World Health Organization

Department of Child and Adolescent Health and Development (CAH)

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS FOR HIGH HIV SETTINGS

unicef

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

ASSESS

CLASSIFY

IDENTIFY TREATMENT

ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

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

CHECK FOR GENERAL DANGER SIGNS

ASK:	*LOOK:*
• Is the child able to drink or breastfeed? • Does the child vomit everything? • Has the child had convulsions?	• See if the child is lethargic or unconscious. • Is the child convulsing now?

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

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

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing?

IF YES, ASK:	LOOK, LISTEN, FEEL:	
• For how long?	• Count the breaths in one minute. • Look for chest indrawing. • Look and listen for stridor or wheezing.	CHILD MUST BE CALM

→ **Classify COUGH or DIFFICULT BREATHING**

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

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print.)
• **Any general danger sign OR** • Chest indrawing OR • Stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	➢ **Give first dose of an appropriate antibiotic IM.** ➢ **If wheezing give a trial of rapid acting bronchodilator for up to three times before classifying severe pneumonia*** ➢ **Refer URGENTLY to hospital.**
• Fast breathing.	**PNEUMONIA**	➢ **Give oral antibiotic for 5 days** ➢ **If wheezing give a trial of rapid acting bronchodilator for up to three times before classifying pneumonia. If wheezing give an inhaled bronchodilator for five days*** ➢ **If recurrent wheezing refer for an assessment** ➢ **Soothe the throat and relieve the cough with a safe remedy** ➢ **Check for HIV infection** ➢ **If coughing for more than 30 days refer for possible TB or asthma** ➢ **Advise the mother when to return immediately** ➢ **Follow-up in 2** days
• No signs of pneumonia or very severe disease.	**COUGH OR COLD**	➢ **If wheezing give an inhaled bronchodilator for 5 days*** ➢ **If recurrent wheezing refer for an assessment** ➢ **Soothe the throat and relieve cough** ➢ **If coughing for more than 30 days refer for possible TB or asthma** ➢ **Advise mother when to return immediately** ➢ **Follow up in 5 days if not** improving

** In settings where inhaler is not available, oral salbutamol may be the second choice*

Does the child have diarrhoea?

IF YES, ASK:

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

LOOK AND FEEL:

- Look at the child's general condition. Is the child:
  - Lethargic or unconscious?
  - Restless and irritable?
- Look for sunken eyes.
- Offer the child fluid. Is the child:
  - Not able to drink or drinking poorly?
  - Drinking eagerly, thirsty?
- Pinch the skin of the abdomen. Does it go back:
  - Very slowly (longer than 2 seconds)?
  - Slowly?

Classify

for DEHYDRATION	Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly.	**SEVERE DEHYDRATION**	➢ If child has no other severe classification: - Give fluid for severe dehydration (Plan C). OR ***If child also has another severe classification:*** ***- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.*** ➢ ***If child is 2 years or older and there is cholera in your area, give antibiotic for cholera.***
	Two of the following signs: • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly.	**SOME DEHYDRATION**	➢ Give fluid, zinc supplements and food for some dehydration (Plan B). ➢ ***If child also has a severe classification:*** ***- Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.*** ➢ Advise mother when to return immediately.
	Not enough signs to classify as some or severe dehydration.	**NO DEHYDRATION**	➢ Give fluid, zinc supplements and food to treat diarrhoea at home (Plan A). ➢ Advise mother when to return immediately.
and if diarrhoea for 14 days or more	• Dehydration present.	**SEVERE PERSISTENT DIARRHOEA**	➢Treat dehydration before referral unless the child has another severe classification. ➢ Refer to hospital.
	• No dehydration.	**PERSISTENT DIARRHOEA**	➢Check for HIV Infection ➢Advise the mother on feeding a child who has PERSISTENT DIARRHOEA ➢Give multivitamins and Zinc for 14 days ➢Follow up in 5 days
and if blood in stool	• Blood in the stool.	**DYSENTERY**	➢ ***Give ciprofloxacin for 3 days*** ➢ Follow-up in 2 days.

If referral is not possible, manage the child as described in **Integrated Management of Childhood Illness, Treat the Child, Annex: Where Referral Is Not Possible, and WHO guidelines for inpatient care.*

Does the child have fever?

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

IF YES:
Decide Malaria Risk: high or low

THEN ASK:

- For how long?
- If more than 7 days, has fever been present every day?
- Has the child had measles within the last 3 months?

LOOK AND FEEL:

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

Look for signs of MEASLES

- Generalized rash and
- One of these: cough, runny nose, or red eyes.

If the child has measles now or within the last 3 months:

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

Classify FEVER

High Malaria Risk

Low Malaria Risk

if MEASLES now or within last 3 months, Classify

HIGH MALARIA RISK

• Any general danger sign or • Stiff neck.	**VERY SEVERE FEBRILE DISEASE**	➢ ***Give quinine for severe malaria (first dose).*** ➢ ***Give first dose of an appropriate antibiotic.*** ➢ ***Treat the child to prevent low blood sugar.*** ➢ ***Give one dose of paracetamol in clinic for high fever (38.5°C or above).*** ➢ ***Refer URGENTLY to hospital.***
• Fever (by history or feels hot or temperature 37.5°C** or above).	**MALARIA**	➢ ***Give oral co-artemether or other recommended antimalarial.*** ➢ ***Give one dose of paracetamol in clinic for high fever (38.5°C or above).*** ➢ Advise mother when to return immediately. ➢ Follow-up in 2 days if fever persists. ➢ If fever is present every day for more than 7 days, refer for assessment.

LOW MALARIA RISK

• Any general danger sign or • Stiff neck.	**VERY SEVERE FEBRILE DISEASE**	➢ ***Give quinine for severe malaria (first dose) unless no malaria risk.*** ➢ ***Give first dose of an appropriate antibiotic.*** ➢ ***Treat the child to prevent low blood sugar.*** ➢ ***Give one dose of paracetamol in clinic for high fever (38.5°C or above).*** ➢ ***Refer URGENTLY to hospital***
• NO runny nose and NO measles and NO other cause of fever.	**MALARIA**	➢ ***Give oral co-artemether or other recommended antimalarial*** ➢ ***Give one dose of paracetamol in clinic for high fever (38.5°C or above).*** ➢ Advise mother when to return immediately. ➢ Follow-up in 2 days if fever persists. ➢ If fever is present every day for more than 7 days, refer for assessment
• Runny nose PRESENT or • Measles PRESENT or • Other cause of fever PRESENT.	**FEVER - MALARIA UNLIKELY**	➢ ***Give one dose of paracetamol in clinic for high fever (38.5°C or above).*** ➢ Advise mother when to return immediately. ➢ Follow-up in 2 days if fever persists. ➢ If fever is present every day for more than 7 days, refer for assessment.

• Any general danger sign or • Clouding of cornea or • Deep or extensive mouth ulcers.	**SEVERE COMPLICATED MEASLES*** **	➢ ***Give Vitamin A for treatment.*** ➢ ***Give first dose of an appropriate antibiotic.*** ➢ ***If clouding of the cornea or pus draining from the eye,*** ➢ ***Apply tetracycline eye ointment.*** ➢ ***Refer URGENTLY to hospital.***
• Pus draining from the eye or • Mouth ulcers.	**MEASLES WITH EYE OR MOUTH COMPLICATIONS*** **	➢ ***Give Vitamin A for treatment.*** ➢ ***If pus draining from the eye, treat eye infection with tetracycline eye ointment.*** ➢ If mouth ulcers, treat with gentian violet. ➢ Follow-up in 2 days.
• Measles now or within the last 3 months.	**MEASLES**	➢ ***Give Vitamin A for treatment.***

** *These temperatures are based on axillary temperature. Rectal temperature readings are approximately 0.5°C higher.*

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

Does the child have an ear problem?

IF YES, ASK:	*LOOK AND FEEL:*
• Is there ear pain? • Is there ear discharge? If yes, for how long?	• Look for pus draining from the ear. • Feel for tender swelling behind the ear.

Classify EAR PROBLEM

• Tender swelling behind the ear.	**MASTOIDITIS**	➢ ***Give first dose of an appropriate antibiotic.*** ➢ ***Give first dose of paracetamol for pain.*** ➢ ***Refer URGENTLY to hospital.***
• Pus is seen draining from the ear and discharge is reported for less than 14 days, or • Ear pain.	**ACUTE EAR INFECTION**	➢ ***Give an antibiotic for 5 days.*** ➢ Give paracetamol for pain. ➢ Dry the ear by wicking. ➢ If ear discharge, check for HIV Infection ➢ Follow-up in 5 days.
• Pus is seen draining from the ear and discharge is reported for 14 days or more.	**CHRONIC EAR INFECTION**	➢ Dry the ear by wicking. ➢ Treat with topical quinolone eardrops for 2 weeks ➢ Check for HIV Infection ➢ Follow-up in 5 days.
• No ear pain and No pus seen draining from the ear.	**NO EAR INFECTION**	➢ No treatment.

THEN CHECK FOR MALNUTRITION AND ANAEMIA

CHECK FOR MALNUTRITION

LOOK and FEEL:

- Look for visible severe wasting
- Feel for oedema of both feet
- Determine weight for age

CLASSIFY NUTRITIONAL STATUS

• Visible severe wasting *Or* • Oedema of both feet	**SEVERE MALNUTRITION**	➢ **Give Vitamin A for treatment** ➢ **Treat the child to prevent low blood sugar** ➢ **Refer URGENTLY to hospital**
• Very low weight for age	**VERY LOW WEIGHT**	➢ Assess the child's feeding and counsel the mother on feeding according to the food box on the COUNSEL THE MOTHER chart - if feeding problems follow up in 5 days ➢ Check for HIV Infection ➢ Give mebendazole if child is 1 year or older and has not had a dose in the previous six months ➢ Give Vitamin A every 6 months from 6 months of age ➢ Advise mother when to return immediately ➢ Follow up in 30 days
• Not very low weight for age and no other signs of malnutrition	**NOT VERY LOW WEIGHT**	➢ If child is less than 2 years, assess and counsel on feeding according to the food box on the COUNSEL THE MOTHER chart - if feeding problem follow up in 5 days ➢ Give routine Vitamin A every 6 months beginning from 6 months of age

CHECK FOR ANAEMIA

LOOK and FEEL:

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

CLASSIFY ANAEMIA

• Severe palmar pallor	**SEVERE ANAEMIA**	➢ **Refer URGENTLY to hospital**
• Some palmar pallor	**ANAEMIA**	➢ Give iron ➢ Give oral antimalarial if high malaria risk ➢ Give mebendazole if child is 1 year or older and has not had a dose in the previous six months ➢ Advise mother when to return immediately ➢ Follow up in 14 days
• no palmar anaemia	**NO ANAEMIA**	➢ Give routine Vitamin A every 6 months from 6 months of age

THEN CHECK FOR HIV INFECTION**

- Does the mother or child have a HIV test done?
- Does the child have one or more of the following conditions:

  - Pneumonia *
  - Persistent diarrhoea *
  - Ear discharge (acute or chronic)
  - Very low weight for age*

* *Note that the severe forms such as severe pneumonia, severe persistent diarrhoea and severe malnutrition can be used to enter the box. Complete assessment quickly and refer child.*

If *yes*, enter the box below and look for the following conditions suggesting HIV infection:

NOTE OR ASK:

- PNEUMONIA ?
- PERSISTENT DIARRHOEA?
- EAR DISCHARGE?
- VERY LOW WEIGHT?

HIV test result available for mother/child?

