

Ministry of Health  
Department of  
Maternal and Infant Health  
Honduras



**COMPREHENSIVE APPROACH  
TO DISEASES OF INFANCY  
AND CHILDHOOD**

**PROCEDURE MANUAL**



**BASICS**



COOPERACION ESPAÑOLA

# TO EVALUATE AND CLASSIFY CHILDREN FROM 2 MONTHS TO 4 YEARS OF AGE

## EVALUATE

## CLASSIFY

## DETERMINE TREATMENT

ASK THE MOTHER WHAT PROBLEMS THE CHILD HAS

- Check if it is the first appointment for that problem or if it is a follow-up appointment
- In the case of a follow-up appointment, follow the instructions on WHEN TO RETURN
- In the case of a first appointment, examine the child in the following manner:

VERIFY IF THERE ARE GENERAL SIGNS OF DANGER	SIGNS	CLASSIFY AS	TREATMENT
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p><b>Ask if the child</b> Can the child drink or nurse? Does s/he vomit everything? During this illness has s/he had convulsions?</p> </div> <div style="width: 45%;"> <p><b>Observe</b> Check for lethargy or unconsciousness</p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Decide if there is a very grave illness</p> </div>	<p>Unable to drink or nurse, or Vomits everything, or Seizures, or Lethargic/unconscious</p>	<p><b>VERY GRAVE ILLNESS</b></p>	<p>(Urgent treatments to be given before referral of the case are shown in italics)</p> <div style="background-color: #f8d7da; padding: 5px;"> <p><i>Complete the exam immediately</i>                      &gt;Give the 1<sup>st</sup> dose of an appropriate antibiotic. Give other urgent treatment                      &gt;Refer <b>URGENTLY</b> to the hospital</p> </div>
<p>*Exception: If the signs of danger are due to serious dehydration and can be solved by the administration of Plan C, referral is not required.</p>			

### NEXT, ASK ABOUT OTHER CHIEF SYMPTOMS:

Does the child have cough or difficulty breathing?

**IF THE ANSWER IS YES, ASK**

**OBSERVE, LISTEN**

- Count the respirations for a child minute
- Look for subcostal retraction
- Listen for stridor
- Listen for wheezes

They must be quiet

How long has it been?

\*If the child has an episode of wheezing, treat it first and then classify the cough or difficulty breathing

**If the child is**  
2-11 mos  
12 mos-4 yrs

**Rapid breathing is**  
50 or more/min  
40 or more/min

**Classify COUGH OR DIFFICULTY BREATHING**

>Any sign of danger or >subcostal retraction or >stridor at rest	<b>SERIOUS PNEUMONIA OR VERY SERIOUS ILLNESS</b>	>Give the 1 <sup>st</sup> dose of an appropriate antibiotic >treat wheezing if present >Refer <b>URGENTLY</b> to the hospital
Rapid breathing	<b>PNEUMONIA</b>	>Give appropriate antibiotic >Instruct mother when to return immediately >Arrange for follow up in 2 days >Continue treating persistent wheezing
No sign of pneumonia or serious illness	<b>S/he doesn't have pneumonia: cough or cold</b>	>If child has cough for more than 30 days, refer for examination >treat sore throat and alleviate cough with cough syrup >Instruct mother when she should return immediately >If not improved, arrange follow up consultation in 5 days >Continue to treat persistent wheezing

### Does the child have diarrhea?

**IF THE ANSWER IS YES, ASK:**

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

**OBSERVE AND PALPATE:**

- Determine the general condition of the child. Is s/he:
  - Lethargic or unconscious?
  - Restless or irritable?
- Determine if s/he has sunken eyes
- Offer fluids to the child
  - Does s/he drink poorly or is s/he unable to drink?
  - Does s/he drink avidly, with thirst?
- Skin fold sign:
  - The skin returns to its previous state
  - Very slowly? (more than 2 sec)
  - Slowly

