

TREAT THE YOUNG INFANT AT CLINIC

GIVE URGENT PRE-REFERRAL TREATMENT TO THE YOUNG INFANT WHO HAS CRITICAL ILLNESS AND REFER URGENTLY TO HOSPITAL

⇒ **Give First Doses of IM Gentamicin and IM Ampicillin to Young Infants with CRITICAL ILLNESS and REFER URGENTLY TO HOSPITAL**

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.

- **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.

WEIGHT	GENTAMICIN (Strength 20 mg/ml)		AMPICILLIN (Strength 250 mg/1.5ml)	
	Amount Per Dose		Amount Per Dose	
1.5 to 2.4 kg	0.4 ml	0.8 ml	1.2 ml	1.5 ml
2.5 to 3.9 kg	0.8 ml	1.2 ml	1.2 ml	1.5 ml
4.0 to 5.9 kg	1.2 ml	1.2 ml	1.2 ml	1.5 ml

IF THE YOUNG INFANT IS CLASSIFIED AS POSSIBLE SERIOUS BACTERIAL INFECTION OR VERY SEVERE DISEASE, GIVE PRE-REFERRAL TREATMENTS AND REFER URGENTLY

1. Give First Dose of Intramuscular Gentamicin and Oral Amoxicillin

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 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.

Amoxicillin: Desired range is 75 to 100 mg/kg/day divided into 2 oral doses. Give the first dose pre-referral if young infant can swallow.

WEIGHT	Gentamicin (strength 20 mg/ml) / dose	Amoxicillin Dispersible tablet (250 mg) / dose	Amoxicillin Dispersible tablet (125 mg) / dose	Amoxicillin Syrup (125 mg in 5 ml) / dose
1.5 to 2.4 kg	0.4 ml	½ tablet	1 tablet	5 ml
2.5 to 3.9 kg	0.8 ml	½ tablet	1 tablet	5 ml
4.0 to 5.9 kg	1.2 ml	1 tablet	2 tablets	10 ml

2. Treat the Young Infant to Prevent Low Blood Sugar

If the young infant is able to breastfeed:

Ask the mother to breastfeed the young infant.

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

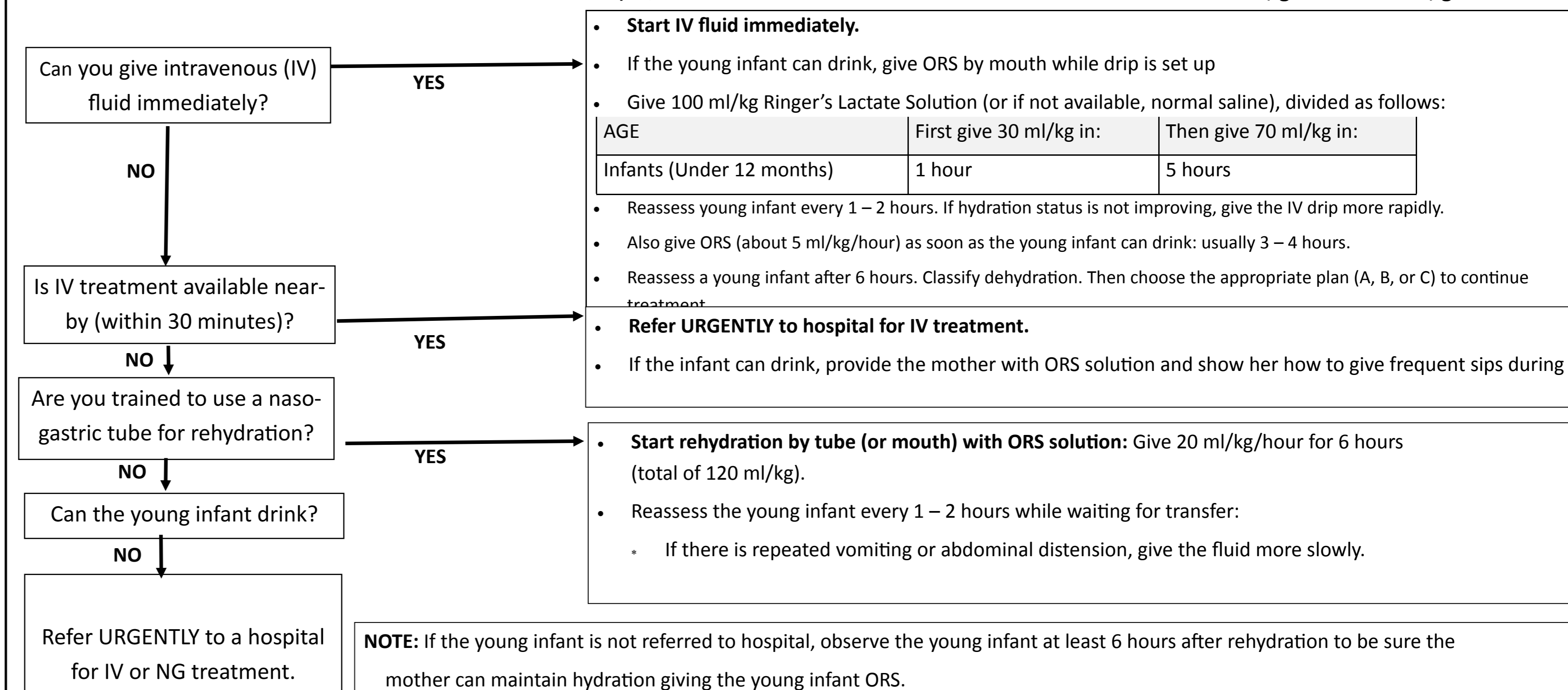
Give 20–25 ml (10 ml/kg) expressed breastmilk before departure. If not possible to give expressed breastmilk, give 20–25 ml (10 ml/kg) sugar water.