LOOK and FEEL:

- Oral thrush
- Parotid enlargement
- Generalized persistent
- lymphadenopathy

Classify for HIV infection

SIGNS	CLASSIFY	IDENTIFY TREATMENTS
• Positive HIV antibody test in child 18 months and above Or • Positive HIV virological test And • 2 or more conditions	**CONFIRMED SYMPTOMATIC HIV INFECTION**	➢ Treat, counsel and follow-up existing infection ➢ Give cotrimoxazole prophyaxis ➢ Check immunization status ➢ Give Vitamin A supplement from 6 months of age every 6 months ➢ Assess the child's feeding and provide appropriate counseling to the mother ➢ Refer for further assessment including HIV care/ART ➢ Advise the mother on home care ➢ Follow-up in 14 days, then monthly for 3 months and then every 3 months or as per immunization schedule
• Positive HIV antibody test in child 18 months and above Or • Positive HIV virological test And • Less than 2 conditions	**CONFIRMED HIV INFECTION**	
• No test results in child or positive antibody test in child <18 months And • 2 or more conditions	**SUSPECTED SYMPTOMATIC HIV INFECTION**	➢ Treat, counsel and follow-up existing infection ➢ Give cotrimoxazole prophyaxis ➢ Give Vitamin A supplements from 6 months of age every 6 months ➢ Assess the child's feeding and provide appropriate counseling to the mother ➢ Test to confirm HIV infection ➢ Refer for further assessment including HIV care/ART ➢ Advise the mother on home care ➢ Follow-up in 14 days, then monthly for 3 months and then every 3 months or as per immunization schedule
One or both of the following: • Mother HIV positive and no test result on child Or • Child less than 18 months with positive antibody test And • Less than 2 conditions	**POSSIBLE HIV/ HIV EXPOSED**	➢ Treat, counsel and follow-up existing infection ➢ Give cotrimoxazole prophyaxis ➢ Give Vitamin A supplements from 6 months of age every 6 months ➢ Assess the child's feeding and provide appropriate counseling to the mother ➢ Confirm HIV infection status of child as soon as possible with best available test ➢ Follow-up in 14 days, then monthly for 3 months and then every 3 months or as per immunization schedule**
• No test result in child or mother And • Less than 2 conditions	**SYMPTOMATIC HIV INFECTION UNLIKELY**	➢ Treat, counsel and follow-up existing infections ➢ Advise the mother about feeding and about her own health ➢ Encourage HIV testing
• Negative HIV test in mother or child AND not enough signs to classify as suspected symptomatic HIV infection	**HIV INFECTION UNLIKELY**	➢ Treat, counsel and follow-up existing infections ➢ Advise the mother about feeding and about her own health

***A child who is already put on ART does not have to enter this HIV box*

THEN CHECK THE CHILD'S IMMUNIZATION STATUS

IMMUNIZATION SCHEDULE:

AGE	VACCINE		
Birth	BCG	OPV-0	
6 weeks	DPT+HIB-1	OPV-1	Hep B1
10 weeks	DPT+HIB-2	OPV-2	Hep B2
14 weeks	DPT+HIB-3	OPV-3	Hep B3
9 months	Measles 1		
18 months	DPT-4	OPV-4	Measles 2
5 years	dT	OPV-5	

VITAMIN A PROPHYLAXIS

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

ROUTINE WORM TREATMENT

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

ASSESS OTHER PROBLEMS:

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments. Check the blood sugar in all children with a general danger sign and treat or prevent low blood sugar.

WHO PAEDIATRIC CLINICAL STAGING FOR HIV

Has the child been confirmed HIV Infected?

(If yes, perform clinical staging: any one condition in the highest staging determines stage. If no, you cannot stage the patient)[1]

	WHO Paediatric Clinical Stage 1- Asymptomatic	WHO Paediatric Clinical Stage 2 - Mild Disease	WHO Paediatric Clinical Stage 3 - Moderate Disease	WHO Paediatric Clinical Stage 4 - Severe Disease (AIDS)
Growth	-	-	Moderate unexplained malnutrition not responding to standard therapy	Severe unexplained wasting/ stunting/Severe malnutrition not responding to standard therapy
Symptoms/ signs	**No symptoms or only:** **Persistent Generalized Lymphadenopathy (PGL)**	➢ Unexplained persistent enlarged liver and/ or spleen ➢ Unexplained persistent enlarged parotid ➢ Skin conditions (prurigo, seborrhoeic dermatitis, extensive molluscum contagiosum or warts, fungal nail infections, herpes zoster) ➢ Mouth conditions (recurrent mouth ulcerations, lineal gingival Erythema) ➢ Recurrent or chronic upper RTI (sinusitis, ear infections, tonsillitis, otorrhoea)	➢ Oral thrush (outside neonatal period) ➢ Oral hairy leukoplakia ➢ Unexplained and unresponsive to standard therapy: • Diarrhoea >14 days • Fever>1 month • Thrombocytopenia* (<50,000/mm3 for > 1 month) • Neutropenia* (<500/mm3 for 1 month) • Anaemia for >1 month (haemoglobin < 8 gm)* ➢ Recurrent severe bacterial pneumonia ➢ Pulmonary TB ➢ Lymph node TB ➢ Symptomatic LIP* ➢ Acute necrotizing ulcerative gingivitis/ periodontitis ➢ Chronic HIV associated lung disease including bronchiectasis*	➢ Oesophageal thrush ➢ More than one month of herpes simplex ulcerations ➢ Severe multiple or recurrent bacterial infections ≥ 2 episodes in a year (not including pneumonia) ➢ *Pneumocystis* pneumonia (PCP)* ➢ Kaposi's sarcoma ➢ Extrapulmonary tuberculosis ➢ Toxoplasma brain abscess* ➢ Cryptococcal meningitis* ➢ Chronic cryptosporidiosis ➢ Chronic isosporiasis ➢ Acquired HIV-associated rectal fistula ➢ HIV encephalopathy* ➢ Cerebral B cell non-Hodgkins lymphoma* ➢ Symptomatic HIV associated cardiomyopathy/nephropathy*
ARV Therapy	**Indicated only if CD4 is available:** • ≤ 11 mo and CD4 ≤ 25% (or ≤1500 cells) • 12-35 mo and CD4 ≤ 20% (or ≤750 cells) • 36-59 mo and CD4≤15% (or ≤ 350 cells) • ≥ 5 yrs and CD4 ≤15% (<200 cells/mm3)	**Indicated only if CD4 or TLC# is available:** • Same as stage I OR • ≤ 11 mo and TLC≤4000 cells/mm3 • 12-35 mo and TLC ≤ 3000 cells • 36-59 mo and TLC ≤ 2500 cells • ≥ 5- 8 years and TLC ≤ 2000 cells* * There is not adequate data for children older than 8 years.	**ART is indicated:** • Child less than 12 months, regardless of CD4 • Child is over 12 months—usually regardless of CD4 but if LIP/TB/ oral hairy leukoplakia—ART Initiation may be delayed if CD4 above age related threshold for advanced or severe immunodeficiency	**ART is indicated:** Irrespective of the CD4 count, and should be started as soon as possible

[1] *Note that these are interim recommendations and may be subject to change.*

[#] *Total lymphocyte count (TLC) has been proposed as a surrogate marker or an alternative to CD4 cell counts or CD4% in resource-constrained settings.*

** conditions requiring diagnosis by a doctor or medical officer – should be referred for appropriate diagnosis and treatment*

[a] *in a child with presumptive diagnosis of severe HIV disease, where it is not possible to confirm HIV infection, ART may be initiated.*

TREAT THE CHILD

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

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

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

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

➢ Give Cotrimoxazole to Children with Confirmed or Suspected HIV Infection or Children who are HIV Exposed

- Should be given to infants starting at 4- 6 weeks of age to :
  - All infants born to mothers who are HIV infected until HIV is definitively ruled out
  - All infants with confirmed HIV infection aged <12 months or those with stage 2,3 or 4 disease or
  - Asymptomatic infants or children (stage 1) if CD4 <25%.
- Give cotrimoxazole once daily.

COTRIMOXAZOLE dosage—single dose per day			
Age	**5 ml syrup 40 mg / 200 mg**	**Single strength adult tablet 80 mg / 400 mg**	**Single strength paediatric tablet 20 mg / 100 mg**
Less than 6 months	2.5 ml	1/4 tablet	1 tablet
6 months up to 5 years	5 ml	1/2 tablet	2 tablets
5-14 years	10 ml	1 tablet	4 tablets
> 15 years	NIL	2 tablets	-

➢ Give an Appropriate Oral Antibiotic

- **FOR PNEUMONIA, ACUTE EAR INFECTION:**

FIRST-LINE ANTIBIOTIC: _____
SECOND-LINE ANTIBIOTIC: _____

	COTRIMOXAZOLE (trimethoprim / sulphamethoxazole) *Give two times daily for 5 days*			**AMOXYCILLIN*** *Give two times daily for 5 days*	
AGE or WEIGHT	**ADULT TABLET** (80/400mg)	**PAEDIATRIC TABLET** (20/100 mg)	**SYRUP** (40/200 mg/5mls)	**TABLET** (250 mg)	**SYRUP** (125 mg /5 ml)
2 months up to 12 months (4 - <10 kg)	1/2	2	5.0 ml	1	10 ml
12 months up to 5 years (10 - 19 kg)	1	3	7.5 ml	11/2	15 ml

*Amoxycillin should be used if there is high cotrimoxazole resistance. Amoxycillin can be given twice daily instead of three times at 25mg/kg/dose. Duration of treatment can be reduced to 3 days in low HIV prevalence areas

➢ For dysentery give Ciprofloxacin

15mg/kg/day—2 times a day for 3 days

	250 mg TABLET	**500 mg TABLET**
AGE	**DOSE/ tabs**	**DOSE/ tabs**
Less than 6 months	1/2 tablet	1/4 tablet
6 months up to 5 years	1 tablet	1/2 tablet

TEACH THE MOTHER TO GIVE ORAL DRUGS AT HOME

➢ Give pain relief

- Safe doses of paracetamol can be slightly higher for pain. Use the table and teach mother to measure the right dose
- Give paracetamol every 6 hours if pain persists
- **Stage 2 pain** is chronic severe pain as might happen in illnesses such as AIDS:
  - Start treating Stage 2 pain with regular paracetamol
  - In older children, ½ paracetamol tablet can replace 10 ml syrup
  - If the pain is not controlled, **add** regular codeine 4 hourly
  - For severe pain morphine syrup can be given

WEIGHT	AGE (If you do not know the weight)	PARACETAMOL 120mg / 5mls		Add CODEINE 30mg tablet	ORAL MORPHINE 5mg/5m
4 - <6kg	2 months up to 4months	2 ml		1/4	0.5ml
6 - <10 kg	4 months up to 12 months	2.5 ml		1/4	2ml
10 - <12 kg	12 up to 2 years	5 ml		1/2	3ml
12 - <14 kg	2 years up to 3 years	7.5 ml		1/2	4ml
14 - 19 kg	3 to 5 years	10 ml		3/4	5ml

➢ Give Iron

- Give one dose daily for 14 days

AGE or WEIGHT	IRON/FOLATE TABLET Ferrous sulfate 200 mg + 250 mcg Folate (60 mg elemental iron)	IRON SYRUP Ferrous fumarate 100 mg per 5 ml (20 mg elemental iron per ml)
2 months up to 4 months (4 - <6 kg)		1.00 ml (< 1/4 tsp.)
4 months up to 12 months (6 - <10)		1.25 ml (1/4 tsp.)
12 months up to 3 years (10 - <14)	1/2 tablet	2.00 ml (<1/2 tsp.)
3 years up to 5 years (14 - 19 kg)	1/2 tablet	2.5 ml (1/2 tsp.)

➢ GIVE INHALED SALBUTAMOL FOR Wheezing

USE OF A SPACER

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

- From salbutamol metered dose inhaler (100ug/puff) give 2 puffs.
- Repeat up to 3 times every 15 minutes before classifying pneumonia
- If a spacer is being used for the first time, it should be primed by 4-5 extra puffs from the inhaler

Spacers can be made in the following way:

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

To use an inhaler with a spacer:

- Remove the inhaler cap. Shake the inhaler well
- Insert mouthpiece of the inhaler through the hole in the bottle or plastic cup
- The child should put the opening of the bottle into his mouth and breath in and out through the mouth
- A carer then presses down the inhaler and sprays into the bottle while the child continues to breath normally
- Wait for three to four breaths and repeat for total of five sprays
- For younger children place the cup over the child's mouth and use as a spacer in the same way

➢ Give Oral Co-artemether

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

	Co-artemether tablets (20mg artemether and 120mg lumefantrine)					
WEIGHT (age)	0hr	8h	24h	36h	48h	60h
10 – 15kg (<3 years)	1	1	1	1	1	1
15—24kg (4-8 years)	2	2	2	2	2	2
25-34 kg (9-14 years)	3	3	3	3	3	3
>34 kg (>14 years)	4	4	4	4	4	4

TEACH THE MOTHER TO TREAT LOCAL INFECTIONS AT HOME

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

Clear the Ear by Dry Wicking and Give Eardrops

- **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 quinolone eardrops after dry wicking three times daily for two weeks

Soothe the Throat, Relieve the Cough with a Safe Remedy

- Safe remedies to recommend:
  - Breast milk for a breastfed infant

  _____
  _____
- Harmful remedies to discourage:

  _____
  _____

Treat Eye Infection with Tetracycline Eye Ointment

- **Clean both eyes 3 times**
  - Wash hands
  - Ask child to close the eye
  - Use clean cloth and water to gently wipe away pus
- **Apply the ointment in both eyes 3 times daily**
  - Ask child to look up
  - Squirt a small amount on the inside of lower lid
  - Wash hands again
- **Treat until redness is gone**

Treat for Mouth Ulcers with Gentian Violet (GV)

- **Treat for mouth ulcers twice daily**
  - Wash hands
  - Wash the child's mouth with a clean soft cloth wrapped around the finger and wet with salt water
  - Paint the mouth with 1/2 strength gentian violet (0.25% dilution)
  - Wash hands again
  - Continue using GV for 48 hours after the ulcers have been cured
  - Give paracetamol for pain relief

Treat for Thrush with Nystatin

- **Treat for thrush four times daily for 7 days**
  - Wash hands
  - Wet a clean soft cloth with salt water and use it to wash the child's mouth
  - Instill nystatin 1ml four times a day
  - Avoid feeding for 20 minutes after medication
  - If breastfed check mother's breasts for thrush. If present treat with nystatin
  - Advise mother to wash breasts after feeds. If bottle fed advise change to cup and spoon
  - If severe, recurrent or pharyngeal thrush consider symptomatic HIV (p. 7)
  - Give paracetamol if needed for pain (p.10)

