, give one or more of the following: food-based fluids such as soft porridge, amasi (maas) or SSS or ORS.
  - **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 SSS or ORS:**
  To make SSS:
  1 litre boiled water + 8 level teaspoons sugar + half a level teaspoon salt.
  SSS is the solution to be used at home to *prevent* dehydration.

  ⇒ **NB The contents of the ORS sachet is mixed with clean water and administered to co*rrect* dehydration.**

- **SHOW THE MOTHER HOW MUCH FLUID TO GIVE IN ADDITION TO THE USUAL FLUID INTAKE:**

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

- **Counsel 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. **CONTINUE FEEDING**
3. **WHEN TO RETURN**

} **See *COUNSEL THE MOTHER* chart (p. 19 - 22)**

Plan B: Treat for Some Dehydration with ORS

In the clinic : Give recommended amount of ORS over 4-hour period

- **DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS.**

**** Use the child's age only when you do not know the weight. The amount of ORS needed each hour is about 20 ml for each kilogram weight. Multiply the child's weight in kg by 20 for each hour. Multiply this by four for the total number of ml over the first four hours. One teacup is approximately 200 ml.***

- **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.

AGE*	Up to 4 months	4 up to 12 months	1 up to 2 years	2 up to 5 years
WEIGHT	< 6 kg	6 - < 10 kg	10 - < 12 kg	12 - 25 kg
ml for 4 hours	200 - 450	450 - 800	800 - 960	960 - 1600

  - Continue breastfeeding whenever the child wants.
  - If the child wants more ORS than shown, give more.

- **AFTER 4 HOURS:**
  - Reassess the child and classify the child for dehydration.
  - Select the appropriate plan to continue treatment.
  - Begin feeding the child in clinic.

- **IF MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT, OR THE CLINIC IS CLOSING:**
  - Refer if possible. Otherwise:
    - Show her how to prepare ORS solution at home.
    - Show her how much ORS to give to finish the 4-hour treatment at home.
    - Show her how to prepare SSS for use at home.
    - Explain the 3 Rules of Home Treatment:

1. **GIVE EXTRA FLUID**
2. **CONTINUE FEEDING**
3. **WHEN TO RETURN**

} **See Plan A for recommended fluids and See *COUNSEL THE MOTHER* chart (p. 19 - 22)**

GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

Plan C: Treat Severe Dehydration Quickly *

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

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. Weigh the child or estimate the weight.
- Give Normal Saline IV:

Within the first half hour:	Plan for the next 5 hours:
Rapidly give 20 ml IV for each kilogram weight, before referral (weight x 20 gives ml needed). **Repeat** this amount up to twice if the radial pulse is weak or not detectable.	**More slowly** give 20 ml IV for each kilogram weight, every hour, during referral. Ensure the IV continues running, but does not run too fast.

- **REFER URGENTLY for further management.**
- **Reassess the child every 1- 2 hours while awaiting transfer.** If hydration status is not improving, give the IV drip more rapidly.
- Also give ORS (about 5 ml per kilogram each hour) as soon as the child can drink: usually after 3 - 4 hours (infants) or 1 - 2 hours (children).
- Reassess the child after 3 hours if he/she is still at the clinic. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment. Refer the child to hospital even if he/she no longer has severe dehydration.
- If mother refuses or you cannot refer, observe child in clinic for at least 6 hours after he/she has been fully rehydrated.

NO ↓

Is IV treatment available nearby (within 30 minutes)?

YES →

- Refer URGENTLY to hospital for IV treatment.
- If the child can drink, provide 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 nasogastric (NG) tube for rehydration?

YES →

NO ↓

Can the child drink?

YES →

- **Start rehydration with ORS solution, by tube**: give 20 ml per kg each hour for 6 hours (total of 120 ml per kg).
- **REFER URGENTLY for further management.**
- **Reassess the child every 1-2 hours while awaiting transfer:**
  - If there is repeated vomiting give the fluid more slowly.
  - **If there is abdominal distension stop fluids and refer urgently.**
  - After 6 hours reassess the child if he/she is still at the clinic. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

NO ↓

Refer URGENTLY to hospital for IV or NG treatment

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

* Exception: Another severe classification

e.g. suspected meningitis, severe malnutrition

- Too much IV fluid is dangerous in very sick children. Treatment should be supervised very closely in hospital.
- Set up a drip for severe dehydration, but give Normal Saline **only 10 ml per kilogram over one hour.**
- Then give sips of ORS while awaiting urgent referral.

GIVE ROUTINE PREVENTIVE TREATMENTS AT THE CLINIC

- **Immunization is especially important.**
- **Determine the doses needed according to the schedule.**
- **Explain to the mother why the treatment is given.**
- **Watch mother give the Vitamin A.**
- **Treat for worms in the clinic.**

Give Vitamin A

- Give Vitamin A routinely to all children from the age of 6 months to *prevent* severe illness (prophylaxis).
- Vitamin A capsules come in 50 000 IU, 100 000 IU and 200 000 IU.
- Record the date Vitamin A given on the RTHC.

ROUTINE VITAMIN A*

Age	Vitamin A dose
6 up to 12 months	A single dose of 100 000 IU at age 6 months or up to 12 months
1 up to 5 years	A single dose of 200 000 IU at 12 months, then a dose of 200 000 IU every 6 months up to 5 years

ADDITIONAL DOSE FOR SEVERE MALNUTRITION, PERSISTENT DIARRHOEA, MEASLES OR XEROPHTHALMIA**

- Give an additional (non-routine) dose of Vitamin A if the child has SEVERE MALNUTRITION, PERSISTENT DIARRHOEA , measles or xerophthalmia.
- Note: If the child has measles or xerophthalmia, repeat this additional dose after 24 hours (p. 42).

Age	Additional dose
6 up to 12 months	100 000 IU
12 - 60 months	200 000 IU

*** If the child has had a dose of Vitamin A within the past month, DO NOT give Vitamin A.**
*** Vitamin A is not contraindicated if the child is on multivitamin treatment.**
**** Xerophthalmia means that the eye has a dry appearance.**

Give Mebendazole

- Many children have worms, so treatment is a routine schedule. The single-dose treatments are safe, convenient and effective.
- Give a single dose in the clinic if:
  - The child is one year of age or older and
  - The child has not had a dose in the previous 6 months.
- Mebendazole comes in 100 and 500 mg tablets:

Age	Weight	Mebendazole
12 up to 24 months	< 10 kg	100 mg twice a day for 3 days
24 - 60 months	10 kg or more	500 mg as a single dose

- Record the dose on the RTHC.
- Worm treatment should be given every 6 months.

COUNSEL THE MOTHER

FEEDING

Assess the Child's Feeding if the child is:

- **classified as NOT GROWING WELL or ANAEMIA**
- **under 2 years of age**

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 (p. 20). If mother is HIV positive, see the special feeding recommendations and advice (p.21).

ASK:

- How are you feeding your child?
- Are you breastfeeding?
  - How many times during the day?
  - Do you also breastfeed at night?
- Are you giving any other milk?
  - What type of milk is it?
  - What do you use to give the milk?
  - How many times a day?
  - How much milk each time?
- What other food or fluids are you giving the child?
  - How often do you feed him/her?
  - What do you use to give other fluids?
- How has the feeding changed during this illness?

If the child is not growing well, ASK:

- How large are the servings?
- Does the child receive his/her own serving?
- Who feeds the child and how?

