TREAT THE YOUNG INFANT AT CLINIC TREAT THE YOUNG INFANT WITH SEVERE DEHYDRATION, QUICKLY WITH PLAN C. Follow the arrows. If the answer is Yes, go across. If No, go down. GIVE URGENT PRE-REFERRAL TREATMENT TO THE YOUNG INFANT WHO HAS CRITICAL ILLNESS AND REFER URGENTLY TO Start IV fluid immediately. HOSPITAL If the young infant can drink, give ORS by mouth while drip is set up Can you give intravenous (IV) \Rightarrow Give First Doses of IM Gentamicin and IM Ampicillin to Young Infants with CRITICAL ILLNESS and REFER URGENTLY TO HOSPITAL YES Give 100 ml/kg Ringer's Lactate Solution (or if not available, normal saline), divided as follows: fluid immediately? AGE First give 30 ml/kg in: Then give 70 ml/kg in: **GENTAMICIN:** Desired range is 5—7.5 mg/kg/day in once daily injection. In low birth weight infants, give 3—4 mg/kg/day in once daily injection. Infants (Under 12 months) NO 1 hour 5 hours **Preparation:** From a 2 ml vial containing 40 mg/ml, remove 1 ml gentamicin from the vial and add 1 ml distilled water to make the required strength of 20 mg/ml. Reassess young infant every 1 – 2 hours. If hydration status is not improving, give the IV drip more rapidly. AMPICILLIN (Strength 250 mg/1.5ml) **GENTAMICIN** (Strength 20 mg/ml) Also give ORS (about 5 ml/kg/hour) as soon as the young infant can drink: usually 3 – 4 hours. **AMPICILLIN:** Desired dose is 50 mg/kg giv-WEIGHT **Amount Per Dose Amount Per Dose** Reassess a young infant after 6 hours. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue Is IV treatment available nearen twice daily. 1.5 to 2.4 kg 0.4 ml 0.8 ml by (within 30 minutes)? To a vial of 250 mg, add 1.3 ml of sterile Refer URGENTLY to hospital for IV treatment. YES 2.5 to 3.9 kg 0.8 ml 1.2 ml water = 250 mg/1.5 mlNO , If the infant can drink, provide the mother with ORS solution and show her how to give frequent sips during 4.0 to 5.9 kg 1.2 ml 1.5 ml Are you trained to use a naso-IF THE YOUNG INFANT IS CLASSIFIED AS POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE, GIVE PREgastric tube for rehydration? Start rehydration by tube (or mouth) with ORS solution: Give 20 ml/kg/hour for 6 hours YES REFERRAL TREATMENTS AND REFER URGENTLY NO (total of 120 ml/kg). Reassess the young infant every 1 - 2 hours while waiting for transfer: Can the young infant drink? 11. Give First Dose of Intramuscular Gentamicin and Oral Amoxicillin * If there is repeated vomiting or abdominal distension, give the fluid more slowly. NO **Gentamicin:** Desired range 5 – 7.5 mg/kg/day in once daily injection. In low birth weight infants, give 3 - 4 mg/kg/day in once daily injection. To prepare the injection: From a 2 ml vial contain-Amoxicillin Gentamicin **Amoxicillin Amoxicillin** ing 40 mg/ml, remove 1 ml gentamicin from the Syrup (125 mg in 5 ml) (strength 20 mg/ml)/ Dispersible tablet (250 Dispersible tablet (125 WEIGHT Refer URGENTLY to a hospital NOTE: If the young infant is not referred to hospital, observe the young infant at least 6 hours after rehydration to be sure the vial and add 1 ml distilled water to make the remg) /dose mg) /dose for IV or NG treatment. 0.4 ml 5 ml 1.5 to 2.4 kg ½ tablet 1 tablet quired strength of 20 mg/ml. mother can maintain hydration giving the young infant ORS. 2.5 to 3.9 kg 0.8 ml ½ tablet 1 tablet 5 ml **Amoxicillin:** Desired range is 75 to 100 mg/kg/day 3. Teach the Young Mother How to Keep the Young Infant Warm on the Way to the Hospital 4.0 to 5.9 kg 2 tablets 1.2 ml 1 tablet 10 ml divided into 2 oral doses. Give the first dose pre-Provide skin to skin contact OR

4. Refer Urgently

MANAGEMENT OF POSSIBLE SERIOUS BACTERIAL INFECTION (PSBI) WHERE REFERRAL IS REFUSED OR NOT POSSIBLE

referral if young infant can swallow.