GIVE VITAMIN A AND MEBENDAZOLE IN CLINIC

- **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 Vitamin A to all children from 6 months of age every 6 months

PREVENTION:

- Give Vitamin A to all children to ***prevent*** severe illness:
  - First dose at 6 weeks in a child that is **not** being breastfed
  - First dose in breastfed children to be given any time after 6 months of age
  - Thereafter vitamin A should be given **every six months** to ALL CHILDREN

TREATMENT:

- Give an extra dose of Vitamin A (same dose) for ***treatment*** if the child has SEVERE MALNUTRITION or PERSISTENT DIARRHOEA. If the child has had a dose of vitamin A within the past month, DO NOT GIVE VITAMIN A

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

Age	VITAMIN A DOSE
Less than 6 months	50 000IU
6 up to 12 months	100 000IU
One year and older	200 000IU

➢ Give Mebendazole

- Give 500 mg mebendazole as a single dose in clinic if:
  - hookworm/ whipworm is a problem in your area
  - the child is 1 year of age or older, and
  - has not had a dose in the previous 6 months

GIVE THESE TREATMENTS IN CLINIC ONLY

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

Give An Intramuscular Antibiotic

- **GIVE TO CHILDREN BEING REFERRED URGENTLY**
- Give Ampicillin (50 mg/kg) and Gentamicin (7.5mg/kg)

AMPICILLLIN

- Dilute 250mg vial with 1ml of sterile water (250mg/ml)
- IF REFERRAL IS NOT POSSIBLE OR DELAYED, repeat the ampicillin injection every 6 hours
- **Where there is a strong suspicion of meningitis the dose of ampicillin can be increased 4 times**

GENTAMICIN

- 7.5mg/kg/day once daily

AGE	WEIGHT	AMPICILLIN 250 mg vial	Gentamicin 2ml/40 mg/ml vial
2 up to 4 months	4 – <6kg	125mg (0.5 ml)	0.5-1.0 ml
4 up to 12 months	6 – <10kg	250mg (1.0 ml)	1.1-1.8 ml
1 up to 3 years	10 – <15kg	375mg (1.5 ml)	1.9-2.7 ml
3 up to 5 years	15 – 19kg	500mg (2.0 ml)	2.8-3.5 ml

Give Diazepam to Stop a Convulsion

- Turn the child to his/her side and clear the airway. Avoid putting things in the mouth
- Give 0.5mg/kg diazepam injection solution per rectum using a small syringe without a needle (like a tuberculin syringe) or using a catheter
- Check for low blood sugar, then treat or prevent (p.15)
- Give oxygen and REFER
- If convulsions have not stopped after 10 minutes repeat diazepam dose

WEIGHT	AGE	DOSE OF DIAZEPAM (10mg/2mls)
< 5kg	<6 months	0.5 mls
5 - < 10kg	6 - < 12 months	1.0 mls
10 - < 15kg	1 - < 3 years	1.5mls
15 - 19 kg	4 - < 5years	2.0 mls

Give Quinine for Severe Malaria

FOR CHILDREN BEING REFERRED WITH VERY SEVERE FEBRILE DISEASE:

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

IF REFERRAL IS NOT POSSIBLE:

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

AGE or WEIGHT	INTRAMUSCULAR QUININE	
	150 mg /ml (in 2 ml)*	*300 mg /ml* (in 2 ml)*
2 months up to 4 months (4 - < 6 kg)	0.4 ml	0.2 ml
4 months up to 12 months (6 - < 10 kg)	0.6 ml	0.3 ml
12 months up to 2 years (10 - < 12 kg)	0.8 ml	0.4 ml
2 years up to 3 years (12 - < 14 kg)	1.0 ml	0.5 ml
3 years up to 5 years (14 - 19 kg)	1.2 ml	0.6 ml

Treat the Child to Prevent Low Blood Sugar

- **If the child is able to breastfeed:**

  Ask the mother to breastfeed the child

- **If the child is not able to breastfeed but is able to swallow:**

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

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

- **If the child is not able to swallow:**

  - Give 50mls of milk or sugar water by nasogastric tube

GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

Plan A: Treat for Diarrhoea at Home

Counsel the mother on the 4 Rules of Home Treatment:

1. Give Extra Fluid, 2. Give Zinc Supplements,
3. Continue Feeding, 4. When to Return

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

➢ **TELL THE MOTHER:**

- Breastfeed frequently and for longer at each feed
- If the child is exclusively breastfed, give ORS or clean water in addition to breast milk
- If the child is not exclusively breastfed, give one or more of the following: food-based fluids (such as soup, rice water, and yoghurt drinks), 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 ORS. GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT HOME.**

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

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

Tell the mother to:

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

2. GIVE ZINC SUPPLEMENTS

➢ **TELL THE MOTHER HOW MUCH ZINC (20 mg tab) TO GIVE:**

Up to 6 months ——- 1/2 tablet daily for 14 days
6 months or more ——- 1 tablet daily for 14 days

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

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

3. *CONTINUE FEEDING*

4. *WHEN TO RETURN*

Plan B: Treat for Some Dehydration with ORS

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

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

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

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

- If the child wants more ORS than shown, give more
- For infants below 6 months who are not breastfed, also give 100-200ml clean water during this period

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

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

➢ **AFTER 4 HOURS:**

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

➢ **IF THE MOTHER MUST LEAVE BEFORE COMPLETING TREATMENT:**

- Show her how to prepare ORS solution at home
- Show her how much ORS to give to finish 4-hour treatment at home
- Give her instructions how to prepare SSS for use at home
- Explain the 4 Rules of Home Treatment:

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

GIVE EXTRA FLUID FOR DIARRHOEA AND CONTINUE FEEDING

Plan C: Treat for 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.
- Give 100 ml/kg Ringer's Lactate Solution (or, if not available, normal saline), divided as follows:

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

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

NO ↓

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

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

NO ↓

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

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

NO ↓

Can the child drink?

NO ↓

Refer URGENTLY to hospital for IV or NG treatment

NOTE:

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

IMMUNIZE EVERY SICK CHILD, AS NEEDED

GIVE FOLLOW-UP CARE

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

➢ PNEUMONIA

After 2 days:

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

Ask:

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

} *See ASSESS & CLASSIFY chart.*

Assess for HIV infection

Treatment:

- If ***chest indrawing or a general danger sign***, give a dose of second-line antibiotic or intramuscular chloramphenicol. Then refer URGENTLY to hospital.
- If ***breathing rate, fever and eating are the same***, change to the second-line antibiotic and advise the mother to return in 2 days or refer. (If this child had measles within the last 3 months or is known or suspected to have Symptomatic HIV Infection, refer.)
- If ***breathing slower, less fever, or eating better***, complete the 5 days of antibiotic.

➢ PERSISTENT DIARRHOEA

After 5 days:

Ask:

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

Assess for HIV infection

Treatment:

- If **the diarrhoea has not stopped** (child is still having 3 or more loose stools per day) do a full assessment of the child. Treat for dehydration if present. Then **REFER** to hospital including for assessment for ART.
- If **the diarrhoea has stopped** (child having less than 3 loose stools per day*),* tell the mother to follow the usual feeding recommendations for the child's age.

➢ DYSENTERY:

After 2 days:

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

Ask:

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

Treatment:

- If the child is **dehydrated**, treat for dehydration
- If **number of stools, blood in the stools, fever, abdominal pain, or eating is worse or the same REFER.**

  Change to second-line oral antibiotic recommended for shigella in your area. Give it for 5 days. Advise the mother to return in 2 days.

  Exceptions: if the child is less than 12 months old or was dehydrated on the first visit, or if he had measles within the last 3 months, REFER TO HOSPITAL.

- **If fewer stools, less fever, less abdominal pain, and eating better***,* continue giving ciprofloxacin until finished.

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

GIVE FOLLOW-UP CARE

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

➢ MALARIA (Low or High Malaria Risk)

If fever persists after 2 days, or returns within 14 days:

Do a full reassessment of the child. > *See ASSESS & CLASSIFY chart.*
Assess for other causes of fever.

Treatment:

- If the child has ***any general danger sign or stiff neck***, treat as VERY SEVERE FEBRILE DISEASE.
- If the child has any ***cause of fever other than malaria***, provide treatment.
- If ***malaria is the only apparent cause of fever:***
  - Treat with the second-line oral antimalarial. (If no second-line antimalarial is available, refer to hospital.) Advise the mother to return again in 2 days if the fever persists.
  - If fever has been present for 7 days, refer for assessment.

➢ FEVER-MALARIA UNLIKELY (Low Malaria Risk)

If fever persists after 2 days:

Do a full reassessment of the child. > *See ASSESS & CLASSIFY chart.*
Assess for other causes of fever.

Treatment:

- If the child has ***any general danger sign or stiff neck***, treat as VERY SEVERE FEBRILE DISEASE.
- If the child has any ***cause of fever other than malaria***, provide treatment.
- If ***malaria is the only apparent cause of fever:***
  - Treat with the first-line oral antimalarial. Advise the mother to return again in 2 days if the fever persists.
  - If fever has been present for 7 days, refer for assessment.

➢ MEASLES WITH EYE OR MOUTH COMPLICATIONS

After 2 days:

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

Treatment for Eye Infection:

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

Treatment for Mouth Ulcers:

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

GIVE FOLLOW-UP CARE

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

EAR INFECTION

After 5 days:

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

Check for HIV infection

Treatment:

- If there is ***tender swelling behind the ear or high fever (38.5°C or above)***, refer URGENTLY to hospital.
- ***Acute ear infection:*** if ***ear pain or discharge*** persists, treat with 5 more days of the same antibiotic. Continue wicking to dry the ear. Follow-up in 5 days.
- ***Chronic ear infection:*** Check that the mother is wicking the ear correctly. Encourage her to continue.
- If ***no ear pain or discharge***, praise the mother for her careful treatment. If she has not yet finished the 5 days of antibiotic, tell her to use all of it before stopping.

FEEDING PROBLEM

After 5 days:

Reassess feeding. *> See questions at the top of the COUNSEL chart.*
Ask about any feeding problems found on the initial visit.

- Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the child back again.
- If the child is very low weight for age, ask the mother to return 30 days after the initial visit to measure the child's weight gain.

PALLOR

After 14 days:

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

VERY LOW WEIGHT

After 30 days:

Weigh the child and determine if the child is still very low weight for age.
Reassess feeding. > *See questions at the top of the COUNSEL chart.*

Check for HIV infection

Treatment:

- If the child is ***no longer very low weight for age***, praise the mother and encourage her to continue.
- If the child is still ***very low weight for age***, counsel the mother about any feeding problem found. Ask the mother to return again in one month. Continue to see the child monthly until the child is feeding well and gaining weight regularly or is no longer very low weight for age.

  Exception:

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

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

•

ALSO, ADVISE THE MOTHER
WHEN TO RETURN IMMEDIATELY.
(SEE *COUNSEL* CHART.)