Counselling skills

Listening and Learning skills

- Use helpful non-verbal behaviour.
- Ask open-ended questions.
- Use responses and gestures that show interest.
- Reflect back what the mother says.
- Avoid judging words.

Confidence Building skills

- Accept what the mother says, how she thinks and feels.
- Recognise and praise what the mother is doing right.
- Give practical help.
- Give relevant information according to the other's need s and check her understanding..
- Use simple language.
- Make suggestions rather than giving commands.

FEEDING RECOMMENDATIONS

(HIV positive mothers who have chosen not to breastfeed should follow recommendations on p. 21, unless the child has HIV INFECTION or SUSPECTED SYMPTOMATIC HIV INFECTION)

Up to 6 months

- Breastfeed as often as the child wants, day and night.
- Feed at least 8 times in 24 hours.
- Do not give other foods or fluids, not even water.

6 months up to 12 months

- Continue to breastfeed as often as the child wants.
- If the baby is not breastfed, give formula or 3 cups of full cream cow's milk (from 9 months of age). If the baby gets no milk, give 5 nutritionally adequate complementary feeds per day.
- Start giving 2-3 teaspoons of soft porridge, and begin to introduce vegetables and fruit.
- Gradually increase the amount and frequency of feeds. Children between 6-8 months should have two meals a day, by 12 months this should have increased to 5 meals per day.
- Give a variety of locally available food. Examples include egg (yolk), beans, dhal, meat, fish, chicken / chicken livers, mopani worms.
- For children who are not growing well, mix margarine, fat, or oil with porridge.
- Fruit juices, tea and sugary drinks should be avoided before 9 months of age.

12 months up to 2 years

- Continue to breastfeed as often as the child wants.
- If no longer breastfeeding, give 2—3 cups of full cream milk every day.
- Give at least 5 adequate nutritious family meals per day.
- Give locally available protein at least once a day. Examples include egg, beans, dhal, meat, fish, chicken / chicken livers, mopani worms.
- Give fresh fruit or vegetables twice every day.
- Give foods rich in iron, and vitamins A and C (see examples below).
- Feed actively from the child's own bowl.

Above 2 years

- Give the child his/her own serving of family foods 3 times a day.
- In addition, give 2 nutritious snacks such as bread with peanut butter, full cream milk or fresh fruit between meals.
- Continue active feeding.
- Ensure that the child receives foods rich in iron and Vitamins A and C.

Feeding Recommendations for PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent, longer breastfeeds, day and night.
- If giving formula, and child is older than one year, replace milk with fermented milk products such as amasi or yoghurt. Otherwise continue with formula.
- For other foods, follow feeding recommendations for the child's age, but give small, frequent meals (at least 6 times a day).
- Avoid very sweet foods or drinks.

Encourage feeding during illness

Recommend that the child be given an extra meal a day for a week once better.

IRON RICH FOODS

- Meat (especially kidney, spleen, chicken livers), dark green leafy vegetables, legumes (dried beans, peas and lentils).
- Iron is absorbed best in the presence of vitamin C.
- Tea, coffee and whole grain cereal interfere with iron absorption.

VITAMIN A RICH FOODS

- Vegetable oil, liver, mango, pawpaw, yellow sweet potato, Full Cream Milk, dark green leafy vegetables e.g. spinach / imfino / morogo.

VITAMIN C RICH FOODS

- Citrus fruits (oranges, naartjies), melons, tomatoes.

FEEDING RECOMMENDATIONS IF MOTHER IS HIV POSITIVE

(if the child has HIV INFECTION or SUSPECTED SYMPTOMATIC HIV INFECTION, follow the feeding recommendations on p. 20.)
Remember to check if the child requires Nevirapine prophylaxis (p. S7)

Up to 6 Months of Age

Breastfeed exclusively as often as the child wants, day and night.

- Feed at least 8 times in 24 hours.
- Do not give other foods or fluids (Mixed feeding could lead to HIV transmission if the mother is HIV positive).
- Safe transition to replacement milk as soon as this is accessible, feasible, affordable, sustainable and safe.

OR

If replacement feeding is AFASS (acceptable, feasible, affordable, sustainable and safe**) give formula feed exclusively** (no breastmilk at all).

- Give formula.
- Other foods or fluids are not necessary.
- Prepare correct strength and amount just before use.
- Use milk within an hour and discard any left.
- Cup feeding is safer than bottle feeding.
- Use a cup which can be kept clean i.e. not one with a spout.
- See details on p. 39.

Remember that a child with HIV INFECTION of SUSPECTED SYMPTOMATIC HIV should follow the recommendations of p. 20.

Safe transition from exclusive breastfeeding

Safe transition means rapidly changing from all breastmilk, to replacement feeding, with no breastmilk.

Avoid mixing breastmilk with other food or fluids (this increases HIV risk).

Suggest transition as soon as this is accessible, feasible, affordable, sustainable and safe (AFASS). It is preferable to avoid breastfeeding after 6 months, if AFASS criteria are met.

Help mother prepare for transition:

- Mother should discuss weaning with her family if possible.
- Express milk to practice cup feeding.
- Find a regular supply of formula or full cream cow's milk (if child older than 9 months).
- Learn how to prepare and store milk safely at home.

Help mother make the transition:

- Teach mother to cup feed her baby.
- Clean all utensils with soap and water.
- Start giving only formula or cow's milk (if child older than 9 months).

Stop breastfeeding completely.

- Express and discard some breastmilk, to keep comfortable until lactation stops.
- Give complementary feeds from 6 months.

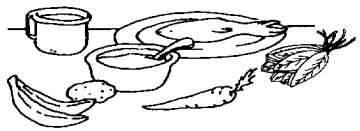
6 Months up to 12 Months

- Stop breastfeeding if AFASS criteria are met.
- Start giving 2-3 teaspoons of soft porridge, and begin to introduce fruit and vegetables.
- Gradually increase the amount and frequency of feeds. Children between 6-8 months should have two meals a day, by 12 months this should have increased to 5 meals per day.
- Give locally available protein daily. Examples include egg (yolk), beans, dhal, meat, fish, chicken / chicken livers, mopani worms.
- For malnourished children, mix margarine, fat, or oil with porridge.
- If the baby is not breastfed, give formula or 3 cups of full cream cow's milk (from 9 months of age). If the baby gets no milk, give 6 nutritionally adequate complementary feeds per day.

For IRON RICH FOODS see page 20

12 Months up to 2 Years

- Give at least 5 adequate nutritious family meals per day.
- Give locally available protein at least once a day. Examples include: egg, beans, dhal, meat, fish, chicken / chicken livers, mopani worms.
- Give fresh fruit or vegetables at least twice every day.
- Give foods rich in iron, and vitamins A and C (see examples on page 20).
- Feed actively from the child's own



For Children 2 years and older see page 20

For FOODS RICH IN VITAMIN A and C see page 20

Counsel the Mother About Feeding Problems

If the child is not being fed according to the recommendations on p. 20 and 21, counsel the mother accordingly. In addition:

If mother reports difficulty with breastfeeding, assess breastfeeding (p. 33):
- Identify the reason for the mother's concern and manage any breast condition.
- If needed, show recommended positioning and attachment (p. 38).
- Build the mother's confidence.
- Advise her that frequent feeds improve lactation.