Classify the DIARRHEA

DEHYDRATION

Two of the following signs: -Lethargic or unconscious -Sunken eyes -Drinks poorly or not at all -Skin tenting: skin returns very slowly to its previous state	<b>GRAVE DEHYDRATION</b>	If the child has no other grave condition: > <b>Give fluids for grave dehydration (Plan C)</b> If it is not possible to carry out Plan C or if the child has some other grave condition: > <b>Refer URGENTLY to the hospital with mother giving frequent sips of ORS during the trip. Advise the mother to continue nursing.</b> If the child is older than 2 years and if there is cholera in the area: >give antibiotic for cholera and report it immediately
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Two of the following signs: -restless, irritable -sunken eyes -drinks avidly with thirst -Skin tenting: skin returns slowly to its previous state	<b>DEHYDRATION</b>	> <i>If the child has a serious condition</i> <b>-Refer urgently to the hospital with mother giving frequent sips of ORS during the trip. Advise mother to continue nursing</b>  >Give fluids and food (Plan B)  >Once rehydrated, follow the instructions for DOES NOT HAVE DEHYDRATION
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No signs sufficient to classify the case as dehydration or grave dehydration	<b>NO DEHYDRATION</b>	>Give food and fluid to treat diarrhea at home (Plan A) >Instruct mother when to return immediately >If diarrhea persists, make a new appointment in 5 days and reevaluate
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Diarrhea for 2 wks or more

-There is dehydration	<b>PERSISTENT GRAVE DIARRHEA</b>	> <i>Treat dehydration before referring the child, unless there is another grave condition</i> > <i>Refer to the hospital</i>
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-There is no dehydration	<b>PERSISTENT DIARRHEA</b>	>Teach mother how to feed a child with PERSISTENT DIARRHEA >Follow up after 5 days.
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Blood in the stool

-Blood in the stool	<b>DYSENTERY</b>	> <i>Give 5 days' treatment with an oral antibiotic recommended in your area for shigella</i> Follow up after 2 days
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## Does the child have an ear problem?

### IF THE ANSWER IS YES, ASK:

-Does the ear ache?  
-Is there drainage from the ear?  
-Check for drainage from the ear?  
If yes, for how long?

### OBSERVE AND PALPATE:

-Check for drainage from the ear  
-Feel for tender swelling behind the ear

To classify  
EAR PROBLEM

-Tender swelling behind the ear	<b>MASTOIDITIS</b>	>Give 1 <sup>st</sup> dose of an appropriate antibiotic >Give 1 <sup>st</sup> dose of acetaminophen for pain >Refer <b>URGENTLY</b> to the hospital
-Visible ear drainage and information that it began less than 14 days ago or -Pain in the ear	<b>ACUTE OTITIS MEDIA</b>	> <b>Give an antibiotic for 10 days</b> >Give acetaminophen for pain >Dry the ear with absorbent wicks if there is drainage >Indicate when to return immediately
-Visible ear drainage and information that it began more than 14 days ago	<b>CHRONIC OTITIS MEDIA</b>	>Give an antibiotic for 14 days if it has not already been treated >Dry the ear with absorbent wicks if there is drainage >Arrange for follow up after 5 days >Instruct when to return immediately
-No earache and no evidence of drainage from the ear	<b>NO OTITIS MEDIA</b>	>No additional treatment

## Does the child have a throat problem?

### IF THE ANSWER IS YES, ASK:

-Does s/he have a sore throat

### OBSERVE, PALPATE:

-Feel for enlarged, tender neck glands  
-Check the throat for  
\*exudates (pus)  
\*redness

Classify the  
**THROAT PROBLEM**

*Swollen, painful lymph nodes in neck or *White exudates (pus) in the throat	<b>STREPTOCOCCAL PHARYNGITIS</b>	> <b>Give a dose of benzyl penicillin</b> >Give a conditioner to soothe sore throat >Give acetaminophen for pain >Instruct mother when to return immediately
*Throat inflammation and/or *Sore throat *Absence of swollen, painful lymph nodes in the neck and of white exudates (pus) in the throat	<b>VIRAL PHARYNGITIS</b>	>Give a conditioner to soothe sore throat >Give acetaminophen for pain >Counsel mother about caring for the child at home
*No throat inflammation, absence of swollen, painful cervical lymph nodes, or white exudates (pus) in the throat *No sore throat	<b>S/HE DOES NOT HAVE PHARYNGITIS</b>	>Give a conditioner to soothe throat irritation

# Does the child have a fever?

(as determined by history, if s/he feels hot to the touch, or if s/he has an axillary temperature of 37.5 C or more)

## IF THE RESPONSE IS AFFIRMATIVE:

Find out if s/he comes from or has been in a malaria risk zone in the last 15 days

### NEXT, ASK

- \* How long has there been fever?
- \* If more than 7 days, has s/he had fever every day?

### OBSERVE

- \* Check for stiff or rigid neck.