GIVE FOLLOW-UP CARE FOR THE CHILD WITH POSSIBLE HIV INFECTION / HIV EXPOSED OR SUSPECTED SYMPTOMATIC OR CONFIRMED HIV INFECTION

GENERAL PRINCIPLES OF GOOD CHRONIC CARE FOR HIV-INFECTED CHILDREN

- Develop a treatment partnership with the mother and infant or child
- Focus on the mother and child's concerns and priorities
- Use the '5 As' : Assess, Advise, Agree, Assist, Arrange to guide you the steps on chronic care consultation. Use the 5A's at every patient consultation
- Support the mother and child's self-management
- Organize proactive follow-up
- Involve "expert patients", peer educators and support staff in your health facility
- Link the mother and child to community-based resources and support
- Use written information – registers, Treatment Plan and treatment cards - to document, monitor and remind
- Work as a clinical team
- Assure continuity of care

IF POSSIBLE HIV INFECTION / HIV EXPOSED

- Follow-up: in 14 days, then monthly for 3 months, then every 3 months or as per immunization schedule
- Do a full re-assessment at each follow-up visit and reclassify for HIV on each follow-up visit
- Counsel about feeding practices (page 25 in chart booklet and according to the recommendations in Module 3)
- Follow **cotrimoxazole prophylaxis** as per national guidelines
- Follow national immunization schedule
- Follow vitamin A supplements from 6 months of age every 6 months
- Monitor growth and development
- Virological Testing for HIV infection as early as possible from 6 weeks of age
- Refer for ARVs if infant develops severe signs suggestive of HIV
- Counsel the mother about her own HIV status and arrange counselling and testing for her if required

** Any child with confirmed HIV infection should be enrolled in chronic HIV care, including assessment for eligibility of ART – refer to subsequent sections of the chart booklet.*

IF SUSPECTED SYMPTOMATIC HIV INFECTION

- Follow up in 14 days, then monthly for 3 months and 3 monthly or as per immunization schedule
- Do a full assessment – classify for common childhood illnesses, for malnutrition and feeding, skin and mouth conditions and for HIV on each visit
- Check if diagnostic HIV test has been done and if not, test for HIV as soon as possible
- Assess feeding and check weight and weight gain
- Encourage breastfeeding- mothers to continue exclusive breastfeeding
- Advise on any new or continuing feeding problems
- Initiate or follow up **cotrimoxazole prophylaxis** according to national guidelines
- Give immunizations according to schedule. Do not give BCG
- Give Vitamin A according to schedule
- Provide pain relief if needed
- Refer for confirmation of HIV infection and ART, if not yet confirmed

IF CHILD IS CONFIRMED HIV INFECTED*

- Follow-up in 14 days, monthly for 3 months and then 3-monthly or as per national guideline
- Continue **cotrimoxazole prophylaxis**
- Follow-up on feeding
- Home care:
  - Counsel the mother about any new or continuing problems
  - If appropriate, put the family in touch with organizations or people who could provide support
  - Explain the importance of early treatment of infections or refer
  - Advise the mother about hygiene in the home, in particular when preparing food
- Reassess for eligibility for ART or REFER

IF CHILD CONFIRMED UNINFECTED

- Stop cotrimoxazole only if no longer breastfeeding and more than 12 months of age
- Counsel mother on preventing HIV infection and about her own health

IF HIV TESTING HAS NOT BEEN DONE

- Re-discuss the benefits of HIV testing
- Identify where and when HIV testing including virological testing can be done
- If mother consents arrange HIV testing and follow -up visit

IF MOTHER REFUSES TESTING

- Provide ongoing care for the child, including routine monthly follow -up
- Discuss and provide **cotrimoxazole prophylaxis**
- On subsequent visits, re-counsel the mother on preventing HIV and on benefits of HIV testing

HIV TESTING FOR THE CHILD WITH POSSIBLE HIV INFECTION/HIV EXPOSED

HIV TESTING IN CHILDREN BORN TO KNOWN HIV POSITIVE WOMEN			
Age	**HIV testing**	**What results mean**	**Considerations**
<18 months	**HIV antibody test** rapid test or lab based antibody test	If positive, test shows either mother's antibody or child's HIV antibody is present. HIV antibody testing from 9-12 months of age if positive usually suggests child is infected Do virological test if child is sick with signs or symptoms that suggest HIV infection	In first few months of life if positive confirms child has been exposed to HIV, as passive transfer of maternal antibodies can cause positive test results.
		If negative and not breastfed = not infected If negative but still breastfed = repeat test once breastfeeding is discontinued for 6 weeks or more	Negative test usually rules out infection acquired during pregnancy and delivery. But child can still be infected by breastfeeding.
	HIV virological test done to detect the virus itself	Positive virological test at any age = child is infected	Best to perform from 6 weeks of age or more
		Negative virological test and never breastfed or not breast fed in the last 6 weeks = child is not infected	Negative results if still breast feeding need to be confirmed 6 weeks or more after breast feeding discontinued. If older than 9-12 months by this time antibody testing can be used before doing another Virological test, as only children who still have HIV antibody need another virological test
≥18 months	**HIV antibody test** rapid test or lab based antibody test	Valid results as for adults. Negative = the child is not infected; Positive = the child is infected.	If negative and still breastfed – repeat test once breastfeeding discontinued for 6 weeks or more.

COUNSEL THE MOTHER

➢ Assess the Feeding of Sick Infants under 2 years (or if child has very low weight for age)

Ask questions about the child's usual feeding and feeding during this illness. Note whether the mother is HIV infected, uninfected, or does not know her status. Compare the mother's answers to the ***Feeding Recommendations*** for the child's age.

ASK — How are you feeding your child?

If the infant is receiving *any* breast milk, ASK:

- How many times during the day?
- Do you also breastfeed during the night?

If infant is receiving replacement milk, ASK:

- What replacement milk are you giving?
- How many times during the day and night?
- How much is given at each feed?
- How is the milk prepared?
- How is the milk being given? Cup or bottle?
- How are you cleaning the utensils?
- If still breastfeeding as well as giving replacement milk could the mother give extra breast milk instead of replacement milk (especially if the baby is below

Does the infant take any other food or fluids?

- What food or fluids?
- How many times per day?
- What do you use to feed the child?

If low weight for age, ASK:

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

During this illness, has the infant's feeding changed?

- If yes, how?

FEEDING RECOMMENDATIONS DURING SICKNESS AND HEALTH

NOTE: These feeding recommendations should be followed for infants of HIV negative mothers. Mothers who DO NOT KNOW their HIV status should be advised to breastfeed but also to be HIV tested so that they can make an informed choice about feeding

Up to 6 Months of Age

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

6 Months up to 12 Months

- Breastfeed as often as the child wants.
- Give adequate servings of:

  _____
  _____
  _____
  _____

  - 3 times per day if breastfed;
  - 5 times per day if not breastfed.

12 Months up to 2 Years

- Breastfeed as often as the child wants.
- Give adequate servings of:

  _____
  _____
  _____
  _____

  or family foods 5 times per day.

2 Years and Older

- Give family foods at 3 meals each day. Also, twice daily, give nutritious food between meals, such as:

  _____
  _____
  _____
  _____
  _____

Feeding Recommendations For a Child Who Has PERSISTENT DIARRHOEA

- If still breastfeeding, give more frequent, longer breastfeeds, day and night.
- If taking other milk:
  - replace with increased breastfeeding OR
  - replace with fermented milk products, such as yoghurt OR
  - replace half the milk with nutrient-rich semisolid food

FEEDING RECOMMENDATIONS: Child classified as HIV exposed

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 may increase the risk of HIV transmission from mother to child when compared with exclusive breastfeeding).

Stop breastfeeding as soon as this is AFASS.

OR (if feasible and safe)

Formula feed exclusively (no breast milk at all)
Give formula or modified cow's milk. Other foods or fluids are not necessary.

Prepare correct strength and amount just before use. Use milk within an hour and discard any left over (a fridge can store formula for 24 hours)

Cup feeding is safer than bottle feeding
Clean the cup and utensils with soap and water

Give these amounts of formula 6 to 8 times per day

*** Exception: heat-treated or boiled breast milk can be given**

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

Stopping exclusive breastfeeding

Stopping breastfeeding means changing from all breast milk to no breast milk (from 2-3 days to 2-3 weeks).
Plan in advance to have a safe transition.

Stop breastfeeding as soon as this is AFASS (see page 27). This could be at or before the age of 6 months but some women may have to continue longer.

Help mother prepare for stopping breastfeeding:

- Mother should discuss stopping breastfeeding with her family if possible
- Express milk and give by cup
- Find a regular supply of formula or other milk, e.g. full cream cows milk
- 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 cows milk

Stop breastfeeding completely:

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

6 Months up to 12 Months

Give 3 adequate servings of nutritious complementary foods plus one snack per day (to include protein, mashed fruit and vegetables).

Each meal should be 3/4 cup*. If possible, give an additional animal-source food, such as liver or meat

_____

_____

_____

_____

If an infant is not breastfeeding, give about 1-2 cups (500 ml) of full cream milk or infant formula per day

Give milk with a cup, not a bottle
If no milk is available, give 4-5 feeds per day

** one cup= 250 ml*

12 Months up to 2 Years

Give 3 adequate nutritious feeds plus 2 snacks per day (each meal should be 1 cup).

If possible, give an additional animal-source food, such as liver or meat.

_____

_____

_____

_____

- Give fruit or vegetables twice every day
- If infant is not breastfeeding, give about 2 cups (500 ml) of full cream milk or infant formula per day. If no milk is available, give 4-5 feeds per day.
- Feed actively with own plate and spoon

COUNSEL THE MOTHER ABOUT FEEDING PROBLEMS

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

- **If the mother reports difficulty with breastfeeding, assess breastfeeding. (See *YOUNG INFANT* chart.) As needed, show the mother correct positioning and attachment for breastfeeding.**
- **If the child is less than 6 months old and is taking other milk or foods*:**
  - Build mother's confidence that she can produce all the breast milk that the child needs.
  - Suggest giving more frequent, longer breastfeeds day or night, and gradually reducing other milk or foods.

  If other milk needs to be continued, counsel the mother to:
  - Breastfeed as much as possible, including at night.
  - Make sure that other milk is a locally appropriate breast milk substitute.
  - Make sure other milk is correctly and hygienically prepared and given in adequate amounts.
  - Finish prepared milk within an hour.

- **If the mother is using a bottle to feed the child:**
  - Recommend substituting a cup for bottle.
  - Show the mother how to feed the child with a cup.
- **If the child is not feeding well during illness, counsel the mother to:**
  - Breastfeed more frequently and for longer if possible.
  - Use soft, varied, appetizing, favourite foods to encourage the child to eat as much as possible, and offer frequent small feedings.
  - Clear a blocked nose if it interferes with feeding.
  - Expect that appetite will improve as child gets better.

- **If the child has a poor appetite:**
  - Plan small, frequent meals
  - Give milk rather than other fluids except where there is diarrhoea with some dehydration
  - Give snacks between meals
  - Give high energy foods
  - Check regularly
- **If the child has sore mouth or ulcers:**
  - Give soft foods that will not burn the mouth, such as eggs, mashed potatoes, pumpkin or avocado
  - Avoid spicy, salty or acid foods
  - Chop foods finely
  - Give cold drinks or ice, if available

** if child is HIV exposed, counsel the mother about the importance of not mixing breastfeeding with replacement*

COUNSEL THE MOTHER

➢ *Feeding advice for the mother of a child with CONFIRMED HIV INFECTION*

- ➢ The child with confirmed HIV infection should be encouraged to breastfeed as s/he is already HIV infected but need the benefits of breastfeeding.
- ➢ The child should be fed according to the feeding recommendations for his age
- ➢ These children often suffer from poor appetite and mouth sores, give appropriate advice
- ➢ If the child is being fed with a bottle encourage the mother to use a cup as this is more hygienic and will reduce episodes of diarrhoea
- ➢ Inform the mother about the importance of hygiene when preparing food because her child can easily get sick. She should wash her hands after going to the toilet and before preparing food. If the child is not gaining weight well, the child can be given an extra meal each day and the mother can encourage him to eat more by offering him snacks that he likes if these are available
- ➢ Advise her about her own nutrition and the importance of a well balanced diet to keep herself healthy. Encourage her to plant vegetables to feed her family.

"AFASS" CRITERIA FOR STOPPING BREASTFEEDING

Acceptable:
Mother perceives no problem in replacement feeding.

Feasible:
Mother has adequate time, knowledge, skills, resouces, and support to correctly mix formula or milk and feed the infant up to 12 times in 24 hours

Affordable:
Mother and family, with community can pay the cost of replacement feeding without harming the health and nutrition of the family

Sustainable:
Availability of a continuous supply of all ingredients needed for safe replacement feeding for up to one year of age or longer

Safe:
Replacement foods are correctly and hygienically prepared and stored.

➢ *Counsel the mother about Stopping Breastfeeding (for HIV exposed)*

- ➢ While you are breastfeeding teach your infant to drink expressed breast milk from a cup. This milk may be heat-treated to destroy HIV.
- ➢ Once the infant is drinking comfortably, replace one breastfeed with one cup feed using expressed breast milk.
- ➢ Increase the number of cup-feeds every few days and reduce the number of breastfeeds. Ask an adult family member to help with cup feeding.
- ➢ Stop putting your infant to your breast completely as soon as your baby is accustomed to frequent cup feeding. From this point on it is best to heat-treat your breast milk.
- ➢ If your infant is receiving milk only check that your baby has at least 6 wet nappies in a 24 hour period. This means he is getting enough milk
- ➢ Gradually replace the expressed breast milk with commercial infant formula or home-modified animal milk.
- ➢ If your infant needs to suck, give him / her one of your clean fingers instead of the breast.
- ➢ To avoid breast engorgement (swelling) express a little milk whenever your breasts feel full. This will help you feel more comfortable. Use cold compresses to reduce inflammation. Wear a firm bra to prevent discomfort.
- ➢ Do not begin breastfeeding again once you have stopped. If you do you can increase the chances of passing HIV to your infant. If your breasts become engorged express breast milk by hand.
- ➢ Begin using a family planning method of your choice, if you have not already done so, as soon as you start reducing breastfeeds.

COUNSEL THE MOTHER ABOUT HER OWN HEALTH

- If the mother is sick, provide care for her, or refer her for help.
- If she has a breast problem (such as engorgement, sore nipples, breast infection), provide care for her or refer her for help.
- Advise her to eat well to keep up her own strength and health.
- Check the mother's immunization status and give her tetanus toxoid if needed.
- Make sure she has access to:
  - Family planning
  - Counselling on STD and AIDS prevention.
- Encourage all mothers to be sure to know their own HIV status and to seek HIV testing if she does not know her status or is concerned about the possibility of HIV in herself or her family.

FLUID

Advise the Mother to Increase Fluid During Illness

FOR ANY SICK CHILD:

- If child breastfed, breastfeed more frequently and for longer at each feed. If child is taking breast-milk substitutes, increase the amount of milk given
- Increase other fluids. For example, give soup, rice water, yoghurt drinks or clean water.