If the child is less than 6 months old, and:

- **the child is taking breastmilk and other milk or foods:**
  - Build mother's confidence that she can produce all the breastmilk that the child needs. Water and other milk are not necessary.
  - If she has stopped breastfeeding, refer her to a breastfeeding counsellor to help with re-lactation.
  - Suggest giving more frequent, longer breastfeeds, day or night, and gradually reducing other milk or foods.

- **the mother has decided to use replacement milk for medical reasons, counsel the mother to:**
  - Make sure the other milk is an adequate breastmilk substitute.
  - Prepare other milk correctly and hygienically, and give adequate amounts (p. 39).
  - Finish prepared milk within an hour.

- **the mother has started complementary feeds**
  - Encourage exclusive breastfeeding.

If the mother is using a bottle to feed the child
- Recommend a cup instead of a bottle. Show mother how to feed the child with a cup.

If the child is not being fed actively, counsel the mother to:
- Sit with the child and encourage eating.
- Give the child an adequate serving in a separate plate or bowl.

If the child has a poor appetite, or is not feeding well during this illness, counsel the mother to:
- Breastfeed more frequently and for longer if possible.
- Use soft, varied, favourite foods to encourage the child to eat as much as possible.
- Give foods of a suitable consistency, not too thick or dry.
- Avoid buying sweets, chips and other snacks that would replace healthy food.
- Offer small, frequent feeds. Try when the child is alert and happy, and give more food if he/she shows interest.
- Clear a blocked nose if it interferes with feeding.
- Offer soft foods that don't burn the mouth, if the child has mouth ulcers / sores e.g. eggs, mashed potatoes, sweet potatoes, pumpkin or avocado.
- Ensure that the spoon is the right size, food is within reach, child is actively fed, e.g. sits on mother's lap while eating.
- Expect the appetite to improve as the child gets better.

If there is no food available in the house:
- Help mother to get a Child Support Grant for any of her children who are eligible.
- Put her in touch with a Social Worker and local organisations that may assist.
- Encourage the mother to have or participate in a vegetable garden.
- Supply milk and enriched (energy dense) porridge from the PEM scheme.

FLUID

Advise the Mother to Increase Fluid During Illness

FOR ANY SICK CHILD:

- If breastfed, breastfeed more frequently and for longer at each feed. If not breastfed, increase the quantity and frequency of milk and/or milk products.
- For children over 6 months, increase fluids. For example, give soft porridge, amasi, SSS or clean water.

FOR CHILD WITH DIARRHOEA:

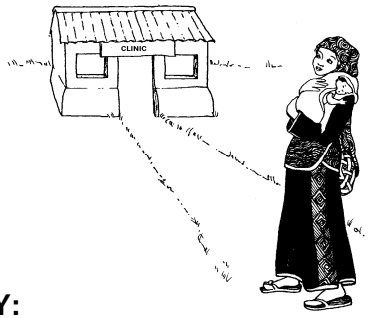
- Giving extra fluid can be lifesaving. Give fluid according to Plan A or Plan B (p. 16).

WHEN TO RETURN

Advise the Mother When to Return

FOLLOW-UP VISIT: Advise 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 SOME DEHYDRATION - if diarrhoea not improving MALARIA - if fever persists SUSPECTED MALARIA - if fever persists FEVER - OTHER CAUSE - if fever persists POSSIBLE TB MEASLES MEASLES WITH EYE AND MOUTH COMPLICATIONS	2 days
COUGH OR COLD - if no improvement WHEEZE - FIRST EPISODE - if still wheezing NO VISIBLE DEHYDRATION - if diarrhoea not improving PERSISTENT DIARRHOEA ACUTE EAR INFECTION - if pain / discharge persists FEEDING PROBLEM	5 days
ACUTE OR CHRONIC EAR INFECTION ANAEMIA NOT GROWING WELL - but no feeding problem	14 days
CONFIRMED HIV-INFECTION POSSIBLE HIV INFECTION SUSPECTED SYMPTOMATIC HIV HIV EXPOSED TB TB EXPOSURE	Monthly



NEXT WELL CHILD VISIT:

Advise mother when to return for next Well Child visit according to your clinic's schedule

WHEN TO RETURN IMMEDIATELY:

Advise mother to return immediately if the child has any of these signs:	
Any sick child	➢ Becomes sicker ➢ Not able to drink or breastfeed ➢ Has convulsions ➢ Vomiting everything ➢ Develops a fever
If child has COUGH OR COLD, also return if	➢ Fast breathing ➢ Difficult breathing ➢ Wheezing
If child has DIARRHOEA, also return if	➢ Blood in stool ➢ Drinking poorly

Counsel the mother about her own health

- If the mother is sick, care for her, or refer her for help.
- If she has a breast condition (such as engorgement, sore nipples, breast infection), provide care 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.
- Encourage mother to grow local foods, if possible, and to eat fresh fruit and vegetables.
- Ensure birth registration.
- Where indicated, encourage her to seek social support services e.g. Child Support Grant.
- Make sure she has access to:
  - Contraception and sexual health services, including HCT services.
  - Counselling on STI and prevention of HIV-infection.

Give additional counselling if the mother is HIV-positive

- Encourage disclosure: exclusive infant feeding and possible ART are very problematic without disclosure.
- Reassure her that with regular follow-up, much can be done to prevent serious illness, and maintain her and the child's health.
- Make sure her CD4 count has been checked and recommend ART if indicated.
- Emphasise the importance of adherence if on ART.
- Emphasise early treatment of illnesses, opportunistic infections or drug reaction.
- Counsel mother on eating healthy food that includes protein, fat, carbohydrate, vitamins and minerals.

GIVE FOLLOW-UP CARE

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

PNEUMONIA and COUGH or COLD

- After 2 days:
  - Check the child for general danger signs
  - Assess the child for cough or difficult breathing
    Ask:- Is the child breathing slower?
    - Is there less fever?
    - Is the child eating better?

  } *See ASSESS & CLASSIFY (p. 2)*

Treatment:

- If there is chest indrawing or a general danger sign, give first dose of ceftriaxone IM. Also give first dose cotrimoxazole unless the child is known to be HIV-ve. Then **REFER URGENTLY.**
- If breathing rate, fever and eating are the same, or worse check if mother has been giving the treatment correctly. If yes, **refer.** If she has been giving the antibiotic incorrectly, teach her to give oral drugs at home. Follow-up in 2 days.
- If breathing slower, less fever or eating better, complete 5 days of antibiotic. Remind the mother to give one extra meal daily for a week.

WHEEZE - FIRST EPISODE

After 2 days (PNEUMONIA with wheeze), or after 5 days (COUGH OR COLD with wheeze):

- If wheezing has not improved, **refer**.
- If no longer wheezing after 5 days, stop salbutamol. Advise mother to re-start salbutamol via spacer if wheezing starts again, and return to clinic immediately if child has not improved within 4 hours.

DIARRHOEA

After 2 days (for some dehydration) or 5 days (for no visible dehydration, but not improving):

- Assess the child for diarrhoea.
- Check if Zinc is being given.
- If blood in the stools, assess for dysentery.
- Ask: - Are there fewer stools?
- - Is the child eating better?
- If some dehydration, **refer.**
- If diarrhoea still present, but no visible dehydration, follow- up in 5 days.
- Assess and counsel about feeding (p. 20 - 21).
- Advise mother when to return immediately (p. 23).
- Follow-up in 5 days. Re-assess and re-classify.