2. Treat the Young Infant to Prevent Low Blood Sugar If the young infant is able to breastfeed:

If the young infant is not able to swallow:

Ask the mother to breastfeed the young infant.

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

Give 20 – 25 ml (10 ml/kg) expressed breastmilk before departure. If not possible to give expressed breastmilk, give 20 – 25 ml (10 ml/kg) sugar water.

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

Give 20 – 25 ml (10 ml/kg) of expressed breastmilk or sugar water by nasogastric tube.

Write a referral note for the mother to take to the hospital. If the infant also has SOME DEHYDRATION OR SEVERE DEHYDRATION and is able to drink: Give the mother some prepared ORS and ask her to give frequent sips of ORS on the way.

Dress the young infant with extra clothing including hat, gloves, and socks. Wrap the infant in a soft dry cloth and cover with a blanket.

Keep the young infant clothed or covered as much as possible all the time, especially in a cold environment.

TREAT THE YOUNG INFANT WHO HAS CLINICAL SEVERE INFECTION WITH IM GENTAMICIN AND ORAL AMOXICILLIN

- Give Intramuscular Gentamicin to Young Infants with CLINICAL SEVERE INFECTION where Referral is Refused or Not Possible
- Desired range is 5—7.5mg/kg/day in once daily injection. In low birth weight infants, give 3—4 mg/kg/day in once daily injection. **Option 1:** Treat for 7 days. **Option 2:** Treat for 2 days. Option to be decided in the process of country adaptation.
- Preparation: From a 2 ml vial containing 40 mg/ml, remove 1 ml gentamicin from the vial and add 1 ml distilled water to make the required strength of 20

GENTAMICIN (Strength 20 mg/ml)
Amount per dose
0.4 ml
0.8 ml
1.2 ml

- ⇒ Ask the mother to bring back the young infant for the next injection tomorrow. Give Oral Amoxicillin where Referral is Refused or Not Possible
 - **♦ To Young Infants with CLINICAL SEVERE INFECTION**
 - ♦ To Young Infants less than 7 days old with SEVERE PNEUMONIA (fast breathing alone)
- ⇒ Teach the mother how to give oral medicines at home.

Advise mother to continue breastfeeding

WEIGHT	Dispersible tablet (250 mg)	Dispersible tablet (125 mg)	Syrup (125 mg in 5 ml
	Per Dose	Per Dose	Per Dose
1.5 to 2.4 kg	1/2 tablet	1 tablet	5 ml
2.5 to 3.9 kg	1/2 tablet	1 tablet	5 ml
4.0 to 5.9 kg	1 tablet	2 tablets	10 ml

TREAT THE YOUNG INFANT AT HOME AND COUNSEL

Teach the Mother to Give Oral Medicines at Home

Follow the instructions below to teach the mother about each oral medicine to be given at home. Also follow the instructions listed with each medicine's dosage table.

WEIGHT

1.5 to 2.4 kg

2.5 to 3.9 kg

4.0 to 5.9 kg

- Determine the appropriate medicines and dosage for the infant's age or weight.
- Tell the mother the reason for giving the medicine to the infant.
- Demonstrate how to measure a dose
- Watch the mother practice measuring a dose by herself
- Ask the mother to give the first dose to her infant Explain carefully how to give the medicine, then label and package
- the medicine If more than one medicine will be given, collect, count, and package
- each medicine separately Explain that all tablets or syrups must be used to finish the course of
- treatment, even if the infant gets better. Check the mother's understanding before she leaves the clinic
- Give Oral Amoxicillin
- **Local Infection:** Give oral amoxicillin twice daily for 5 days. Pneumonia (fast breathing alone) in
- infant 7—59 days old: Give oral amoxicillin twice daily for 7 days
- ⇒ Immunize Every Sick Young Infant, as needed.

COUNSEL THE MOTHER. To Treat the Young In	fant with Diarrhoea, Give Extra Fluids and Continue Feeding
If the young infant has NO DEHYDRATION, use PLAN A.	. If the young infant has SOME DEHYDRATION, use PLAN B.
PLAN A: TREAT DIARRHOEA AT HOME	PLAN B: TREAT SOME DEHYDRATION WITH ORS

2. When to Return 1. GIVE EXTRA FLUID (as much as the young infant will take. TELL THE MOTHER:

Counsel the mother on the Rules of Home Treat-

Breastfeed frequently and for longer at each

Also give ORS or clean water in addition to

breastmilk. TEACH THE MOTHER HOW TO MIX ANS GIVE ORS.