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

If the young infant is not able to swallow:

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

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.



3. Teach the Young 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, especially in a cold environment.

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.

4. Refer Urgently

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.

Advise mother to continue breastfeeding.

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

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 5–7.5 mg/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 mg/ml.

WEIGHT	GENTAMICIN (Strength 20 mg/ml)		
	Amount per dose		
1.5 to 2.4 kg	0.4 ml	0.8 ml	1.2 ml
2.5 to 3.9 kg	0.8 ml	1.2 ml	1.2 ml
4.0 to 5.9 kg	1.2 ml	1.2 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.

WEIGHT	AMOXICILLIN (Desired range is 75 to 100 mg/kg/day divided into 2 daily oral doses) Give Twice Daily for 7 Days		
	Dispersible tablet (250 mg) Per Dose	Dispersible tablet (125 mg) Per Dose	Syrup (125 mg in 5 ml) 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.

- 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.**

WEIGHT	AMOXICILLIN Desired range is 75 to 100 mg/kg/day divided into 2 daily oral doses. Give Twice Daily		
	Dispersible tablet (250 mg) Per Dose	Dispersible tablet (125 mg) Per Dose	Syrup (125 mg in 5 ml) 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

⇒ **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%)	GENTIAN VIOLET HALF STRENGTH (0.25%)
To Treat Skin Pustules or Umbilical Infection The mother should do the treatment twice daily for 5 days <ul style="list-style-type: none"> • Wash hands • Gently wash off pus and crusts with soap and water • Dry the area • Paint the skin or umbilicus/cord with full strength Gentian Violet (0.5%) • Wash hands again 	To Treat Thrush (ulcers or white patches in mouth) The mother should do the treatment 4 times daily for 7 days <ul style="list-style-type: none"> • Wash hands • Paint the mouth with half strength Gentian Violet (0.25%) using a soft clean cloth wrapped around the finger • Wash the hands again

⇒ **Advise the Mother to Give Homecare for the Young Infant**

1. 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		ADVISE CARETAKER WHEN TO RETURN IMMEDIATELY
If the infant has:	Return for first follow up on	
• JAUNDICE	Day 2 of treatment	⇒ Breastfeeding poorly ⇒ Reduced activity ⇒ Becomes sicker ⇒ Develops a fever ⇒ Feels unusually cold ⇒ Develops fast breathing ⇒ Develops difficult breathing ⇒ Palms or soles appear yellow
• DIARRHOEA	Day 3	
• FEEDING PROBLEM		
• THRUSH		
• LOCAL INFECTION		
• PNEUMONIA	Day 4	
• SEVERE PNEUMONIA (where referral is refused or not possible)		
• LOW WEIGHT FOR AGE in infant receiving no breastmilk	Day 7	
• LOW WEIGHT FOR AGE in breastfed infant	Day 14	

⇒ **Teach Correct Positioning and Attachment for Breastfeeding**

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
 - ◊ 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.
 - ◊ Cover the infant with mother's clothes (and an additional warm blanket in cold weather)

⇒ **Teach the Mother How to Express Breastmilk**

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 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.

- 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. 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:

- ◊ Infant **becomes worse** after treatment is started or
- ◊ 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 amoxicillin twice daily until all the tablets are finished.

⇒ **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.

• **Refer** young infant if:

- ◊ 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
- If the diarrhoea has stopped, tell the mother continue exclusive breastfeeding

⇒ **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

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

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

⇒ If **thrush is the same or better**, and if infant is **feeding well**, continue half strength Gentian Violet for a total of 7 days.