Classify the FEVER

Check for signs of bleeding.  
\* Petechiae or ecchymoses or bleeding gums

Classify SIGNS OF BLEEDING

Check if s/he has a generalized skin rash:  
\* Generalized non-vesicular maculopapular eruption  
Check for the presence of:  
\* One of the following signs: cough, runny nose, or enflamed eyes.

Classify the GENERAL SKIN ERUPTION

*Any general sign of danger or *nuchal rigidity (neck stiffness)	<b>VERY GRAVE FEBRILE ILLNESS</b>	>Give the 1 <sup>st</sup> dose of appropriate antibiotic >Treat the child to prevent hypoglycemia >Give a dose of acetaminophen at the Health Clinic for high fever (38.5 C or more) >Refer <i>URGENTLY</i> to the hospital
* Fever in a malaria zone.	<b>MALARIA</b>	>Treat with an oral antimalarial* >Give a dose of acetaminophen at the Health Service for high fever (38.5 C or more) >Obtain a specimen >Instruct the mother when to return immediately >Arrange follow up after 2 days if fever persists
* Fever	<b>FEBRILE ILLNESS</b>	>At the Health Service give a dose of acetaminophen for high fever (38.5 C or more) >Instruct mother when she should return immediately >If s/he has had fever every day for more than 7 days, refer for examination >Investigate and determine the causes of fever and give specific treatment >Arrange for follow up after 2 days if fever persists
* Petechiae or * Ecchymoses or * Bleeding Gums	<b>SUSPECTED HEMORRHAGIC DENGUE FEVER</b>	> Refer <i>URGENTLY</i> to the hospital.
*Generalized maculopapular rash and *Cough, runny nose and inflamed eyes	<b>SUSPECTED MEASLES</b>	>Give Vitamin A >Report by the fastest means to the corresponding level >Immediate investigation: -Fill out an epidemiologic report -Enact control measures >Take blood specimens >Instruct mother when to return immediately >Arrange follow up after 2 days
*Generalized maculopapular rash *S/he does not have cough, runny nose nor inflamed eyes	<b>OTHER FEBRILE ERUPTIVE ILLNESS</b>	>Give symptomatic treatment >Instruct mother when she should return immediately >Report by the fastest means to the corresponding level >Take blood specimens >Immediate investigation: -Fill out an epidemiologic report -Enact control measures

## NEXT, CHECK FOR THE PRESENCE OF ANEMIA

### OBSERVE:

- \*Determine if there is palmar pallor
  - Intense palmar pallor?
  - Mild palmar pallor?

### Identify the ANEMIA

*Intense palmar pallor	<b>SEVERE ANEMIA</b>	>Refer <b>URGENTLY to the hospital</b>
*Mild palmar pallor	<b>MILD ANEMIA</b>	<ul style="list-style-type: none"> <li>&gt;Give supplemental (therapeutic) iron therapy</li> <li>&gt;Evaluate the child's nutrition and instruct the mother about nutrition, as indicated in the section about NUTRITION in the table REACHING AGREEMENTS WITH THE MOTHER</li> <li>&gt;Instruct mother about when to return immediately</li> <li>&gt;Follow up after 30 days</li> </ul>
*No palmar pallor	<b>NO ANEMIA</b>	>Give iron for preventive therapy

## NEXT, CHECK FOR GROWTH PROBLEMS

### OBSERVE AND PALPATE:

- \*to determine if there is visible emaciation
- \*to check for edema in both feet

- \*to determine inadequate weight gain
  - weight loss
  - no weight gain
  - insufficient weight gain