} *See ASSESS & CLASSIFY (p.3)*

PERSISTENT DIARRHOEA

After 5 days:

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

Treatment:

- Check if Zinc is being given.
- If the diarrhoea has not stopped reassess child, treat for dehydration, then **refer.**
- If the diarrhoea has stopped:
  - Counsel on feeding (p. 20 - 21).
  - Suggest mother gives one extra meal every day for one week.
  - Review after 14 days to assess weight gain.

DYSENTERY

After 2 days:
Assess the child for diarrhoea. *See ASSESS & CLASSIFY (p. 3).*
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 general danger sign present, or child sicker, **REFER URGENTLY.**
- If child dehydrated, treat for dehydration, and **REFER URGENTLY.**
- If number of stools, amount of blood, fever or abdominal pain is the same or worse, **refer.**
- If child is better (fewer stools, less blood in stools, less fever, less abdominal pain, eating better), complete 3 days of Ciprofloxacin.
- Give an extra meal each day for a week.

GIVE FOLLOW-UP CARE

- **Care for the child who returns for follow-up using all the boxes that match the child's previous classifications.**
- **If the child has a new problem, assess, classify and treat the new problem as on the *ASSESS AND CLASSIFY* chart (p. 2).**

FEVER: OTHER CAUSE

If fever persists after 2 days:
Do a full reassessment of the child.

Treatment:

- If the child has any general danger sign or stiff neck or bulging fontanelle, treat for SUSPECTED MENINGITIS (p. 4) and **REFER URGENTLY.**
- If fever has been present for 7 days, consider TB.
  - If TB, treat accordingly
  - If TB EXPOSURE, refer (do not start treatment until child has been assessed by a doctor
  - If POSSIBLE TB, do TST and follow-up according to p. 29.
- Treat for other causes of fever.

MALARIA or SUSPECTED MALARIA

If fever persists after 2 days, or returns within 14 days:
- Do a full reassessment of the child.
- Assess for other causes of fever.

Treatment:

- If the child has any general danger signs, bulging fontanelle or stiff neck, treat as SUSPECTED SEVERE MALARIA (p. 4) and **REFER URGENTLY.**
- If malaria rapid test was positive at initial visit and fever persists or recurs, **REFER URGENTLY.**
- If malaria test was negative at the initial visit, and no other cause for the fever is found after reassessment, repeat the test:
  - If malaria test is negative or unavailable, **refer.**
  - If malaria rapid test is positive, treat for malaria.
- Treat for any other cause of fever.

EAR INFECTION

Reassess for ear problem. *See ASSESS & CLASSIFY (p. 5).*

Treatment:

- If there is tender swelling behind the ear or the child has a high fever, **REFER URGENTLY.**

ACUTE EAR INFECTION:

After 5 days:

- If ear pain or discharge persists, treat with amoxicillin for 5 more days.
- Continue dry wicking if discharge persists.
- Follow-up in 5 more days.
- After two weeks of adequate wicking, if discharge persists, **refer.**

CHRONIC EAR INFECTION:

After 14 days:

- If some improvement, continue dry wicking, and review in 14 days
- If no improvement, **refer**

GIVE FOLLOW-UP CARE

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

NOT GROWING WELL

After 14 days:

- Weigh the child and determine if the child is still low weight for age.
- Determine weight gain.
- Reassess feeding (p. 19 - 22).

TREATMENT:

- If the child is gaining weight well, praise the mother. Review every 2 weeks until GROWING WELL.
- If the child is still NOT GROWING WELL:
  - Check for TB and manage appropriately.
  - Check for HIV infection and manage appropriately.
  - Check for feeding problem. If feeding problem, counsel and follow-up in 5 days.
  - Counsel on feeding recommendations.
- If the child has lost weight or you think feeding will not improve, **refer.**
- **Otherwise** review again after 14 days: if child has still not gained weight, or has lost weight, **refer.**

FEEDING PROBLEM

After 5 days:

- Reassess feeding (p. 19-22).
- Ask about feeding problems and counsel the mother about any new or continuing feeding problems (p. 19-22).
- If child is NOT GROWING WELL, review after 14 days to check weight gain.

ANAEMIA

After 14 days: Check haemoglobin.

TREATMENT:

- If haemoglobin lower than before, **refer.**
- If haemoglobin the same or higher than before**,** continue iron. Recommend iron rich diet (p. 20). Review in 14 days. Continue giving iron every day for 2 months.
- If the haemoglobin has not improved or the child has palmar pallor after one month, **refer.**

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

ALSO, ADVISE THE MOTHER WHEN TO RETURN IMMEDIATELY (p. 23).

GIVE FOLLOW-UP CARE

HIV INFECTION not on ART

All children less than one year of age should be initiated on ART.

Those older than one year should be assessed for ART eligibility (p. S1). Those meeting the criteria should be initiated on ART. Children who do not meet the criteria should be classified as HIV INFECTION not on ART, and should be followed up regularly (at least three monthly).

The following should be provided at each visit:

- Routine child health care: immunization, growth monitoring, feeding assessment and counselling and developmental screening.
- Cotrimoxazole prophylaxis (p. 9).
- Assessment, classification and treatment of any new problem.
- Ask about the mother's health. Provide HCT and treatment if necessary.

Clinical staging and a CD4 count must be done at least six monthly to assess if the child meets the criteria for initiation of ART.

POSSIBLE HIV INFECTION

See the child at least once every month. At each visit provide:

- Routine child health care: immunization, growth monitoring, and developmental screening.
- Check if the child has been receiving prophylactic nevirapine. All infants of HIV-positive mothers should receive Nevirapine for 6 weeks. At 6 weeks of age, stop Nevirapine if the mother is on lifelong ART or if the infant is not receiving ANY breastmilk. Otherwise continue daily nevirapine until the mother has stopped giving the child ANY breastmilk for one week (p. S7)
- Feeding assessment and counselling to ensure that the mother is practising exclusive feeding (breast or replacement).
- Cotrimoxazole prophylaxis (p. 9).
- Assessment, classification and treatment of any new problem.
- Recheck child's HIV status 6 weeks after cessation of breastfeeding. Reclassify the child according to the test result.
- Ask about the mother's health. Provide counselling, HCT and treatment as necessary.

SUSPECTED SYMPTOMATIC HIV INFECTION

Children with this classification should be tested, and reclassified on the basis of their test result.

See the child at least once a month. At each visit:

- Provide routine child health care: immunization, growth monitoring, feeding assessment and counselling, and developmental screening.
- Provide Cotrimoxazole prophylaxis from 6 weeks of age (p. 9).
- Assessment, classification and treatment of any new problem.
- Ask about the mother's health. Provide HCT and appropriate treatment.

HIV EXPOSED

See the child at least once every month. At each visit provide:

- Routine child health care: immunization, growth monitoring, and developmental screening.
- Check if the child has been receiving prophylactic nevirapine. All HIV EXPOSED infants should receive nevirapine for six weeks. If the mother is on lifelong ART OR has stopped all breastfeeding, stop the nevirapine at 6 weeks of age. Otherwise continue for daily for nevirapine until the mother has stopped giving the child ANY breastmilk for one week (p. S7)
- Feeding assessment and counselling to ensure that the mother is practising exclusive feeding (breast or replacement).
- Cotrimoxazole prophylaxis (p. 9).
- Assessment, classification and treatment of any new problem.
- Test the child at six weeks (HIV PCR), and reclassify according to the test results.
- Retest the child six weeks after cessation of breastfeeding. Reclassify the child according to the test result and provide the relevant management.
- Ask about the mother's health. Provide counselling and appropriate management if necessary.