FOR CHILD WITH DIARRHOEA:

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

WHEN TO RETURN

Advise the Mother When to Return to Health Worker

FOLLOW-UP VISIT

If the child has:	Return for first follow-up
• PNEUMONIA • DYSENTERY • MALARIA, if fever persists • FEVER-MALARIA UNLIKELY, if fever persists	**2 days**
• PERSISTENT DIARRHOEA • ACUTE EAR INFECTION • CHRONIC EAR INFECTION • FEEDING PROBLEM	**5 days**
• ANAEMIA • CONFIRMED HIV INFECTION • SUSPECTED SYMPTOMATIC HIV INFECTION	**14 days**
• VERY LOW WEIGHT FOR AGE	**30 days**

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

WHEN TO RETURN IMMEDIATELY

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

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

DO A RAPID APRAISAL OF ALL WAITING INFANTS

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
  - if initial visit, assess the young infant as follows:

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

CHECK FOR VERY SEVERE DISEASE AND LOCAL INFECTION

ASK:

- Has the infant had convulsions (fits)?
- Is the infant having difficulty feeding?

LOOK, LISTEN, FEEL:

- Count the breaths in one minute. repeat the count if more than 60 breaths per minute

} YOUNG INFANT MUST BE CALM

- Look for severe chest indrawing.
- Look and listen for grunting.
- Look at the young infant's movements.
  - Does the infant move only when stimulated?
  - Does the infant not move even when stimulated?
- Measure axillary temperature.
- Look at the umbilicus. Is it red or draining pus?
- Look for skin pustules.

Classify ALL YOUNG INFANTS

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
Any one of the following signs: • Convulsions or • Not feeding well or • Fast breathing (60 breaths per minute or more) or • Severe chest indrawing or • Grunting or • Movement only when stimulated or no movement even when stimulated or • Fever (38°C* or above)* or • Low body temperature (less than 35.5°C*)	**VERY SEVERE DISEASE**	➢ ***Give first dose of intramuscular antibiotics.*** ➢ ***Treat to prevent low blood sugar (see page 15)*** ➢ ***Advise mother how to keep the infant warm on the way to the hospital.*** ➢ ***Refer URGENTLY to hospital.*** **
• Umbilicus red or draining pus • Skin pustules	**LOCAL BACTERIAL INFECTION**	➢ ***Give an appropriate oral antibiotic.*** ➢ Teach the mother to treat local infections at home. ➢ Advise mother to give home care for the young infant. ➢ Follow up in 2 days.
None of the signs of very severe disease or local bacterial infection	**INFECTION UNLIKELY**	➢ Advise mother to give home care.

* *These thresholds are based on axillary temperature. The thresholds for rectal temperature readings are approximately 0.5 degrees higher.*

** *If referral is not possible, see management of Childhood Illness, Treat the Child, Annex: when referral is not possible.*

Does the young infant have diarrhoea*?

IF YES, LOOK AND FEEL:

- Look at the young infant's general condition:
  - Does the infant move only when stimulated?
  - Does the infant not move even when stimulated?
  - Is the infant restless and irritable?
- Look for sunken eyes.
- Pinch the skin of the abdomen.
  Does it go back:
  - Very slowly (longer than 2 seconds)?
  - or slowly?

Classify DIARRHOEA FOR DEHYDRATION

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

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

A young infant has diarrhoea if the stools have changed from usual pattern and are many and watery (more water than fecal matter).

The normally frequent or semi-solid stools of a breastfed baby are not diarrhoea.

CHECK THE YOUNG INFANT FOR HIV INFECTION

ASK:

Has the mother or the infant had an HIV test?

What was the result?

Classify by test result

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold print)
• Child has positive PCR test	**CONFIRMED HIV INFECTION**	➢ Give cotimoxazole prophylaxis at age 4-6 weeks ➢ Assess feeding and counsel as necessary ➢ Refer for staging and assessment for ART ➢ Advise the mother on home care ➢ Follow-up in 14 days
One or both of the following conditions: • Mother HIV positive • Child has positive HIV antibody test (sero-positive)	**POSSIBLE HIV INFECTION/ HIV EXPOSED**	➢ Give cotrimoxazole prophylaxis at age 4-6 weeks ➢ Assess the child's feeding and give appropriate feeding advice ➢ Refer/ do PCR to confirm infant's HIV status at least 6 weeks after breastfeeding has stopped ➢ Consider presumptive severe HIV disease as defined before ➢ Follow-up in one month
Negative HIV test in mother or child	**HIV INFECTION UNLIKELY**	➢ Treat, counsel and follow-up existing infections ➢ Advise the mother about feeding and about her own health

THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT FOR AGE IN BREASTFED INFANTS*

ASK:

- Is the infant breastfed? If yes, how many times in 24 hours?
- Does the infant usually receive any other foods or drinks? If yes, how often?

LOOK, LISTEN,FEEL:

- Determine weight for age.

IF AN INFANT: **Is less than 7 days old,**
Is breastfeeding less than 8 times in 24 hours,
Is taking any other foods or drinks, or
Is low weight for age,

AND

Has no indications to refer urgently to hospital:

ASSESS BREASTFEEDING:

- Has the infant breastfed in the previous hour?

If the infant has not fed in the previous hour, ask the mother to put her infant to the breast. Observe the breastfeed for 4 minutes.

(If the infant was fed during the last hour, ask the mother if she can wait and tell you when the infant is willing to feed again.)

- Is the infant able to attach well?

TO CHECK ATTACHMENT, LOOK FOR:

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

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

- Is the infant suckling effectively (that is, slow deep sucks, sometimes pausing)?

not suckling effectively *suckling effectively*

Clear a blocked nose if it interferes with breastfeeding.

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

Classify FEEDING

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

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

THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT FOR AGE IN INFANTS RECEIVING NO BREAST MILK

(use this chart when an HIV positive mother has chosen not to breastfeed)

ASK:

- What milk are you giving?
- How many times during the day and night?
- How much is given at each feed?
- How are you preparing the milk?
  - Let mother demonstrate or explain how a feed is prepared, and how it is given to the infant.
- Are you giving any breast milk at all?
- What foods and fluids in addition to replacement feeds is given?
- How is the milk being given? Cup or bottle?
- How are you cleaning the feeding utensils?

LOOK, LISTEN, FEEL:

- Determine the weight for age.
- Look for ulcers or white patches in the mouth (thrush).

Classify **FEEDING**

SIGNS	CLASSIFY AS	TREATMENT (Urgent pre-referral treatments are in bold)
• Milk incorrectly or unhygienically prepared Or • Giving inappropriate replacement feeds • Giving insufficient replacement feeds Or • A HIV positive mother mixing breast and other feeds Or • Using a feeding bottle Or • Thrush Or • Low weight for age	**FEEDING PROBLEM OR LOW WEIGHT FOR AGE**	➢ Counsel about feeding ➢ Explain the guidelines for safe replacement feeding ➢ Identify concerns of mother and family about feeding. Help mother gradually withdraw other food or fluids ➢ If mother is using a bottle, teach cup feeding ➢ If thrush, teach the mother to treat it at home ➢ Follow-up FEEDING PROBLEM or THRUSH in 2 days ➢ Follow up LOW WEIGHT FOR AGE in 7 days ➢ Vitamin A
• Not low weight for age and no other signs of inadequate feeding	**NO FEEDING PROBLEM**	➢ Advise mother to continue feeding, and ensure good hygiene ➢ Praise the mother for feeding the infant well

THEN CHECK THE YOUNG INFANT'S IMMUNIZATION AND VITAMIN A STATUS:

	AGE	VACCINE			VITAMIN A
IMMUNIZATION SCHEDULE:	**Birth**	BCG	OPV-0		200 000 IU to the mother at delivery
	6 weeks	DPT+HIB-1	OPV-1	Hep B 1	50 000 IU for infants at 6 weeks if **not breastfed**
	10 weeks	DPT+HIB-2	OPV-2	Hep B 2	

- **Give all missed doses on this visit.**
- Include sick infants unless being referred.
- Advise the caretaker when to return for the next dose.

ASSESS OTHER PROBLEMS

ASSESS THE MOTHER'S HEALTH NEEDS

Nutritional status and anaemia, contraception. Check hygienic practices.

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

➢ *Give an Appropriate Oral Antibiotic*

For local bacterial infection:

First-line antibiotic: _____
Second-line antibiotic: _____

	COTRIMOXAZOLE *(trimethoprim + sulphamethoxazole)* Give two times daily for 5 days			AMOXYCILLIN Give three times daily for 5 days	
AGE or WEIGHT	**Adult Tablet** single strength (80 mg trimethoprim + 400 mg sulphamethoxazole)	**Paediatric Tablet** (20 mg trimethoprim +100 mg sulphamethoxazole)	**Syrup** (40 mg trimethoprim +200 mg sulphamethoxazole)	**Tablet** 250 mg	**Syrup** 125 mg in 5 ml
Birth up to 1 month (< 3 kg)		1/2*	1.25 ml*		1.25 ml
1 month up to 2 months (3-4 kg)	1/4	1	2.5 ml	1/4	2.5 ml

** Avoid cotrimoxazole in infants less than 1 month of age who are premature or jaundiced. See page 10 for prophylaxis dose.*

➢ *Give First Dose of Intramuscular Antibiotics*

Give first dose of both benzylpenicillin and gentamicin intramuscular.

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

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

- Referral is the best option for a young infant classified with POSSIBLE SERIOUS BACTERIAL INFECTION. If referral is not possible, give benzylpenicillin and gentamicin for at least 5 days. Give benzylpenicillin every 6 hours plus gentamicin every 8 hours. For infants in the first week of life, give gentamicin every 12 hours.

TREAT THE YOUNG INFANT

➢ To Treat for Diarrhoea, See TREAT THE CHILD chart

➢ Teach the Mother How to Keep the Young Infant Warm on the way to the Hospital

- ➢ Provide skin to skin contact or
- ➢ Keep the young infant clothed or covered as much as possible all the time. Dress the young infant with extra clothing including hat, gloves, socks and wrap the infant in a soft dry cloth and cover with a blanket.

➢ Teach the Mother to treat Local Infections at home

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

➢ To Treat for Skin Pustules or Umbilical Infection

The mother should do the treatment twice daily for 5 days:

- Wash hands
- Gently wash off pus and crusts with soap and water
- Dry the area
- Paint with full strength gentian violet (0.5%)
- Wash hands

➢ Treat for Thrush with Nystatin or Gentian Violet

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

- Wash hands
- Wash mouth with clean soft cloth wrapped around the finger and wet with salt water
- Give nystatin 1 ml 4 times a day or paint with diluted 0.5% gentian violet
- Wash hands

TREAT THE YOUNG INFANT AND COUNSEL THE MOTHER

➢ Advise the Mother How to keep the Low Weight Infant Warm at Home

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

➢ Teach the Mother How to Express Breast Milk

Ask the mother to:

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

COUNSEL THE MOTHER

➢ Teach Correct Positioning and Attachment FOR BREASTFEEDING

- ➢ Show the mother how to hold her infant:
  - with the infant's head and body straight
  - facing her breast, with infant's nose opposite her nipple
  - with infant's body close to her body
  - supporting infant's whole body, not just neck and shoulders.

- ➢ Show her how to help the infant to attach. She should:
  - touch her infant's lips with her nipple
  - wait until her infant's mouth is opening wide
  - move her infant quickly onto her breast, aiming the infant's lower lip well below the nipple

- ➢ Look for signs of good attachment and effective suckling. If the attachment or suckling is not good, try again.

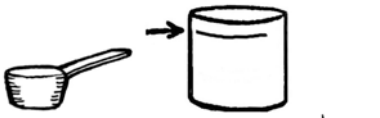
➢ Counsel the HIV-positive mother who has chosen not to breastfeed (or the caretaker of a child who cannot be breastfed)

The mother or caretaker should have received full counselling before making this decision

- ➢ Ensure that the mother or caretaker has an adequate supply of appropriate replacement feed.
- ➢ Ensure that the mother or caretaker knows how to prepare milk correctly and hygienically and has the facilities and resources to do so.
- ➢ Demonstrate how to feed with a cup and spoon rather than a bottle.
- ➢ Make sure that the mother or caretaker understands that prepared feed must be finished within an hour after preparation.
- ➢ Make sure that the mother or caretaker understands that mixing breastfeeding with replacement feeding may increase the risk of HIV infection and should not be done.

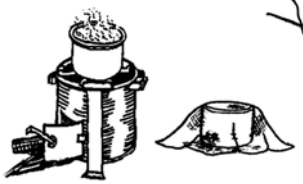
COUNSEL THE MOTHER

➢ Safe Preparation of Formula Milk

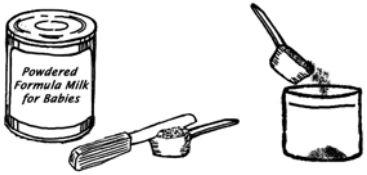


Always use a marked cup or glass and spoon to measure water and the scoop to measure the formula powder.