### Classification of GROWTH

*Visible emaciation or *Edema in both feet	<b>INADEQUATE GROWTH WITH GRAVE NUTRITIONAL DAMAGE</b>	<ul style="list-style-type: none"> <li>&gt;Give vitamin A</li> <li>&gt;Refer <b>URGENTLY to the hospital</b></li> </ul>
*Weight loss or *No weight gain or *Insufficient weight gain	<b>INADEQUATE GROWTH</b>	<ul style="list-style-type: none"> <li>&gt;Give vitamin A if appropriate</li> <li>&gt;Register in the LINVI</li> <li>&gt;Evaluate the feeding of the child and come to agreement with mother about feeding, as indicated in the table REACHING AGREEMENT WITH THE MOTHER OR ACCOMPANYING ADULT</li> <li>&gt;If feeding is a problem, arrange a follow up consultation after 5 days</li> <li>&gt;If feeding is not a problem, arrange for follow up in 15 days</li> <li>&gt;Give an adequate antiparasitic</li> </ul>
*Adequate weight gain	<b>ADEQUATE GROWTH</b>	<ul style="list-style-type: none"> <li>&gt;Give vitamin A if appropriate</li> <li>&gt;If the child is less than 2 years of age, evaluate feeding and reach agreement with mother about feeding, as indicated in the section on FEEDINGS in the table REACHING AGREEMENT WITH THE MOTHER OR ACCOMPANYING ADULT</li> <li>&gt;If feeding is a problem, arrange follow up consultation after 5 days</li> <li>&gt;Give an adequate antiparasitic if appropriate</li> <li>&gt;If there is no problem with feeding, arrange for routine consultation according to the table WHEN TO RETURN</li> <li>&gt;Register in the LINVI</li> </ul>

➤ **One single determination of weight: Do not classify and call for control in 30 days; treat as Inadequate Growth**

**NEXT, DETERMINE IF ALTERED DEVELOPMENT IS PRESENT  
(Only healthy children under 2 years of age and in good general condition)\***

(\* ) If the child presents with a serious condition or her/his general state of health is compromised. (Red or yellow line, with the exception of inadequate growth or mild anemia) postpone the developmental evaluation until the next appointment.

**DISABILITY AND/OR DEVELOPMENTAL ABNORMALITY**

- Determine:
  - There is basic disabling pathology
  - Absence of one or more achievements in the same behavior or area

*Classify the  
DEVELOPMENT*

- Evaluate development using the chart "Schematic Evolution of Developmental Behaviors"

*If there is basic disabling pathology and *Absence of one or more achievements in the same behavior or area	<b>DISABILITY</b>	>Send to a specialized center (Telethon) >If the referral can't be achieved immediately, teach the mother techniques of early stimulation, using the guides for stimulating development " <b>LET'S LEARN TOGETHER</b> " taking into account adaptations according to the pathology, using the guides for stimulating development
*Absence of one or more achievements in the same behavior or area	<b>PROBABLE ALTERATION OF DEVELOPMENT</b>	>Evaluate the profundity with the EDIM scale >Teach the mother techniques of early stimulation using the guides for stimulating development " <b>LET'S LEARN TOGETHER</b> " >Arrange follow up in 30 days
*All expected achievements for her/his age are present	<b>THERE IS NO ALTERATION OF DEVELOPMENT</b>	>Teach the mother (using pamphlets) about the stimulus and special care a child should receive according to her/his developmental age >Give a pamphlet corresponding to an age greater than her/his developmental age

**NEXT, CHECK THE CHILD'S VACCINATION HISTORY AND GIVE THE OUTSTANDING VACCINES ACCORDING TO HER/HIS AGE**

	<b>AGE</b>	Birth	2 mos	4 mos	6 mos*	12 mos	18 mos	2-4 yrs	5-6 yrs
<b>TIMETABLE FOR VACCINATION</b>	<b>VACCINE</b>	BCG-Sabin	Sabin-1 DPT/HB/Hib-1	Sabin-2 DPT+HB+Hib-2	Sabin-3 DPT+HB+Hib-3	MMR	DPT Booster	MR In large-scale campaigns	DPT Booster

Vitamin A: Every 6 months, from the age of 6 months

**EVALUATE OTHER PROBLEMS**

**TREATMENT SELECTION AND ADMINISTRATION**  
**ADMINISTER THE TREATMENTS AND FOLLOW THE PROCEDURES**  
**INDICATED IN THE CHART OF *EVALUATE, CLASSIFY, AND DETERMINE THE TREATMENT***

**TEACH THE MOTHER TO ADMINISTER THE MEDICINES ORALLY IN HER HOME**

Following the instructions that allow for continuation for all of the oral medicines that should be administered at home. Follow also the instructions in the dosage square for each one of the medicines.