GIVE FOLLOW-UP CARE

POSSIBLE TB

After 2-3 days:
- Ask about features of TB.
- Look for evidence of weight loss or weight gain.
- Check the Tuberculin Skin Test - if it measures more than 10 mm (or 5 mm in an HIV infected child) it is positive.

- If the TST is positive:
  - If 2 or more features of TB are present, treat for TB according to National TB guidelines (p 11). Provide follow-up (see below). Remember to complete the TB register and any other documentation.
  - If there are no features of TB and no other symptoms suggestive of TB, then classify as TB INFECTION and give INH for 6 months (p. 11). Provide follow-up (see below).
  - If there is one feature of TB or other symptoms suggestive of TB, refer for further assessment.
- If TST is negative:
  - If child is well (no features of TB present), no further follow-up is required.
  - If fever is still present, refer.
  - If child still coughing, treat with Amoxicillin for five days (p. 9). If cough does not resolve after five days, refer.
  - If child not gaining weight, provide counselling, deworming and food supplementation. If no weight gain after 2 weeks, refer.

FEATURES OF TB

- Persistent, non-remitting cough or wheeze for more than 2 weeks.
- Documented loss of weight or failure to thrive during the past 3 months (especially if not responding to deworming together with food and/or micronutrient supplementation).
- Fatigue/reduced playfulness.
- Fever every day for 14 days or more.

TB (on treatment)

- Follow-up monthly.
- Ensure that the child is receiving regular treatment, ideally as Directly Observed Treatment, 7 days a week. Remember to switch to the continuation phase after two months treatment (p. 11).
- Ask about symptoms and check weight.
- If symptoms are not improving or if the child is not growing well, refer.
- Counsel regarding the need for adherence, and for completing six months treatment.
- Counsel and recommend HIV testing if the child's HIV status is not known.

TB EXPOSURE or TB INFECTION (on treatment)

- Follow-up monthly.
- Ask about symptoms and check weight.
- If symptoms develop, or if child is not growing well, refer.
- Counsel regarding the need for adherence, and for completing six months treatment.
- Ensure that the child is receiving medication, and provide treatment for one month where necessary (p. 11).

Palliative Care for the Child – for symptomatic children where ART has failed, or cannot be provided

The decision to provide palliative care only should be made at the referral level. Palliative care includes medication, counselling and support for the child and his family:
- Cotrimoxazole prophylaxis long-term.
- Pain relief (See *Guidelines for the Management of HIV-infected Children Ch 8*).
- Routine child care.
- Treatment at home needs to be strengthened when at referral level it is determined that there can be no further benefit from referral.
- Counsel the mother regarding good nutrition, hygiene and management of skin lesions.
- Referral to a community support or home based care group.

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

DO A RAPID APRAISAL OF ALL WAITING CHILDREN. ASK THE MOTHER WHAT THE YOUNG INFANT'S PROBLEMS ARE.

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

- if follow-up visit, use the follow-up instructions on p. 41
- if initial visit, assess the young infant as follows:

CHECK FOR POSSIBLE BACTERIAL INFECTION AND JAUNDICE

ASK:

- Has the infant had convulsions?
- Has the infant had any attacks where he stops breathing, or becomes stiff or blue (apnoea)?

LOOK, LISTEN, FEEL:

- Is the infant convulsing now?
- Count the breaths in one minute. Repeat the count if elevated.
- Look for severe chest indrawing.

} YOUNG INFANT MUST BE CALM

- Look for nasal flaring.
- Listen for grunting.
- Look and feel for bulging fontanelle.
- Measure temperature (or feel for fever or low body temperature).
- Look at the young infant's movements. Does he/she only move when stimulated?
- Look for discharge from the eyes. Is there pus draining? Is there a sticky discharge?
- Look at the umbilicus. Is it red or draining pus?
- Does the redness extend to the skin?
- Look for skin pustules. Are there many or severe pustules?
- Look for jaundice: Look for yellow palms and soles.

Classify ALL young infants

Any one of these: • Convulsions with this illness. • Apnoea. • Fast breathing (> 60 per minute). • Severe chest indrawing. • Nasal flaring or grunting. • Bulging fontanelle. • Fever (37.5° or above or feels hot) or low body temperature (less than 35.5° or feels cold). • Only moves when stimulated. • Pus draining from eyes • Umbilical redness extending to the skin and/or draining pus. • Many or severe skin pustules.	**POSSIBLE SERIOUS BACTERIAL INFECTION**	➢ **Give diazepam rectally if convulsing at present (p. 14)** ➢ **Give oxygen (p. 15)** ➢ **Give first dose of ceftriaxone IM (p. 36)** ➢ **If fast breathing, chest indrawing or grunting, give cotrimoxazole 2.5 ml if older than 1 month (p. 9)** ➢ **If pus is draining from the eyes, wash with normal saline (p. 37) before referral** ➢ **Test for low blood sugar, and treat or prevent (p. 15)** ➢ **Refer URGENTLY** ➢ **Breastfeed if possible and indicated** ➢ **Keep the infant warm on the way**
• Sticky discharge of eyes or • Red umbilicus. or • Skin pustules.	**LOCAL BACTERIAL INFECTION**	➢ Give erythromycin for seven days (p. 35) ➢ Teach the mother to treat local infections at home (p. 37) ➢ Give chloramphenicol eye ointment for sticky eyes (p. 37) ➢ Follow-up in 2 days (p. 41)
• None of the above signs.	**NO BACTERIAL INFECTION**	➢ Check mother's health (p. 35) ➢ Counsel about general hygiene and care

AND if yellow palms and soles

• Yellow palms and soles.	**JAUNDICE**	➢ Refer for measurement of serum bilirubin and possible phototherapy

DOES THE YOUNG INFANT HAVE DIARRHOEA?

IF YES, ASK:

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

LOOK AND FEEL:

- Look at the young infant's general condition. Is the infant:
  - Lethargic or unconscious?
  - Restless and irritable?
- Look for sunken eyes.
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (> 2 seconds)?
  - Slowly?

Classify DIARRHOEA

for DEHYDRATION	Two of the following signs: • Lethargic or unconscious. • Sunken eyes. • Skin pinch goes back very slowly. • Young infant less than one month of age.	**SEVERE DEHYDRATION**	➢ **Start intravenous infusion (Plan C, p. 17)** ➢ **Give first dose of ceftriaxone IM (p. 36)** ➢ **Breastfeed or give frequent sips of ORS if possible. Keep the infant warm on the way to hospital** ➢ **Refer URGENTLY**
	Two of the following signs: • Restless, irritable. • Sunken eyes. • Skin pinch goes back slowly. .	**SOME DEHYDRATION**	➢ If other severe classification, refer with breastfeeding or ORS sips on the way ➢ Give fluid for some dehydration Plan B (p. 16) ➢ Advise mother to continue breastfeeding ➢ Give zinc for 14 days (p. 12) ➢ Follow-up in 2 days
	• Not enough signs to classify as some or severe dehydration.	**NO VISIBLE DEHYDRATION**	➢ Give fluids to treat for diarrhoea at Home (Plan A p. 15) ➢ If exclusively breastfed, do not give other fluids except SSS ➢ Give zinc for 14 days (p. 12) ➢ Follow-up in 2 days
AND if diarrhoea 14 days or more	• Diarrhoea lasting 14 days or more	**SEVERE PERSISTENT DIARRHOEA**	➢ **Refer after treating for dehydration if present** ➢ **Keep the infant warm on the way to hospital**
AND if blood in stool	• Blood in the stool.	**SERIOUS ABDOMINAL PROBLEM**	➢ **Refer URGENTLY.** ➢ **Keep the infant warm on the way to hospital**

THEN CONSIDER HIV INFECTION

Has the child been tested for HIV infection?