GIVE THE MOTHER 2 PACKETS OF ORS TO USE AT

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. Tell the mother to:

• If the infant vomits, wait 10 minutes. Then

. Give Extra Fluids

continue, but more slowly.

Give small frequent sips from a cup

- Continue giving extra fluid till the diarrhoea
- 2. WHEN TO RETURN

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

DETERMINE AMOUNT OF ORS TO GIVE DURING FIRST 4 HOURS

	WEIGHT	< 6 кg
	AGE	Up to 4 months
	ORS	200—450 ml
nly w	hen you do not know the weight.	The approximate amount of ORS re

required (in ml) can also be calcu-*Use the age onl lated by multiplying the young infant's weight (in kg) times 75.

AMOXICILLIN Desired range is 75 to 100 mg/kg/day divided into 2 daily

oral doses. Give Twice Daily

mg) Per Dose

1 tablet

1 tablet

2 tablets

Syrup (125 mg in 5

ml) Per Dose

5 ml

5 ml

10 ml

Dispersible tablet (250 | Dispersible tablet (125 |

mg) Per Dose

1/2 tablet

1/2 tablet

1 tablet

- If the young infant wants more ORS than shown, give more For young infants who are not breastfed, also give 100-2-ml of clean water during this period if you
- use standard ORS. This is not needed if you give new low osmolarity ORS. SHOW THE MOTHER HOW TO GIVE ORS SOLUTION
- Give frequent small sips from a cup
- If the young infant vomits, wait 10 minutes. Then continue, but more slowly. Continue breastfeeding whenever the young infant wants.
- **AFTER 4 HOURS** Reassess the young infant and classify the infant for dehydration
- Select the appropriate plan to continue treatment Begin breastfeeding the young infant in clinic
- IF THE MOTHER MUST LEAVE BEFORE COMPLETING THE TREATMENT:
- Show her how to prepare ORS solution at home Show her how much ORS to give to finish 4-hour treatment at home. Give her enough ORS packets to
- complete rehydration. Also give her 2 packets as recommended in PLAN A.
- 1. GIVE EXTRA FLUIDS. Breastfeed frequently and for longer at each feed.
- 2. WHEN TO RETURN
- Explain the Rules of Home Treatment for Young Infant:

⇒ Teach the Mother 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:

- Teach the Mother How 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 return to the clinic if the infection worsens
- **GENTIAN VIOLET FULL STRENGTH (0.5%)** To Treat Skin Pustules or Umbilical Infection
- The mother should do the treatment twice daily for 5 days Wash hands Gently wash off pus and crusts with soap and water
- Paint the skin or umbilicus/cord with full strength Gentian Violet (0.5%) Wash hands again
- The mother should do the treatment 4 times daily for 7 days Wash hands Paint the mouth with half strength Gentian Violet (0.25%) using a soft clean cloth

DIATELY

⇒ Breastfeeding poorly

⇒ Reduced activity

⇒ Becomes sicker

ADVISE CARETAKER WHEN TO RETURN IMME-

wrapped around the finger Wash the hands again

GENTIAN VIOLET HALF STRENGTH (0.25%)

To Treat Thrush (ulcers or white patches in mouth)

⇒ Advise the Mother to Give Homecare for the Young Infant **EXCLUSIVELY BREASTFEEDING THE YOUNG INFANT (for breastfeeding mothers)**

- ♦ Give only breastfeeds to the young infant
- ♦ Breastfeed frequently, as often and for as long as the infant wants, day or night, during sickness and health. 2. MAKE SURE THAT THE YOUNG INFANT IS KEPT WARM AT ALL TIMES
- In cool weather cover the infant's head and feet and dress the infant with extra clothing

Follow-up visit			
If the infant has:	Return for first follow up on		
JAUNDICE	Day 2 of treatment		
• DIARRHOEA	Day 3		
FEEDING PROBLEM			
• THRUSH			
LOCAL INFECTION			
PNEUMONIA	Day 4		
SEVERE PNEUMONIA (where referral is refused or not possible	e)		
LOW WEIGHT FOR AGE in infant receiving no breastmilk	Day 7		
LOW WEIGHT FOR AGE in breastfed infant	Day 14		

\Rightarrow Develops a fever \Rightarrow Feels unusually cold ⇒ Develops fast breathing ⇒ Develops difficult breathing ⇒ Palms or soles appear yellow Day 14