- Determine the medicines and the appropriate dosages for the age and weight of the boy/girl.
- Explain to the mother the reason why she should administer the medicines to the child.
- Show her how to measure the dosage.
- Observe the mother while she is practicing to measure the dosage.
- Ask the mother to administer the first dosage to the child.
- Explain specifically how to administer the medicine, how to label it, and how to put the label on the container (if necessary)
- If she needs to give more than one medicine, gather, count and put each medicine in a container separately (if necessary)
- Explain that all of pills, capsules, and syrups should continue being administered until the treatment has finished, even if the child gets better.
- Assure that the mother has understood all of the procedures before she goes to the Health Center.
- Assure that the medicines are in a fresh space and out of the reach of children.
- Inform about whatever secondary effects can occur from taking the medicines

- Give an Appropriate Oral Antibiotic

- For Pneumonia\*, Mastoiditis, Acute Otitis Media, or Very Severe Sickness:

\*For pneumonia, give an oral antibiotic for 7 days.

\*For the acute otitis media give an oral antibiotic for 10 days, and the chronic not treated =14 days.

\*For the pneumonia, if an oral antibiotic is not available, give an intramuscular antibiotic (procaine penicillin).

\*For a very severe sickness, use only one dosage.

**ANTIBIOTIC: AMOXICILIN, TRIMETHOPRIM-SULFAMETHOXAZOLE**

AGE OR WEIGHT	<b>TRIMETHOPRIM-SULFAMETHOXAZOLE</b> Give 2 times a day		<b>AMOXICILIN</b> Give every 8 hours
	<b>PEDIATRIC TABLET</b> (20mg of trimethoprim plus 100 mg of sulfamethoxazole)	<b>SYRUP</b> 40mg trimethoprim plus 200 mg sulfamethoxazol/5 mg	<b>SYRUP</b> (250 mg/5 ml)
2 to 11 months (4-<10 kg)	2	5 ml	3 ml
1 to 4 years (10-19 kg)	3	7.5 ml	5 ml

- For Dysentery:

Give an antibiotic against Shigella for 5 days.

ANTIBIOTIC OF FIRST CHOICE AGAINST SHIGELLA: Trimethoprim-Sulfamethoxazole

ANTIBIOTIC OF SECOND CHOICE AGAINST SHINGELLA: Ampicillin

ANTIBIOTIC OF THIRD CHOICE: Nalidixic Acid

AGE OR WEIGHT	<b>TRIMETHOPRIM- SULFAMETHOXAZOLE</b> Give 2 times a day for 5 days	<b>AMPICILLIN</b> (250 mg/5ml) Give 4 times a day for 5 days	<b>NALIDIXIC ACID</b> (250 mg tablet) Give 4 times a day for 5 days
2 to 3 months (4 - <6 kg)	See the dosage on the chart above.	2.5 ml	¼ tablet
4 to 11 months (6-<10 kg)		5 ml	½ tablet
1 to 4 years (10-19 kg)		7.5 ml	1 tablet

- For Cholera:

Give an antibiotic against Cholera for 3 days.

ANTIBIOTIC OF FIRST CHOICE AGAINST CHOLERA: Trimethoprim-Sulfamethoxazole

ANTIBIOTIC OF SECOND CHOICE: Tetracycline

ANTIBIOTIC OF THIRD CHOICE: Erythromycin

AGE OR WEIGHT	<b>TRIMETHOPRIM- SULFAMETHOXAZOLE</b> Give 2 times a day for 3days	<b>TETRACYCLINE</b> (250 mg tablets) Give 4 tablets a day for 3 days	<b>ERYTHROMYCIN</b> (syrup 200mg/5ml) Give 4 times a day for 3 days
2 to 3 months (4 - <6 kg)	See the dosage on the chart above		1.5 ml
4 to 11 months (6-<10 kg)		½ tablet	2.5 ml
1 to 4 years (10-19 kg)		1 tablet	5 ml

## TEACH MOTHER TO GIVE

### MEDICINES ORALLY AT HOME

Follow instructions in the figures below for all oral medications that should be given at home. Also follow instructions from the dosage chart for each medication.

#### ➤ **To Give an Oral Antimalarial**

##### ➤ IF CHLOROQUINE IS GIVEN:

\*Explain to mother that she should be closely attentive to the child for 30 minutes after giving a dose of chloroquine. If the child vomits within 30 minutes of the dose, mother should repeat the dosage and return to the Health Service to get more pills.