IF YES, AND THE RESULT IS AVAILABLE, ASK:

- What was the result of the test?
- Was the child breatfeeding when the test was done, or had the child breastfed less than 6 weeks before the test was done?

HIV testing in infants 0 - 2 months:

- Use an HIV PCR test.
- All children of HIV positive mothers should be tested at six weeks of age.
- Babies with symptoms suggestive of HIV infection should be tested earlier.
- If the child is breastfeeding the HIV test must be repeated 6 weeks after breastfeeding stops.

NOTE:

All children who have had a PCR test should have an HIV rapid test at 18 months of age.

Classify Child's HIV status

• Child has positive PCR test	**HIV INFECTION**	➢ Follow the six steps for initiation of ART (p. S1) ➢ Give cotrimoxazole prophylaxis from 6 weeks (p. 9) ➢ Assess feeding and counsel appropriately (p. 19-22) ➢ Ask about the mother's health, provide HCT and treatment as necessary. ➢ Provide long term follow-up (p. S5)
• Child has negative PCR test. and • Child still breastfeeding or stopped breastfeeding less than 6 weeks before the test was done	**POSSIBLE HIV INFECTION**	➢ If mother is HIV positive, give prophylactic nevirapine for 6 weeks. If mother is not on lifelong ART continue for as long as infant receives ANY breastmilk (p. S7). ➢ If mother is HIV positive, give cotrimoxazole prophylaxis from 6 weeks (p. 9) ➢ Assess feeding and counsel appropriately (p. 19-22) ➢ Repeat PCR test 6 weeks after stopping breast-feeding to confirm HIV status ➢ Provide follow-up care (p. 28)
• Child has a negative PCR test. and • Child is not breastfeeding and was not breastfed for six weeks before the test was done	**HIV NEGATIVE**	➢ Stop cotrimoxazole prophylaxis ➢ Routine follow-up

IF NO TEST RESULT FOR CHILD, CLASSIFY ACCORDING TO MOTHER'S STATUS

ASK:

- Was the mother tested for HIV during pregnancy or since the child was born?
- If YES, was the test negative or positive?

Classify child according to Mother's HIV status

• Mother HIV positive.	**HIV EXPOSED**	➢ Give prophylactic nevirapine for 6 weeks. If mother is not on lifelong ART continue for as long as infant receives ANY breastmilk (p. S7). ➢ Do a PCR test at 6 weeks, or earlier if the child is sick. Reclassify the child on the basis of the result. ➢ Give cotrimoxazole prophylaxis from age 6 weeks (p. 9) ➢ Assess feeding and provide counselling (p. 19-22) ➢ Ask about the mother's health, and treat as necessary ➢ Provide long term follow-up (p. 28)
• No HIV test done on mother. or • HIV test result not available.	**HIV UNKNOWN**	➢ Counsel mother on the importance of HIV testing, and offer her HCT
• Mother HIV negative	**HIV UNLIKELY**	➢ Routine follow-up

THEN CHECK FOR FEEDING AND GROWTH:

First ask mother if she knows her HIV status. If she is HIV-positive and has chosen not to breastfeed, use the alternative chart (p. 34).

ASK:

- How are you feeding the baby?
- How is feeding going?
- How many times do you breastfeed in 24 hours?
- Does your baby get any other food or drink?
  - If yes, how often?
  - What do you use to feed your baby?

LOOK, LISTEN, FEEL:

- Plot the weight on the RTHC to determine weight for age.
- Look at the shape of the curve. Is the child gaining weight?
- Look for white patches in the mouth (thrush).

IF BABY:
Has any difficulty feeding, or
Is breastfeeding less than 8 times in 24 hours, or
Is taking any other foods or drinks, or
Is low weight for age, or
Is not gaining weight
AND
Has no indications to refer urgently to hospital:

THEN ASSESS BREASTFEEDING:

- Has the baby breastfed in the previous hour?
- If baby has not fed in the last hour, ask mother to put baby to the breast. Observe the breastfeed for 4 minutes. (If baby was fed during the last hour, ask mother if she can wait and tell you when the infant is willing to feed again).
- Is baby able to attach?
  not at all *poor attachment* *good attachment*

To check ATTACHMENT, look for:
- Chin touching breast
- Mouth wide open
- Lower lip turned outward
- More areola visible above than below the mouth

(All these should be present if attachment is good)
Then also check POSITIONING (p. 38)

- Is the baby suckling well (that is, slow deep sucks, sometimes pausing)?
  not at all *not suckling well* *suckling well*
- Clear a blocked nose if it interferes with breastfeeding.

Classify FEEDING in all young infants

• Not able to feed. or • No attachment at all. or • Not suckling at all.	**NOT ABLE TO FEED**	➢ **Treat as possible severe bacterial infection (p. 30)** ➢ **Give first dose of ceftriaxone IM (p. 36).** ➢ **Test for low blood sugar, and treat or prevent (p. 15)** ➢ **Refer URGENTLY to hospital—make sure that the baby is kept warm**
• Not well attached to breast. or • Not suckling effectively. or • Less than 8 breastfeeds in 24 hours. or • Receives other foods or drinks. or • Thrush	**FEEDING PROBLEM**	➢ Advise the mother to breastfeed as often and for as long as the infant wants, day and night ➢ If not well attached or not suckling effectively, teach correct positioning and attachment (p. 38) ➢ If breastfeeding less than 8 times in 24 hours, advise to increase frequency of feeding ➢ If mother has a breastfeeding problem see advice for common breastfeeding problems (p. 38) ➢ If receiving other foods or drinks, counsel mother about breastfeeding more, gradually stopping other foods or drinks, and using a cup ➢ If thrush, teach the mother to treat for thrush at home (p. 37) ➢ Follow-up in 2 days (p. 41)
• Less than 1.8kg in first week of life. or • Weight less than birth weight at or after one week of age or • Low weight for age. or • Weight gain is unsatisfac-tory. or • Weight loss following dis-charge of LBW infant	**POOR GROWTH**	➢ Advise the mother to breastfeed as often and for as long as the infant wants, day and night ➢ If less than 2 weeks old follow-up in 2 days (p. 41) ➢ If more than 2 weeks old follow-up in 7 days (p. 41)
• Not low weight for age and no other signs of inadequate feeding	**FEEDING AND GROWING WELL**	➢ Praise the mother for feeding the infant well

THEN CHECK FOR FEEDING AND GROWTH:
ALTERNATIVE CHART for HIV positive mother who has chosen not to breastfeed

ASK:

- How is feeding going?
- 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 baby.
- Are you giving any breastmilk at all?
- What foods and fluids in addition to replacement milk is given?
- How is the milk being given? Cup or bottle?
- How are you cleaning the utensils?