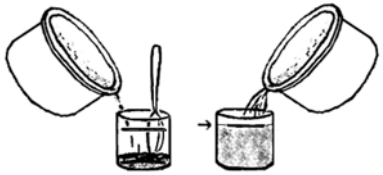
Wash your hands before preparing a feed.



Bring the water to the boil and then let it cool. Keep it covered while it cools.



Measure the formula powder into a marked cup or glass.
Make the scoops level.
Put in one scoop for every 25 mls of water.



Add a small amount of the cooled boiled water and stir.
Fill the cup or glass to the mark with the water. Stir well.

Feed the infant using a cup.

Wash the utensils.

➢ Teach the Mother How to Feed by Cup

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

➢ Approximate amount of formula needed per day

Age in months	Weight in kilos	Approx. amount of formula in 24 hours	Approx. number of feeds
Birth	3	400 ml	8 x 50 ml
4 weeks	3	450 ml	8 x 60 ml
2 months	4	600 ml	7 x 90 ml
3 months	5	750 ml	6 x 120 ml
4 months	4.5	750 ml	6 x 120 ml
5 months	6	900 ml	6 x 150 ml
6 months	8	900 ml	6 x 150 ml

➢ Advise the 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:	**Return for first follow-up in:**
• LOCAL BACTERIAL INFECTION • ANY FEEDING PROBLEM • THRUSH • SOME DEHYDRATION	2 days
• LOW WEIGHT FOR AGE	7 days
• CONFIRMED HIV INFECTION or POSSIBLE HIV INFECTION/ HIV EXPOSED	14 days

WHEN TO RETURN IMMEDIATELY*:*

Advise the caretaker to return immediately if the young infant has any of these signs:
➢ Difficulty feeding ➢ Becomes sicker ➢ Develops a fever ➢ Fast breathing ➢ Difficult breathing ➢ Vomits everything ➢ Less than normal movement ➢ Convulsions

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

➢ *LOCAL BACTERIAL INFECTION*

After 2 days:

- Look at the umbilicus. Is it red or draining pus? Does redness extend to the skin?
- Look at the skin pustules. Are there many or severe pustules?

Treatment:

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

➢ *THRUSH*

After 2 days:

- Look for white patches in the mouth (thrush).
- Reassess feeding. > See "Then Check for Feeding Problem or Low Weight for age " above (p. 33).
- If **thrush is worse** check that treatment is being given correctly, consider HIV (p.32).
- If the infant has **problems with attachment or suckling**, refer to hospital.
- If thrush is the same or better, and the baby is feeding well, continue with nystatin (or gentian violet) for a total of 5 days.

➢ FEEDING PROBLEM

After 2 days:

- Reassess feeding. See 'Check For Feeding Problem or Low Weight ' above
- Ask about any feeding problems found on the initial visit.
- Counsel the mother about any new or continuing feeding problems. If you counsel the mother to make significant changes in feeding, ask her to bring the young infant back again.
- If the young infant is low weight for age, ask the mother to return after 14 days of this follow up visit. Continue follow-up until the infant is gaining weight well.

Exception:

If you do not think that feeding will improve, refer the child.

GIVE FOLLOW-UP CARE FOR THE YOUNG INFANT

➢ POSSIBLE HIV/HIV EXPOSED

- Follow-up after 14 days and then monthly or according to immunization programme.
- Counsel about feeding practices. Avoid giving both breast milk and formula milk (mixed feeding).
- Start **cotrimoxazole prophylaxis** at 4-6 weeks, if not started already and check compliance.
- Test for HIV infection as early as possible, if not already done so.
- Refer for ART if presumptive severe HIV infection as per definition above.
- Counsel the mother about her HIV status and arrange counselling and testing for her if required.

➢ LOW WEIGHT FOR AGE

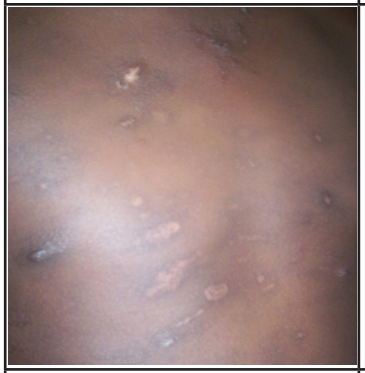
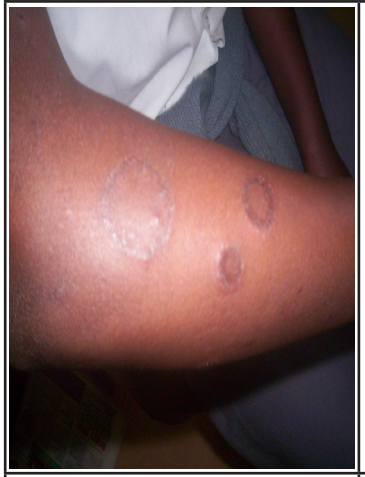
After 14 days:

- Weigh the young infant and determine if the infant is still low weight for age.
- Reassess feeding. > See “Then Check for Feeding Problem or Low Weight” above.
- If the infant is **no longer low weight for age**, praise the mother and encourage her to continue.
- If the infant is **still low weight for age, but is feeding well**, praise the mother. Ask her to have her infant weighed again within 14 days or when she returns for immunization, whichever is the earlier.
- If the infant is **still low weight for age and still has a feeding problem,** counsel the mother about the feeding problem. Ask the mother to return again in 14 days (or when she returns for immunization if this is within 2 weeks). Continue to see the young infant every few weeks until the infant is feeding well and gaining weight regularly and is not longer low weight for age

Exception:

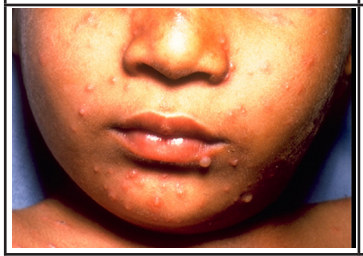
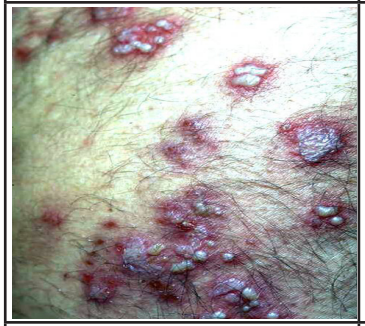
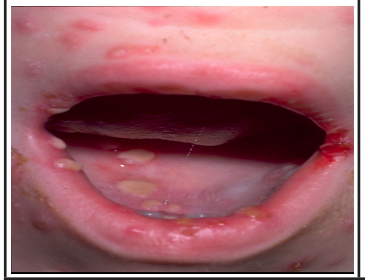
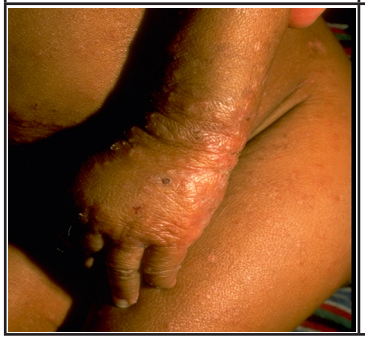
If you do not think that feeding will improve, or if the young infant has **lost weight**, refer to hospital.

ANNEX A:
SKIN AND MOUTH CONDITIONS*

	SIGNS	CLASSIFY	TREATMENT	UNIQUE FEATURES IN HIV
	Itching rash with small papules and scratch marks Dark spots with pale centres	**PAPULAR ITCHING RASH (PRURIGO)**	**Treat itching:** - Calamine lotion - Antihistamine by mouth - If not improved, 1% hydrocortisone Can be an early sign of HIV and needs assessment for HIV	Is a Clinical stage 2 defining disease
	An itchy circular lesion with a raised edge and fine scaly area in centre with loss of hair. May also be found on body or web of feet	**RINGWORM (TINEA)**	**Whitfield's** ointment or other anti-fungal cream if few patches **If extensive:** Refer, if not give: ketoconazole for 2 up to 12 months (6-10 kg) 40 mg per day. For 12 up to 5 years give 60 mg per day . Or give griseofulvin 10 mg/kg/day If **in** hairline, shave hair, treat itching as above	Extensive : There is a high incidence of coexisting nail infection which has to be treated adequately, to prevent recurrences of tinea infection of skin Fungal nail infection is a Clinical stage 2 defining disease
	Rash and excoriations on torso; burrows in web space and wrist Face spared	**SCABIES**	**Treat itching** as above, manage with anti-scabies: 25% topical benzyl benzoate at night , repeat for 3 days after washing 1% topical lindane cream or lotion once– wash off after 12 hours	In HIV positive individuals scabies may manifest as crusted scabies Crusted scabies presents as extensive areas of crusting mainly on the scalp face, back, and feet. Patients may not complain of itch but the scales will be teeming with mites

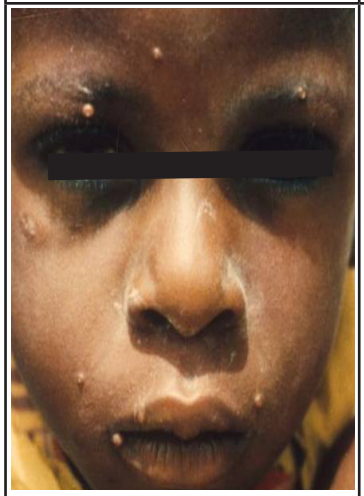
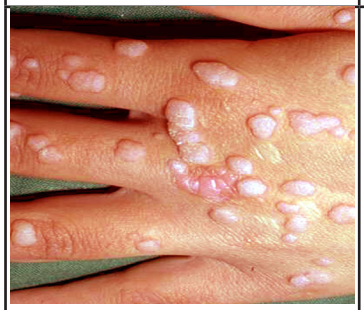
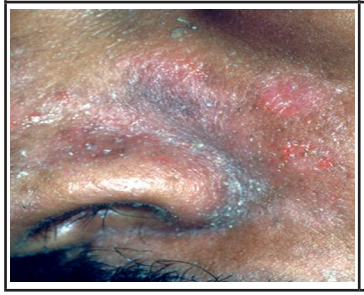
** IMAI acute care module gives more information*

Identify skin problem if skin has blisters / sores / pustules

	SIGNS	CLASSIFY	TREATMENT	UNIQUE FEATURES IN HIV
	Vesicles over body Vesicles appear progressively over days and form scabs after they rupture	**CHICKEN POX**	Treat itching as previous page Refer URGENTLY if pneumonia or jaundice appear	Presentation atypical only if child is immunocompromised Duration of disease longer, complications more frequent, chronic infection with continued appearance of new lesions for >1 month; typical vesicles evolve into nonhealing ulcers that become necrotic, crusted, and hyperkeratotic
	Vesicles in one area on one side of body with intense pain or scars plus shooting pain Herpes zoster is uncommon in children except where they are immuno-compromised, for example if infected with HIV	**HERPES ZOSTER**	Keep lesions clean and dry. Use local antiseptic If eye involved give acyclovir– 20 mg /kg (max 800 mg) 4 times daily for 5 days Give pain relief Follow-up in 7 days	Duration of disease longer Hemorrhagic vesicles, necrotic ulceration Rarely recurrent, disseminated or multidermatomal Is a Clinical stage 2 defining disease
	Vesicular lesion or sores, also involving lips and / or mouth	**HERPES SIMPLEX**	If child unable to feed, refer If first episode or severe ulceration, give acyclovir as above	Extensive area of involvement Large ulcers Delayed healing (often greater than a month) Resistance to Acyclovir common. Therefore continue treatment till complete ulcer healing Chronic HSV infection (>1 month) is a Clinical stage 4 defining disease
	Red, tender, warm crusts or small lesions	**IMPETIGO OR FOLLICULITIS**	Clean sores with antiseptic Drain pus if fluctuant. Start cloxacillin if size >4cm or red streaks or tender nodes or multiple abscesses for 5 days (25-50 mg/kg every 6 hours) Refer URGENTLY if child has fever and /or if infection extends to the muscle	

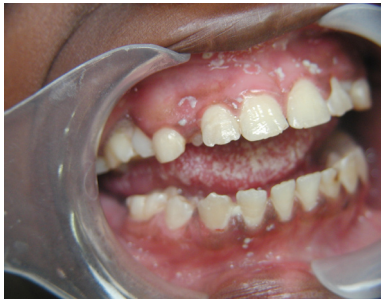
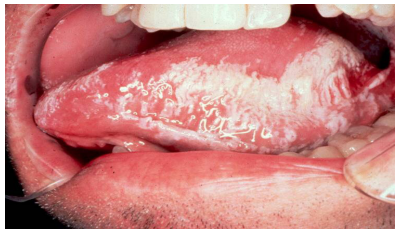
See below for more information about drug reactions