\*Explain that itching is a possible side effect of the medicine, but it is not dangerous

#### \*RADICAL TREATMENT FOR VIVAX AND MIXED

AGE AND WEIGHT	Chloroquine 150mg base for/3 days			Primaquine (Give for 5 days) Infants = 5mg
	Day 1	Day 2	Day 3	
< 6 mos	¼ tab	¼ tab	¼ tab	
6-11 mos (6-10 kg)	½ tab (75mg)	½ tab (75mg)	½ tab (75mg)	½ tab (2.5mg daily/5 days)
1-2 ys (10-14 kg)	1 tab (150mg)	½ tab (75mg)	½ tab (75mg)	½ tab (2.5mg daily/5 days)
3-4 years (10-<19 kg)	1 tab (150mg)	1 tab (150mg)	1 tab (150mg)	1 tab (5mg daily/5 days)

\*In case of failure, treat with chloroquine for 3 days and primaquine for 14 days

#### >To give acetaminophen for fever >38.5 C, for earache, for sore throat or for mastoiditis

\*Give acetaminophen every 6 hours until fever, sore throat or earache resolve(s).

ACETAMINOPHEN		
AGE OR WEIGHT	TABLET (100MG)	SYRUP (120/5ml)
2-3 mos (4-6 kg)	½	2.5 ml
4-35 mos (6-<14 kg)	1	5 ml
36-59 mos (14-19 kg)	1-1/2	7.5 ml

#### >To give an antiparasitic

- If the child is >2 yrs, with suspected ASCARIS infestation, first give Piperazine, and a week later give Mebendazole
- If the child is less than 2 years, give only Piperazine

#### ➤ **To give Piperazine**

AGE	PIPERAZINE (100mg/kg) One dose
6-23 mos	5-10 ml (1-2 teaspoons)
24-35 mos	10-15 ml (2-3 teaspoons)
36-60 mos	15-20 ml (3-4 teaspoons)

#### ➤ **To give Mebendazole**

- Give 500mg of Mebendazole as a single dose in the clinic, if:

\*the child is more than 2 yrs old: and/or

\*the child has not received a dose in the last 6 mos

**TEACH MOTHER TO GIVE ORAL MEDICATIONS AT HOME**  
**SCHEDULE FOR VITAMIN A SUPPLEMENT**

CONDITION	AGE (in months)	SUPPLEMENTARY DOSE every 6 mos (IU)	TREATMENT DOSAGES**	
Adequate and inadequate growth	6 – 11	100,000*		
	More than 11	200,000		
Suspicion of measles	6 – 11	100,000	100,000 at 24 hs	
	More than 11	200,000	200,000 at 24 hs	
Inadequate growth with severe nutritional damage	6-11	100,000	100,000 at 24 hs	100,000 at 15 days
	More than 11	200,000	200,000 at 24 hs	200,000 at 15 days
Woman w/in 30 days postpartum	All	200,000 (as a single dose)		

\*The following dose should be 200,000 IU

**Note: 200,000 IU gel caps:** Always check the appearance of the gel cap

\*\*If s/he has received the supplementary dose for his/her age, begin treatment immediately

**PREVENTIVE AND RECUPERATIVE THERAPY WITH IRON**

**Bottle of iron sulfate 125mg/ml. Give a maximum of 2 bottles per visit**

Age	PREVENTIVE THERAPY		RECUPERATIVE THERAPY	
	Droppers/day	Duration	Droppers/day	Duration
4-11 mos	½	6 mos (3 bottles)	2	3 mos (5 bottles)
12-24 mos	1	3 mos (4 bottles)	2	3 mos (5 bottles)
25-60 mos	1-1/2	3 mos (5 bottles)	3	3 mos (9 bottles)

>If the child is premature or weighs less than 2.5 kg, start supplementation at 30 days of age, giving 1 drop per kg weight

>Each dropper = 20 drops

## TEACH THE MOTHER HOW TO TREAT LOCALIZED INFECTIONS

- Explain to the mother what the treatment consists of and why it should be given
- Explain the steps of the treatment
- Observe the mother while she gives the 1<sup>st</sup> treatment in the Health Center (except conditioners for cough or sore throat)
- Instruct the mother how many treatments should be given at home
- Before the mother leaves the Health Center, be sure she has understood all procedures

- ***Dry the ear with an absorbent wick***

>Dry the ear at least three times a day

- \*Twist an absorbent cloth, forming a wick
- \*Place the absorbent wick in the child's ear
- \*Remove the wick when it is soaked
- \*With a new, clean wick, repeat the procedure until the ear is dry

- **To ease sore throat and to relieve cough with a conditioner**

>It is recommended

- \*Mother's milk for those under 6 months who have been exclusively breast fed
- \*Apple tea
- \*Lemon tea
- \*Eucalyptus tea

>These are not recommended

- \*Oils
- \*Antitussives (cough syrups)
- \*Expectorants

### **ADMINISTER THE FOLLOWING TREATMENTS AT THE HEALTH CENTER**

- Explain to the mother the reason for which the treatment is given
- Determine the appropriate dosage according to the child's weight (or her/his age)
- Use a sterilized syringe and needle. Measure the dosage exactly.
- Give the medication by intramuscular injection.
- If it is not possible to refer the child, follow the instructions below.