LOOK, LISTEN, FEEL:

- Plot the weight on the RTHC to determine the weight for age.
- Look at the shape of the curve. Is the child growing well?
- Look for ulcers or white patches in the mouth (thrush).

Classify FEEDING in all young infants

• Not able to feed. or • Not sucking at all.	**NOT ABLE TO FEED**	➢ **Treat as possible severe bacterial infection (p. 30)** ➢ **Give first dose of ceftriaxone IM (p. 36)** ➢ **Test for low blood sugar, and treat or prevent (p. 15)** ➢ **Refer URGENTLY —make sure that the baby is kept warm**
• Milk incorrectly or unhygienically prepared. or • Giving inappropriate replacement milk or other foods/fluids. or • Giving insufficient replacement feeds. or • An HIV positive mother mixing breast and other feeds. or • Using a feeding bottle. or • Thrush	**FEEDING PROBLEM**	➢ Counsel about feeding and explain the guidelines for safe replacement feeding (p. 39) ➢ Identify concerns of mother and family about feeding ➢ If mother is using a bottle, teach cup feeding (p.39) ➢ If thrush, teach the mother to treat it at home (p. 37) ➢ Follow-up in 2 days (p. 41)
• Less than 1.8kg in first week of life. or • Weight less than birth weight at or after 2 week visit. or • Low weight for age. or • Weight gain is unsatisfactory. or • Weight loss following dis-charge of LBW infant.	**POOR GROWTH**	➢ Check for feeding problem ➢ Counsel about feeding ➢ If less than 2 weeks old follow-up in 2 days (p. 41) ➢ If more than 2 weeks old follow-up in 7 days (p. 41)
• Not low weight for age and no other signs of inadequate feeding.	**FEEDING AND GROWING WELL**	➢ Advise mother to continue feeding, and ensure good hygiene if mother is replacement feeding (p. 39) ➢ Praise the mother

CHECK IF THE YOUNG INFANT HAS ANY SPECIAL RISK FACTORS

IF:

- the mother has died; or
- the infant was premature or low birth weight; or
- there was perinatal asphyxia; or
- the infant is not breastfed exclusively; or
- the mother is a young adolescent; or
- the mother is known to be HIV-positive; or
- there is severe socio-economic deprivation; or
- there is any birth defect.

This infant is at **high risk**.
If there is more than one factor present the infant is at **very high risk**.

- Take special care to ensure there are no feeding problems and the child is gaining weight.
- Arrange appropriate regular follow-up with the mother.
- Refer to social worker where indicated.
- Refer for birth registration where necessary.
- Refer to an appropriate support group if possible.
- Refer for child support grant.

THEN CHECK THE YOUNG INFANT'S IMMUNIZATION STATUS

		VACCINES				
IMMUNIZATION SCHEDULE:	Birth	BCG	OPV0			
	6 weeks	DaPT-Hib-IPV1	OPV1	Hep B1	PCV1	RV1
	10 weeks	DaPT-Hib-IPV2		Hep B2		

- **Give all missed doses on this visit**
- Include sick babies and those without a RTHC
- If the child has no RTHC, issue a new one today.
- Advise the mother when to return for the next dose.

ASSESS OTHER PROBLEMS

ASSESS THE MOTHER'S HEALTH

- **Check for anaemia, contraception, breast problems, tetanus status.**
- **Check HIV status and refer for assessment for ART if symptomatic.**
- **Check RPR results and complete treatment if positive.**
- **Check that mother received 200 000 IU of Vitamin A at delivery - this can be given up to 8 weeks after delivery.**

TREAT THE YOUNG INFANT

Treat LOCAL BACTERIAL INFECTION with Erythromycin Syrup

- Give seven days of erythromycin for skin pustules, red umbilicus and pus draining from the eye.
- If pus draining from the eye also give single dose of ceftriaxone (see below).

ERYTHROMYCIN SYRUP Give four times a day for seven days	
AGE or WEIGHT	Erythromycin syrup 125 mg in 5 ml
Birth up to 1 month (< 3 kg)	1.25 ml
1 month up to 2 months (> 3 kg)	2.5 ml

Treat for POSSIBLE SERIOUS BACTERIAL INFECTION with Intramuscular Ceftriaxone

- Give first dose of ceftriaxone IM.
- The dose of ceftriaxone is 50 mg per kilogram.
- Dilute a 250 mg vial with 1 ml of sterile water.

CEFTRIAXONE INJECTION Give a single dose in the clinic	
WEIGHT	**Ceftriaxone** 250 mg in 1 ml
2 - < 3 kg	0.5 ml
3 - 6 kg	1 ml

To Treat for Diarrhoea, See TREAT THE CHILD (p. 16-17).

If there is DIARRHOEA WITH SEVERE DEHYDRATION or DIARRHOEA WITH SOME DEHYDRATION (p.16 -17).

If there is SEVERE DEHYDRATION commence intravenous rehydration, give the first dose of ceftriaxone IM (p. 36) and REFER URGENTLY.

Immunize Every Sick Young Infant, as Needed (p. 35).

TREAT THE YOUNG INFANT

Teach the Mother to treat Local Infections at home

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

Treat for Thrush with Nystatin

If there are thick plaques the mother should:

- Wash hands with soap and water.
- Wet a clean soft cloth with chlorhexidine or salt water, wrap this around the little finger, then gentle wipe away the plaques.
- Wash hands again.

For all infants with thrush

- Give nystatin 1 ml 4 times a day (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 mother knows how to clean utensils used to prepare and administer the milk (p. 39).

Treat for Sticky Eyes

The mother should:

- Wash hands with soap and water
- Gently wash off pus and clean the eye with saline at least 4 times a day. Continue until the discharge disappears.
- Apply chloramphenicol ointment 4 times a day for seven days.
- Wash hands again after washing the eye.
- Give Erythromycin for 7 days.

Remember to check the mother for a possible STI, and treat as necessary.

Treat for Skin Pustules or Umbilical Infection

The mother should:

- Wash hands with soap and water.
- Gently wash off pus and crusts with soap and water.
- Dry the area.
- Paint with polyvidone iodine lotion or gentian violet.
- Wash hands again.
- Give Erythromycin for 7 days.

COUNSEL THE MOTHER

Teach Correct Positioning and Attachment for Breastfeeding

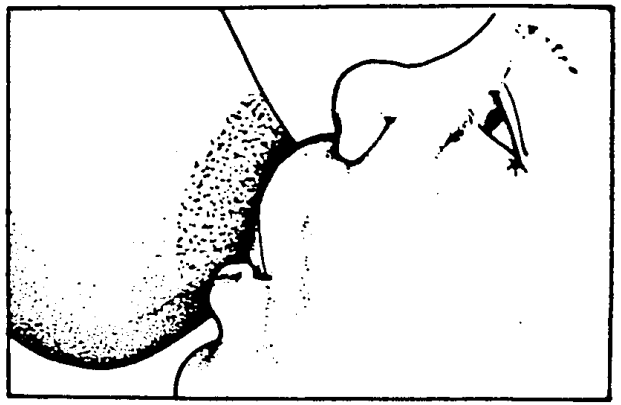
- Seat the mother comfortably
- Show the mother how to hold her infant:
  - with the infant's head and body straight
  - facing her breast, with infant's nose opposite her nipple
  - with infant's body close to her body
  - supporting infant's whole body, not just neck and shoulders.
- Show her how to help the infant attach. She should:
  - touch her infant's lips with her nipple.
  - wait until her infant's mouth is opening wide.
  - move her infant quickly onto her breast, aiming the infant's lower lip well below the nipple.
- Look for signs of good attachment and effective suckling. If the attachment or suckling is not good, try again.
- Most of the common breastfeeding problems expressed by mothers are related to poor positioning and attachment.