Identify papular lesions: non itchy

	SIGNS	CLASSIFY	TREATMENT	UNIQUE FEATURES IN HIV
	Skin colored pearly white papules with a central umblication It is most commonly seen on the face and trunk in children	**MOLLUSCUM CONTAGIOSUM**	Can be treated by various modalities: Leave them alone unless superinfected Use of phenol: Pricking each lesion with a needle or sharpened orange stick and dabbing the lesion with phenol Electrodesiccaton Liquid nitrogen application (using orange stick) Curettage	Incidence is higher Giant molluscum (>1cm in size), or coalescent double or triple lesions may be seen More than 100 lesions may be seen. Lesions often chronic and difficult to eradicate Extensive molluscum contagiosum is a Clinical stage 2 defining disease
	The **common wart** appears as papules or nodules with a rough (verrucous) surface	**WARTS**	**Treatment:** Topical salicylic acid preparations (eg. Duofilm) Liquid nitrogen cryotherapy. Electrocautery	Lesions more numerous and recalcitrant to therapy Extensive viral warts is a Clinical stage 2 defining disease
	Greasy scales and redness on central face, body folds	**SEBBHORREA**	Ketoconazole shampoo If severe, refer or provide tropical steroids For seborrheic dermatitis: 1% hyrdocortison cream X2 daily If severe, refer	Seborrheic dermatitis may be severe in HIV infection. Secondary infection may be common

ANNEX A:
ASSESS, CLASSIFY AND TREAT SKIN AND MOUTH CONDITIONS

Mouth problems : Thrush

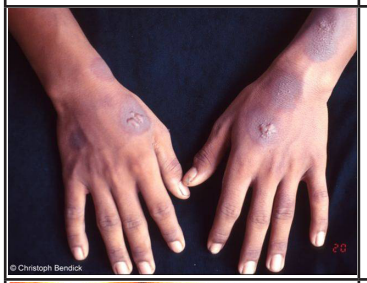
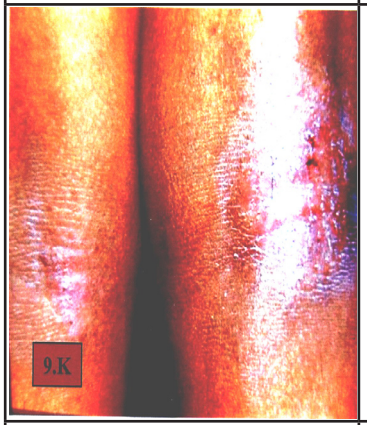
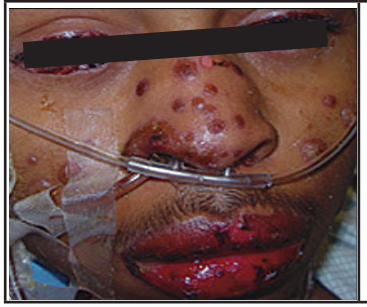
SIGNS	CLASSIFY	TREATMENT
Not able to swallow	**SEVERE OESOPHAGEAL THRUSH**	Refer URGENTLY to hospital. If not able to refer, give fluconazole. If mother is breastfeeding check and treat the mother for breast thrush. (Stage 4 disease)
Pain or difficulty swallowing	**OESOPHAGEAL THRUSH**	Give fluconazole. Give oral care to young infant or child. If mother is breastfeeding check and treat the mother for breast thrush. Follow up in 2 days. Tell the mother when to come back immediately. Once stabilized, refer for ART initiation (Stage 4 disease)
White patches in mouth which can be scraped off 	**ORAL THRUSH**	Counsel the mother on home care for oral thrush. The mother should: - Wash her hands - Wash the young infant / child's mouth with a soft clean cloth wrapped around her finger and wet with salt water - Instill 1ml nystatin four times per day or paint the mouth with 1/2 strenghth gentian violet for 7 days - Wash her hands after providing treatment for the young infant or child - Avoid feeding for 20 minutes after medication If breastfed, check mother's breasts for thrush. If present (dry, shiny scales on nipple and areola), treat with nystatin or GV. Advise the mother to wash breasts after feeds. If bottle fed, advise to change to cup and spoon. If severe, recurrent or pharyngeal thrush, consider symptomatic HIV. Give paracetamol if needed for pain. (Stage 3 disease)
Most frequently seen on the sides of the tongue, a white plaque with a corrugated appearance 	**ORAL HAIRY LEUCOPLAKIA**	Does not independently require treatment, but resolve with ART and Acyclovir (Stage 2 disease)

ANNEX A:
ASSESS, CLASSIFY AND TREAT SKIN AND MOUTH CONDITIONS

Mouth ulcer or gum problems

SIGNS	CLASSIFY AS:	TREATMENTS
Deep or extensive ulcers of mouth or gums or Not able to eat	**SEVERE GUM OR MOUTH INFECTION**	➢ Refer URGENTLY to hospital. ➢ If possible, give first dose acyclovir pre-referral. ➢ Start metronidazole if referral not possible. ➢ If child is on antiretroviral therapy this may be a drug reaction so refer to second level for assessment.
Ulcers of mouth or gums	**GUM / MOUTH ULCERS**	➢ Show mother how to clean the ulcers with saline or peroxide or sodium bicarbonate. ➢ If lips or anterior gums involved, give acyclovir, if possible. If not possible, refer. ➢ If child receiving cotrimoxazole or antiretroviral drugs or isoniazid (INH) prophylaxis (for TB) within the last month, this may be a drug rash, especially of the child also has a skin rash, so refer. ➢ Provide pain relief. ➢ Follow up in 7 days.

ANNEX A:
ASSESS, CLASSIFY AND TREAT SKIN AND MOUTH CONDITIONS

	SIGNS	CLASSIFY	TREATMENT	UNIQUE FEATURES IN HIV
	Generalized red, widespread with small bumps or blisters; or one or more dark skin areas (fixed drug reactions)	**FIXED DRUG REACTIONS**	Stop medications Give oral antihistamines If peeling rash, refer	Could be a sign of reaction to ARV's
	Wet, oozing sores or excoriated, thick patches	**ECZEMA**	Soak sores with clean water to remove crusts (no soap) Dry skin gently Short-term use of topical steroid cream not on face Treat itching	
	Severe reaction involving the skin as well as the eyes and/or mouth Might cause difficulty breathing	**STEVEN JOHNSON SYNDROME**	Stop medication Refer urgently	May be seen with use of cotrimoxazole or nevirapine

ANNEX B: ARV DOSAGES

efavirenz (EFV)
TREATMENT DOSE:
15 mg/kg/day (capsule or tablet) for age 3 years or more
Once daily

Weight (kg)	Combinations of 200, 100 and 50 mg capsules		600 mg tablet
10-13.9	One 200 mg		
14 - 19.9	One 200 mg + one 50 mg		
20 - 24.9	One 200 mg + one 100 mg		
25 - 29.9	One 200 mg + one 100 mg + one 50 mg		
30 - 39.9	Two 200 mg		
40 and over	Three 200 mg	**or**	one

stavudine (d4T)
TREATMENT DOSE:
1 mg/kg/dose (to maximum 30 mg dose)
Give dose twice daily

Weight (kg)	Solution 1		15 mg, 20 mg, 30 mg capsules	
	AM	**PM**	**AM**	**PM**
5 - 5.9	6 ml	6 ml		
6 - 9.9			0.5 20 mg capsule	0.5 20 mg capsule
10 - 13.9			One 15 mg capsule	One 15 mg capsule
14 - 24.9			One 20 mg capsule	One 20 mg capsule
25 and above			One 30 mg capsule	One 30 mg capsule

abacavir (ABC)
TREATMENT DOSE:
8 mg/kg/dose (to maximum dose of 300 mg/dose)
Give dose twice daily

Weight (kg)	Syrup 20 mg/ml			300 mg capsules	
	AM	**PM**		**AM**	**PM**
5 - 5.9	2 ml	2 ml			
6 - 6.9	3 ml	3 ml			
7 - 9.9	4 ml	4 ml			
10 - 10.9	5 ml	5 ml			
11 - 11.9	5 ml	5 ml	**or**	0.5 tablet	0.5 tablet
12 -13.9	6 ml	6 ml	**or**	0.5 tablet	0.5 tablet
14 - 19.9				0.5 tablet	0.5 tablet
20 - 24.9				1 tablet	0.5 tablet
25 and above				1 tablet	1 tablet

lamivudine (3TC)
TREATMENT DOSE:
4 mg/kg/dose (to maximum 150 mg dose)
Give dose twice daily

Weight (kg)	Syrup 10 mg/ml			150 mg tablet	
	AM	**PM**		**AM**	**PM**
30 days or older					
5 - 6.9	3 ml	3 ml			
7 - 9.9	4 ml	4 ml			
10 - 11.9	5 ml	5 ml			
12 - 13.9	6 ml	6 ml	**or**	0.5	0.5
14 - 19.9				0.5	0.5
20 - 24.9				one	0.5
25 kg and over				one	one

ANNEX B: ARV DOSAGES

zidovudine (AZT or ZDV)
TREATMENT DOSE:
180-240 mg/m^2/dose
Give dose twice daily

Weight (kg)	Syrup 10 mg/ml			100 mg (capsule), 300 mg (tablet)	
	AM	PM		AM	PM
5 - 5.9	6 ml	6 ml			
6 - 6.9	7 ml	7 ml			
7 - 7.9	8 ml	8 ml			
8 - 8.9	9 ml	9 ml	**or**	one 100 mg capsule	one 100 mg capsule
9 - 11.9	10 ml	10 ml	**or**	one 100 mg capsule	one 100 mg capsule
12 -13.9	11 ml	11 ml	**or**	one 100 mg capsule	one 100 mg capsule
14 - 19.9				two 100 mg capsules or 0.5 300 mg	one 100 mg capsule or 0.5 300 mg
20 - 24.9				two 100 mg capsules or 0.5 300 mg	two 100 mg capsule or 0.5 300 mg
25 - 29.9				two 100 mg capsules or one 300 mg	two 100 mg capsules or 0.5 300 mg

nevirapine (NVP)
TREATMENT: MAINTENANCE DOSE: 160-200 mg/m^2/dose
(to max 200 mg twice daily dose)
Maintenance dose—give dose twice daily
Lead-in dose during weeks 1 and 2 = only give am dose

Weight (kg)	Syrup 10 mg/ml			200 mg tablets	
	AM	PM		AM	PM
5 - 5.9	6 ml	6 ml			
6 - 6.9	7 ml	7 ml			
7 - 7.9	8 ml	8 ml			
8 - 8.9	9 ml	9 ml			
9 - 9.9	9 ml	9 ml	**or**	0.5 tablet	0.5 tablet
10 - 11.9	10 ml	10 ml	**or**	0.5 tablet	0.5 tablet
12 - 13.9	11 ml	11 ml	**or**	0.5 tablet	0.5 tablet
14 - 24.9				one tablet	0.5 tablet
25 and above				one tablet	one tablet

zidovudine 10mg/ml syrup for PMTCT prophylaxis in newborns.
Give 4 mg/kg/dose twice daily

Weight in kg	1 - 1.9	2 - 2.9	3 - 3.9	4 - 4.9
AM	0.4 ml	0.8 ml	1.2 ml	1.6 ml
PM	0.4 ml	0.8 ml	1.2 ml	1.6 ml

nevirapine for PMTCT prophylaxis in newborns
2 mg/kg/dose within 72 hours of birth—once only

Unknown weight	0.6
1 - 1.9	0.2
2 - 2.9	0.4
3 - 3.9	0.6
4 - 4.9	0.8

ANNEX B: COMBINATION ARV DOSAGES

DUAL FDCs

stavudine + lamivudine (d4T-3TC) 30 mg d4T / 150 mg 3TC tablet		
Weight (kg)	**AM**	**PM**
10 - 13.9	0.5	0.5
14 - 24.9	1	0.5
25 - 34.9	1	1

zidovudine + lamivudine (ZDV-3TC = AZT-3TC) 300 mg ZDV / 150 mg 3TC tablet		
Weight (kg)	**AM**	**PM**
14 - 19.9	0.5	0.5
20 - 29.9	1	0.5
30 or above	1	1

TRIPLE FDCs

stavudine + lamivudine + neverapine (d4T-3TC-NVP) 30 mg d4T / 150 mg 3TC / 200 mg NVP tablet		
Weight (kg)	**AM**	**PM**
10 - 13.9	0.5	0.5
14 - 24.9	1	0.5
25 or above	1	1

zidovudine + lamivudine + abacavir (ZDV-3TC-ABC = AZT-3TC-ABC) 300 mg ZDV / 150 mg 3TC / 300 mg ABC tablet		
Weight (kg)	**AM**	**PM**
14 - 19.9	0.5	0.5
20 - 29.9	1	0.5
30 or above	1	1