### **Administer an antibiotic by the intramuscular route**

➤ ***Give Benzathine Penicillin for Streptococcal Pharyngotonsillitis***

- > Give a single dose of 600,000 I U
- > Dilute the 1,200,000 IU vial with 3cc of distilled water

***Note: If there is history of penicillin allergy, give Erythromycin according to the presentation and dosage in the chart GIVE AN APPROPRIATE ORAL ANTIBIOTIC***

➤ ***Give Procaine Penicillin***

**IF YOU DO NOT HAVE AN ORAL ANTIBIOTIC:**

>Advise procaine penicillin every 24 hours for 7 days to treat pneumonia

**FOR CHILDREN REFERRED TO ANOTHER SERVICE WHO CANNOT TAKE AN ORAL ANTIBIOTIC:**

>Give the 1<sup>st</sup> dose of procaine penicillin and refer the child URGENTLY to the hospital

**IF IT IS NOT POSSIBLE TO REFER THE CHILD:**

>Continue procaine penicillin every 12 hours until referral is possible or complete 7 days of treatment

AGE OR WEIGHT	<b>PROCAINE PENICILLIN</b> (50,000 IU/kg/dose) Add 8 cc of distilled water to the 4,000,000 IU vial
2 - 11 mos (4 - <10 kg)	400,00 IU (1 ml)
1 - 4 years (10 - 19 kg)	800,000 IU (2 ml)

➤ **TREAT WHEEZING**

**CHILDREN WITH HISTORY OF WHEEZING:**

>With general signs of danger\_\_\_Give a fast-acting inhaled bronchodilator and refer

**CHILDREN WITH HISORY OF WHEEZING AND/OR ASTHMA:**

>1 nebulization every 20 min x 3, or 3 puffs every 10 min x 5

**Improvement:**  
wheezing disappears

Wait 1 hour



Better → yes

\*Go to the chart:

\*Classify cough or breathing difficulty

\*Oral Salbutamol or

\*2 puffs inhaled salbutamol every 8 hrs  
for 2 weeks (management of obstructive problem)



no

3 puffs every 20 min x 3 or  
1 nebulization every 20 min up to 3 times

\*Oral Prednisone

\*Hydrocortisone IM/IV

Observe for 3 hours

\*Follow-up

Better → yes

\*Classify cough and breathing difficulty

\*Salbutamol orally or 2 puffs inhaled every 8 hours

\*Prednisone (1mg/kg) every AM for 3-5 days



no

**No improvement:**  
wheezing persists

>Refer urgently to the hospital  
>Continue treatment of wheezing

**Treat the child to prevent hypoglycemia**

**>If the child is able to breast feed:**

Tell the mother to nurse the child

**>If the child is unable to breast feed but is able to drink:**

Give her/him extracted milk or other milk in small frequent sips.

If this is not possible, give sugar water.

Give the child 30-50 ml sugar water before s/he leaves.

**To prepare sugar water: dissolve 4 level teaspoons of sugar (20g) in a cup with 200 ml of drinking water.**

**>If the child cannot drink:**

Give 50 ml of milk or sugar water through a nasogastric tube.

\*Hydrocortisone IM or IV  
10mg/kg as initial dose  
Then 5mg/kg every 6 hours

FAST-ACTING BRONCHODILATOR		ORAL BRONCHODILATOR				
<p><b>SALBUTAMOL NEBULIZATIONS</b> 0.03ml/kg/dose (0.3-0.5ml) + 2ml of distilled water + 2ml normal saline</p> <p>Give a 15 min treatment every 20 min up to 3 times</p>	<p><b>SALBUTAMOL INHALER</b></p> <p>Give 3 puffs every 10 minutes x 5 doses</p>	<p><b>ORAL SALBUTAMOL</b> (0.1mg/kg/dose) every 8 hours x 2 wks</p>		<p><b>ORAL THEOPHYLLINE</b> (5mg/kg/dose) every 8 hours x 1wk</p>		
		<p><b>AGE OR WEIGHT</b></p>	<p><b>TAB</b> 2mg</p>	<p><b>SYRUP</b> 2mg/5ml</p>	<p><b>SYRUP</b></p>	
		<p>2-11 mos (5-9 kg)</p>	<p>½ - 1</p>	<p>2.5 - 5 ml</p>	<p>5 -10 ml</p>	
		<p>1-4 years (10-19kg)</p>	<p>1 - 2</p>	<p>5 - 10 ml</p>	<p>10 -17 ml</p>	