To check ATTACHMENT, look for:

- Chin touching breast.
- Mouth wide open.
- Lower lip turned outward.
- More areola visible above than below the mouth.

All these should be present if attachment is good

Good attachment



Poor attachment

COUNSEL THE MOTHER ABOUT GIVING REPLACEMENT FEEDS

Safe Preparation of Formula Milk

- Wash your hands with soap and water before preparing a feed.
- Boil the water. If you are boiling the water in a pot, it must boil for three minutes. Put the pot's lid on while the water cools down.
- If using an automatic kettle, the kettle must switch off by itself.
- The water must still be hot when you mix the feed to kill germs that might be in the powder.
- Carefully pour the amount of water that will be needed in the marked cup. Check if the water level is correct before adding the powder.
- Only use the scoop that was supplied with the formula. Fill the scoop loosely with powder and level it off with a sterilised knife or the scraper that was supplied with the formula.
- Make sure you add 1 scoop of powder for every 25 ml of water.
- Mix using a cup, stir using a spoon.
- Cool the feed to body temperature under a running tap or in a container with cold water.
- Pour the mixed formula into a cup to feed the baby.
- Only make enough formula for one feed at a time.
- Feed the baby using a cup.
- Wash the utensils.

How to feed a baby with a cup

- Hold the baby sitting upright or semi-upright on your lap.
- Hold the small cup of milk to the baby's mouth. Tip the cup so that the milk just reaches the baby's lips. The cup rests lightly on the baby's lower lips and the edges of the cup touch the outer part of the baby's upper lip. The baby will become alert.
- Do not pour milk into the baby's mouth: A low birth weight baby starts to take milk with the tongue. A bigger / older baby sucks the milk, spilling some of it.
- When finished the baby closes the mouth and will not take any more. If the baby has not had the required amount, wait and then offer the cup again, or offer more frequent feeds.

Approximate amount of formula needed per day

Age	Weight	Approx. amount of formula in 24 hours	Previously boiled water per feed	Number of scoops per feed	Approx. number of feeds
Birth	3 kg	400 ml	50	2	8 x 50 ml
2 weeks	3 kg	450 ml	60	2	8 x 60 ml
6 weeks	4 kg	600 ml	75	3	7 x 90 ml
10 weeks	5 kg	750 ml	125	5	6 x 125 ml
14 weeks	6.5 kg	900 ml	150	6	6 x 150 ml
4 months	7 kg	1050 ml	175	7	6 x 175 ml
5 - 6 months	8 kg	1200 ml	200	8	6 x 200 ml

COUNSEL THE MOTHER

Advise Mother to Give Home Care for the Young Infant

1. **FLUIDS**

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

2. **WHEN TO RETURN**

Follow-up Visit:

If the infant has:	Follow-up in:
LOCAL BACTERIAL INFECTION THRUSH SOME DEHYDRATION FEEDING PROBLEM POOR GROWTH AND INFANT LESS THAN 2 WEEKS	2 days
POOR GROWTH and infant more than two weeks	7 days
POSSIBLE HIV INFECTION HIV EXPOSED	At least once a month

When to Return Immediately:

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

- Breastfeeding poorly or drinking poorly.
- Irritable or lethargic.
- Vomits everything.
- Convulsions.
- Fast breathing.
- Difficult breathing.
- Blood in stool.

3. **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.

GIVE FOLLOW-UP CARE FOR THE SICK YOUNG INFANT

If there is a new problem, assess, classify and treat the new problem as on the ASSESS AND CLASSIFY chart3 (p. 30).

LOCAL BACTERIAL INFECTION

After 2 days:

- Sticky discharge of eyes: has the discharge improved? Are the lids swollen?
- Red umbilicus :is it red or draining pus? Does redness extend to the skin?
- Skin pustules: are there many or severe pustules?

Treatment:

- If condition remains the same or is worse, **refer.**
- If condition is improved, tell the mother to continue giving the antibiotic and continue treating for the local infection at home.

FEEDING PROBLEM

After 2 days:

- Ask about any feeding problems found on the initial visit and reassess feeding (p. 33, 34).
- 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 after 5 days.
- If the young infant has POOR GROWTH (low weight for age or has poor weight gain), ask the mother to return again after 5 days to measure the young infant's weight gain. Continue follow-up until the weight gain is satisfactory.
- If the young infant has lost weight, **refer.**

EXCEPTION: If the young infant has lost weight or you do not think that feeding will improve, **refer**

THRUSH

After 2 days:

- Look for thrush in the mouth.
- Reassess feeding. See "Then Check for Feeding Problem or Growth" above (p. 33 or 34).

Treatment:

- If thrush is worse check that treatment is being given correctly, and that the mother has been treated for thrush, if she is breastfeeding. Also consider HIV INFECTION (p. 32).
- If the infant has problems with attachment or suckling, **refer.**
- If thrush is the same or better, and the baby is feeding well, continue with nystatin for a total of 5 days.

POOR GROWTH

After 2 days in infant less than 2 weeks or 7 days in infant more than 2 weeks:

- Reassess feeding (p 33, 34).
- Check for possible serious bacterial infection and treat if present.
- Weigh the young infant. Determine weight gain.
- 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 gaining weight, praise the mother. Ask her to have her infant weighed again within 14 days or when she returns for immunization, whichever is the earlier.

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

OPTIONAL CHART: MEASLES

If the child has measles now:

ASK:

- Is there someone else with measles at home?

LOOK:

- Look for mouth ulcers.
- Are they deep and extensive?
- Look for pus draining from the eye.
- Look for clouding of the cornea.

if MEASLES Classify

• Any general danger sign. or • Clouding of cornea. or • Deep or extensive mouth ulcers.	**SEVERE COMPLICATED MEASLES**	**➢ Give additional dose Vitamin A (p. 18)** **➢ If clouding of the cornea or pus draining from the eye, apply chloramphenicol eye ointment** **➢ Give first dose of amoxicillin (p. 9)** **➢ REFER URGENTLY**
• Pus draining from the eye. or • Mouth ulcers, but able to eat.	**MEASLES WITH EYE OR MOUTH COMPLICATIONS**	➢ Give additional doses Vitamin A (p. 18) ➢ If pus draining from the eye, treat eye infection with chloramphenicol eye ointment for 7 days (p. 13) ➢ If mouth ulcers, treat with chlorhexidine (p. 13) ➢ Notify EPI coordinator, and complete necessary forms ➢ Take specimens as advised by EPI coordinator, and send these to the National Institute for Communicable Diseases (NICD) ➢ Follow-up in 2 days
• Measles now or within the last 3 months.	**MEASLES**	➢ Give additional doses Vitamin A (p. 18) ➢ Notify EPI coordinator, and complete necessary forms ➢ Take specimens as advised by EPI coordinator, and send these to the National Institute for Communicable Diseases (NICD) ➢ Follow up in 2 days