Teach Correct Positioning and Attachment for Breastfeeding Show the mother how to hold her infant

- With the infant's head and body in line
- With the infant approaching breast with nose opposite the nipple
- With the infant held close to the mother's body
- With the infant's whole body supported, not just
- neck and shoulders Show her how to help the infant to attach. She
- should: Touch her infant's 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 the signs of good attachment and effective suckling. If the attachment of suckling is not good, try
- Wash her hands thoroughly

Teach the Mother How to Express Breastmilk

Make herself comfortable

Ask the mother to:

- Hold a wide-necked container under her nipple and areola
- Place her thumb on top of the breast and the first finger on the underside of the breast so
- they are opposite each other (at least 4 cm from the top of the nipple) Compress and release the tissue between her finger and thumb a few times
- If the milk does not appear she should reposition her thumb and finger closer to the nipple and compress and release the breast as before. Compress and release all the way around the breast, keeping her fingers the same distance
- from the nipple. Be careful not to squeeze the nipple or to rub the skin or move her thumb or finger on the skin. Express one breast until the milk just drips and 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.
- Cover the infant with mother's clothes (and an additional warm blanket in cold weather) When not in skin-to-skin contact, keep the infant clothed or covered as much as possible at all times. Dress the young infant with extra clothing including hat and socks.

♦ Place the infant in skin-to-skin contact on mother's chest between the mother's breasts. Keep the infant's head turned to one side.

- Loosely wrap the young infant in a soft dry cloth and cover with a blanket. Check frequently if the hands and feet are warm. If cold, re-warm the baby using skin-to-skin contact
- Breastfeed the infant frequently (or give expressed breastmilk by cup)
- Use Kangaroo Mother Care

FOLLOW-UP CARE FOR THE YOUNG INFANT

CLINICAL SEVERE INFECTION where REFERRAL WAS REFUSED OR NOT POSSIBLE

- Follow up at the next contact for injection (day 2) and on day 4 of treatment.
- At each contact, reassess the young infant **Refer** the young infant if:

Refer young infant if:

Infant becomes worse after treatment is started or

cillin twice daily until all the tablets are finished.

- Any new sign of CLINICAL SEVERE INFECTION appears while on treatment or
- Any sign of CLINICAL SEVERE INFECTION is still present after day 8 of treatment or If no improvement on day 4 after 3 full days of treatment
- ♦ If the young infant is improving, complete the 2 days of treatment with IM Gentamicin. Ask the mother to continue giving the oral amoxi-
- ⇒ PNEUMONIA OR SEVERE PNEUMONIA Follow-up on day 4 of treatment. Reassess the young infant for POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE, PNEUMONIA AND LOCAL INFECTION.
- ♦ Infant becomes worse after treatment is started or
- Any **new sign of VERY SEVERE DISEASE** appears while on treatment
- If the young infant is improving, ask the mother to continue giving the oral amoxicillin twice daily until all the tablets are finished. Ask the mother to bring the young infant back in 4 more days. Young infants with fast breathing alone should be checked as often as possible but it is mandatory to do so on day 4 of treatment.
- DIARRHOEA
- On day 3, ASK: Has the diarrhoea stopped? • If the diarrhoea has not stopped, assess and treat the young infant for diarrhoea

> LOW WEIGHT FOR AGE

On day 14 (or on day 7 if the infant is receiving no breastmilk):

Weigh the young infant and determine if the infant is still low weight for age Reassess feeding. Use "The Check for Feeding Problem or Low Weight for Age"

- If the infant is **no longer low weight for age,** praise the mother and encourage her to continue.
- If the infant is still low weight for age, but is feeding well, praise the mother. Ask her to have her infant weighed again within a month or
- when she returns for immunization. • If the infant is still low weight for age and still has a feeding problem, counsel the mother about the feeding problem. Ask the mother to return again in 14 days (or when she returns for immunization, if this is within 14 days). Continue to see the young infant every few weeks until the infant is feeding well and gaining weight regularly or is no longer low weight for age.

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

⇒ THRUSH

On day 3 of treatment

Reassess feeding. Use "Then Check for Feeding Problem or Low Weight for Age"

⇒ If **thrush is worse**, or the infant has problems with **attachment or suckling**, refer to hospital \Rightarrow If **thrush is the same or better,** and if infant is **feeding well,** continue half strength Gentian Violet for a total of 7 days.

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

• If the diarrhoea has stopped, tell the mother continue exclusive breastfeeding