ANNEX C: ARV SIDE EFFECTS*

	Very common side-effects: warn patients and suggest ways patients can manage; also be prepared to manage when patients seek care	**Potentially serious side effects:** warn patients and tell them to seek care	**Side effects occurring later during treatment:** discuss with patients
d4T stavudine	Nausea Diarrhoea	**Seek care urgently:** Severe abdominal pain Fatigue AND shortness of breath **Seek advice soon:** Tingling, numb or painful feet or legs or hands	**Changes in fat distribution:** Arms, legs, buttocks, cheeks become THIN Breasts, belly, back of neck become FAT
3TC lamivudine	Nausea Diarrhoea		
NVP nevirapine	Nausea Diarrhoea	**Seek care urgently:** Yellow eyes Severe Skin rash Fatigue AND shortness of breath Fever	
ZDV zidovudine (also known as AZT)	Nausea Diarrhoea Headache Fatigue Muscle pain	**Seek care urgently:** Pallor (anaemia)	
EFV efavirenz	Nausea Diarrhoea Strange dreams Difficulty sleeping Memory problems Headache Dizziness	**Seek care urgently:** Yellow eyes Psychosis or confusion Severe Skin rash	

** for more guidance, refer to IMAI chronic care guideline module*

ANNEX D: DRUG DOSAGES FOR OPPORTUNISTIC INFECTIONS

Fluconazole dosage			Nystatin
Weight of child	**50mg/5ml oral suspension**	**50 mg capsule**	**Oral suspension 100,000 units/ml**
3-<6kg	-	-	1-2ml four times per day for all age groups
6-<10kg	-	-	
10-<15kg	5 ml once a day	1	
15-<20kg	7.5 ml once a day	1-2	
20-<29kg	12.5 ml once a day	2-3	

Recommended dosages for griseofulvin:		
Age of child	**Weight**	**Dose, frequency and duration**
2 months up to 12 months	3-<6kg	10m g/kg/day: *for example* for 3kg baby – 30mg; for 6kg baby – 60mg – once a day
	6-<10kg	10 mg/kg/day once a day
12 months up to 5 years	10-19 kg	10mg/ kg/day once a day

Recommended dosages for ketoconazole:		
Age of child	**Weight**	**Dose, frequency and duration**
2 months up to 12 months	3-<6kg	20 mg once daily
	6-<10kg	40 mg once daily
12 months up to 5 years	10-19 kg	60 mg once daily

Recommended dosages for acyclovir :	
Age of child	**Dose, frequency and duration**
<2 years	200mg 8 hourly for 5 days
>2 years	400mg 8 hourly for 5 days

Recommended dosages for cloxacillin / flucloxacillin:		
Weight of child	**Form**	**Dose, every 6 hours for 5 days**
3-<6kg	250mg capsule	1/2 tablet
6-<10kg		1
10-<15kg		1
15-<20kg		2

MANAGEMENT OF THE SICK YOUNG INFANT AGE UP TO 2 MONTHS

Name_____ Age: _____ Weight: _____ Temperature: _____
ASK: What are the baby's problems?_____ Initial visit? _____ Follow-up visit?_____

ASSESS **CLASSIFY**

CHECK FOR VERY SEVERE DISEASE AND LOCAL INFECTION

- Is the infant having difficulty feeding?
- had convulsions
- fast breathing : breaths per minute: _____ Repeat if required:____
- grunting
- severe chest indrawing
- umbilical draining pus or redness
- Fever (38 or above) or low temperature (below 35.5 or feels cold)
- skin pustules
- Does the infant move only when stimulated?
- Does the infant not move even when stimulated?

Classify all young infants

DOES THE YOUNG INFANT HAVE DIARRHOEA? yes no

- Does the infant move only when stimulated? Does the infant not move even when stimulated?
- restless and irritable sunken eyes
- pinched skin goes back slowly goes back very slowly (> 2 secs)

THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT in breastfed infants (infants receiving breastmilk)

State feeding problems identified:

Breastfeeding no yes _____ times in 24 hours
Receiving other food or drinks no yes _____ times in 24 hours

If yes what do you use to feed the baby?_____
Plot weight for age low weight not low weight Poor weight gain

If any difficulty feeding, feeding less than 8 times in 24 hours, taking any other food or drinks, or is low weight for age AND has no indication to refer urgently to hospital

Assess breastfeeding Breastfed in previous hour? yes no
If the mother has not fed in the previous hour, ask the mother to put the child to the breast
Observe the breastfeed for four minutes, check attachment:

- Chin touching breast yes no
- Mouth wide open yes no
- Lower lip turned out yes no
- More areola above than below the mouth yes no

not attached *not well attached* *Good attachment*

Is the young infant suckling effectively (that is, slow deep sucks, sometimes pausing)?
Not sucking at all **not suckling effectively** suckling **effectively**

Is thrush present?

CHECK FOR HIV INFECTION

- Does the mother or infant have had an HIV test?
- What was the result ?

THEN CHECK FOR FEEDING PROBLEM OR LOW WEIGHT in infants receiving no breastmilk

Difficulty feeding? yes no

What made you decide not to breastfeed*? _____

Which breastmilk substitute?_____

Is enough milk being given in 24 hrs?	yes	no
Correct feed preparation?	yes	no
Any food or fluids other than milk?	yes	no
Feeding utensils:	cup	bottle
Utensils cleaned adequately?	yes	no
Thrush present?	yes	no

Plot weight for age: low weight not low weight Poor weight gain

ARE THERE ANY SPECIAL RISK FACTORS PRESENT? yes no

- Premature or low birthweight
- Birth asphyxia
- Severe socioeconomic deprivation
- Young adolescent mother
- Not breast fed
- Mother known to be HIV positive

other _____

CHECK THE YOUNG INFANTS IMMUNIZATION STATUS mark immunizations needed today

Birth	BCG	OPV-0	
6weeks	OPV-1	DPT+HIB-1	HepB 1
10weeks	OPV-2	DPT+HIB-2	HepB 2

Return for next immunization on:

_____
(Date)

MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

Name: _____ Age: _____ Weight: _____ kg Temperature: _____°C

ASK: What are the child's problems? _____ Initial visit? ___ Follow-up Visit? ___

ASSESS (Circle all signs present) **CLASSIFY**

CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS LETHARGIC OR UNCONSCIOUS CONVULSING NOW	General danger signs present? Yes___ No___ **Remember to use danger sign when selecting classifications**
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes___ No___ • For how long? ____ Days • Count the breaths in one minute. _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor/wheeze.	
DOES THE CHILD HAVE DIARRHOEA? Yes ___ No __ • For how long? _____ Days • Is there blood in the stools? • Look at the child's general condition.Is the child: Lethargic or unconscious? Restless or irritable? • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eargerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly?	
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5°C or above) Decide Malaria Risk: High Low Yes___ No___ • For how long? _____ Days • If more than 7 days, has fever been present every day? • Has child had measles within the last three months? • Look or feel for stiff neck. • Look for runny nose. Look for signs of MEASLES: • Generalized rash and • One of these: cough, runny nose, or red eyes. **If the child has measles now or within the last 3 months:** • Look for mouth ulcers. If Yes, are they deep and extensive? • Look for pus draining from the eye. • Look for clouding of the cornea.	
DOES THE CHILD HAVE AN EAR PROBLEM? Yes___ No___ • Is there ear pain? • Is there ear discharge? If Yes, for how long? ___ Days • Look for pus draining from the ear. • Feel for tender swelling behind the ear.	
THEN CHECK FOR MALNUTRITION AND ANAEMIA • Look for visible severe wasting. • Look for palmar pallor. Severe palmar pallor? Some palmar pallor? • Look for oedema of both feet. • Determine weight for age. Very Low ___ Not Very Low ___	
CHECK FOR HIV INFECTION HIV tested before (confidential): Mother o positive o negative o unknown Child o positive o negative o unknown pneumonia or Very low weight or persistent diarrhoea or ear discharge or mother or child HIV status known: Yes __NO __ ☐ Pneumonia ☐ Very Low weight for age ☐ Ear discharge ☐ Persistent diarrhoea ☐ Parotid enlargement ☐ Oral thrush ☐ Generalized persistent lymphadenopathy If mother is HIV infected, and child less than 24 months old, decide on infant feeding counseling needs	
CHECK THE CHILD'S IMMUNIZATION STATUS Circle immunizations needed today. _____ _____ _____ _____ BCG DPT1 DPT2 DPT3 _____ _____ _____ _____ _____ _____ OPV 0 OPV 1 OPV 2 OPV 3 Measles	Return for next immunization on: _____ (Date)
ASSESS CHILD'S FEEDING if child has ANAEMIA OR VERY LOW WEIGHT or is less than 2 years old. • Do you breastfeed your child? Yes____ No ____ If Yes, how many times in 24 hours? ___ times. Do you breastfeed during the night? Yes___ No___ • Does the child take any other food or fluids? Yes___ No ___ If Yes, what food or fluids? _____ _____ How many times per day? ___ times. What do you use to feed the child? _____ If very low weght for age: How large are servings? _____ Does the child receive how own serving? ___ Who feeds the child and how? _____ • During the illness, has the child's feeding changed? Yes ____ No ____ If Yes, how? ASSESS OTHER PROBLEMS Ask about mother's own health Time taken:	FEEDING PROBLEMS

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8 v.
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1. HIV infections - diagnosis. 2. HIV infections - therapy. 3. Acquired immunodeficiency syndrome - diagnosis. 4. Acquired immunodeficiency syndrome - therapy. 5. Infant. 6. Child. 7. Disease management. 8. Teaching materials. I. World Health Organization. II. Title: IMCI complementary course on HIV/AIDS. III. Title: Complementary course on HIV/AIDS.

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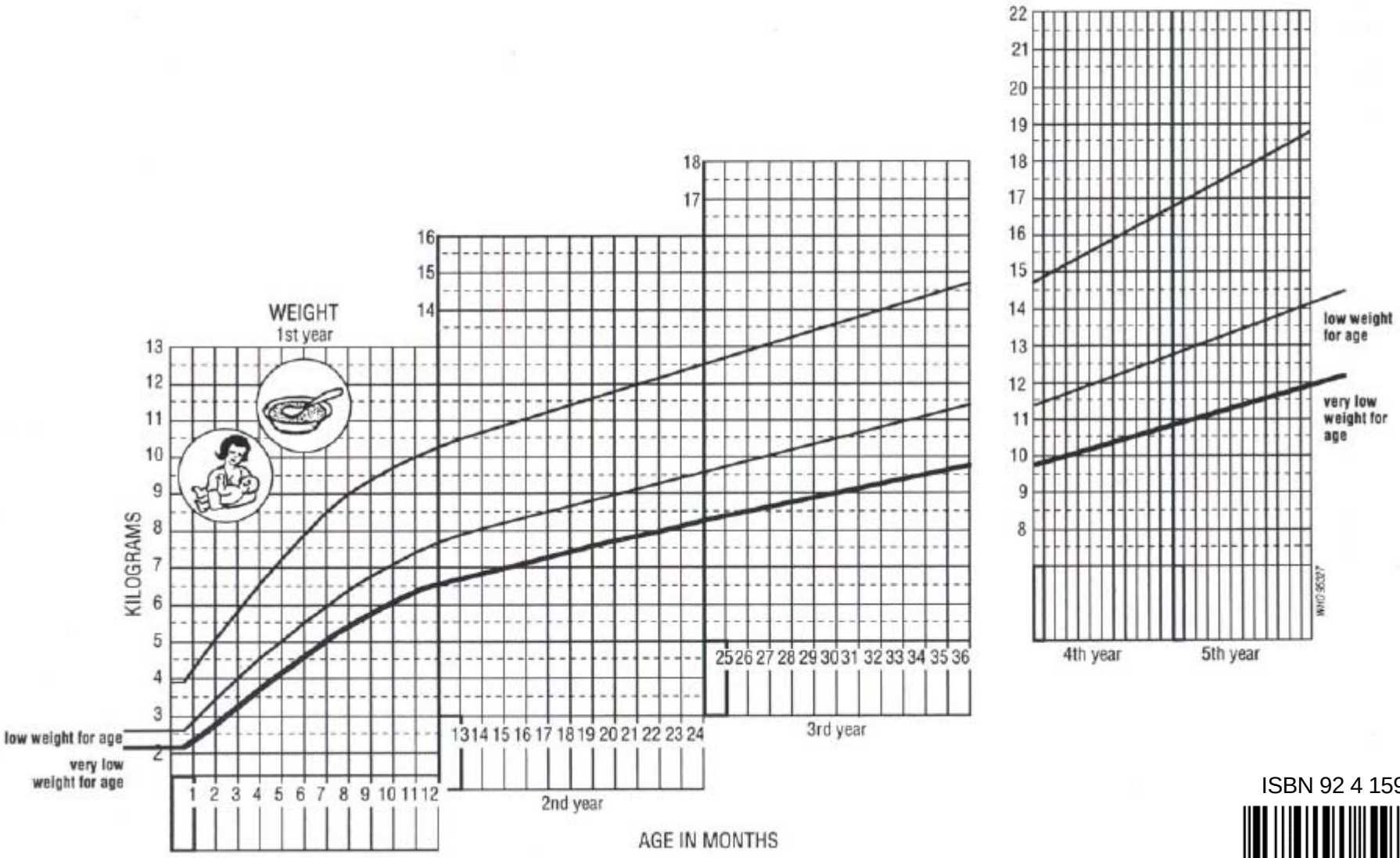
WEIGHT FOR AGE CHART



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