## GIVE THE CHILD MORE FLUIDS FOR DIARRHEA AND CONTINUE TO FEED HER/HIM

(Check the recommendations about food on the chart REACHING AGREEMENTS WITH THE MOTHER OR ACCOMPANYING PERSON)

### ➤ Plan A: Treat Diarrhea at Home

Teach mother the three rules of treating diarrhea at home:  
Give plenty of fluids, continue to feed the child, and when to return

#### 1. GIVE PLENTY OF FLUIDS (all that the child will accept)

>GIVE THE FOLLOWING INSTRUCTIONS TO THE MOTHER:

- If the child is nursed, nurse more frequently, for a longer time and give ORS only if it becomes necessary
- If the child is not nursed, give one or more of the following liquids: ORS solution, home-made liquids (soup, rice water) and boiled water

**It is especially important to give ORS at home if:**

- During this appointment the child has received *Plan B or Plan C* treatment
- If diarrhea worsens and the child cannot return to the Health Center

**>TEACH THE MOTHER TO MIX AND ADMINISTER ORS  
GIVE 2 SACHETS OF ORS TO BE GIVEN AT HOME**

**>SHOW THE MOTHER THE QUANTITY OF LIQUID THAT SHOULD BE GIVEN TO THE CHILD AT HOME, OVER AND ABOVE WHAT IS GIVEN CUSTOMARILY**

under than 2 years	50-100 ml after each liquid stool
over 2 years	100-200 ml after each liquid stool

**Give mother the following instructions:**

- Administer small frequent sips of fluid using a cup or spoon
- If the child vomits, wait 10 minutes and then continue, but more slowly
- *Continue giving plenty of fluids until diarrhea stops.*

Consult the chart

#### 2. CONTINUE TO FEED THE CHILD

#### 3. WHEN TO RETURN

**REACH AGREEMENTS  
WITH MOTHER OR  
ACCOMPANYING ADULT**

### ➤ Plan B: Treat dehydration with ORS

**Administer over 4 hours, at the Health Center, the recommended quantity of ORS**

#### ➤ DETERMINE THE APPROXIMATE QUANTITY OF ORS WHICH SHOULD BE GIVEN DURING THE FIRST FOUR HOURS

(50-100 ml/kg depending on the severity of dehydration. Cases of severe dehydration without shock may receive up to 150ml/kg)

AGE	<4 MOS		4-11 MOS		1-4 YEARS	
WEIGHT	3 kg	5 kg	8 kg	10 kg	15 kg	18 kg
IN ML	150-300	250-500	400-800	500-1000	750-1500	900-1800

If the weight is not known give oral saline solution continuously with a spoon or cup until the child doesn't want anymore.

\*If the child wants more ORS than the quantity indicated, give more

#### >SHOW MOTHER HOW THE ORS SOLUTION IS GIVEN

- \*Give frequent small sips of liquid from a cup
- \*If the child vomits, wait 10 minutes and then continue, but more slowly
- \*Continue breast feeding more frequently; if the child wants more ORS than the amount indicated, give her/him more

#### >AFTER FOUR HOURS:

- \*Reevaluate the child and assess the dehydration
- \*Select the appropriate plan for continuing treatment
- \*Begin to feed the child at the Health Center

#### >IF MOTHER HAS TO GO BEFORE TREATMENT IS COMPLETED

- \*Teach her how to prepare the ORS solution at home
- \*Show her the amount of ORS that should be given to finish the our hour treatment at home
- \*Give her enough packets of ORS to complete the rehydration. Also give her two packets as recommended in Plan A
- \*Explain to her the three rules for treatment at home

- 1. GIVE PLENTY OF FLUIDS**
- 2. CONTINUE TO FEED HER/HIM**
- 3 .WHEN TO RETURN**

Consult Plan A for recommended fluids and consult the chart REACHING AGREEMENT WITH MOTHER OR ACCOMPANYING ADULT

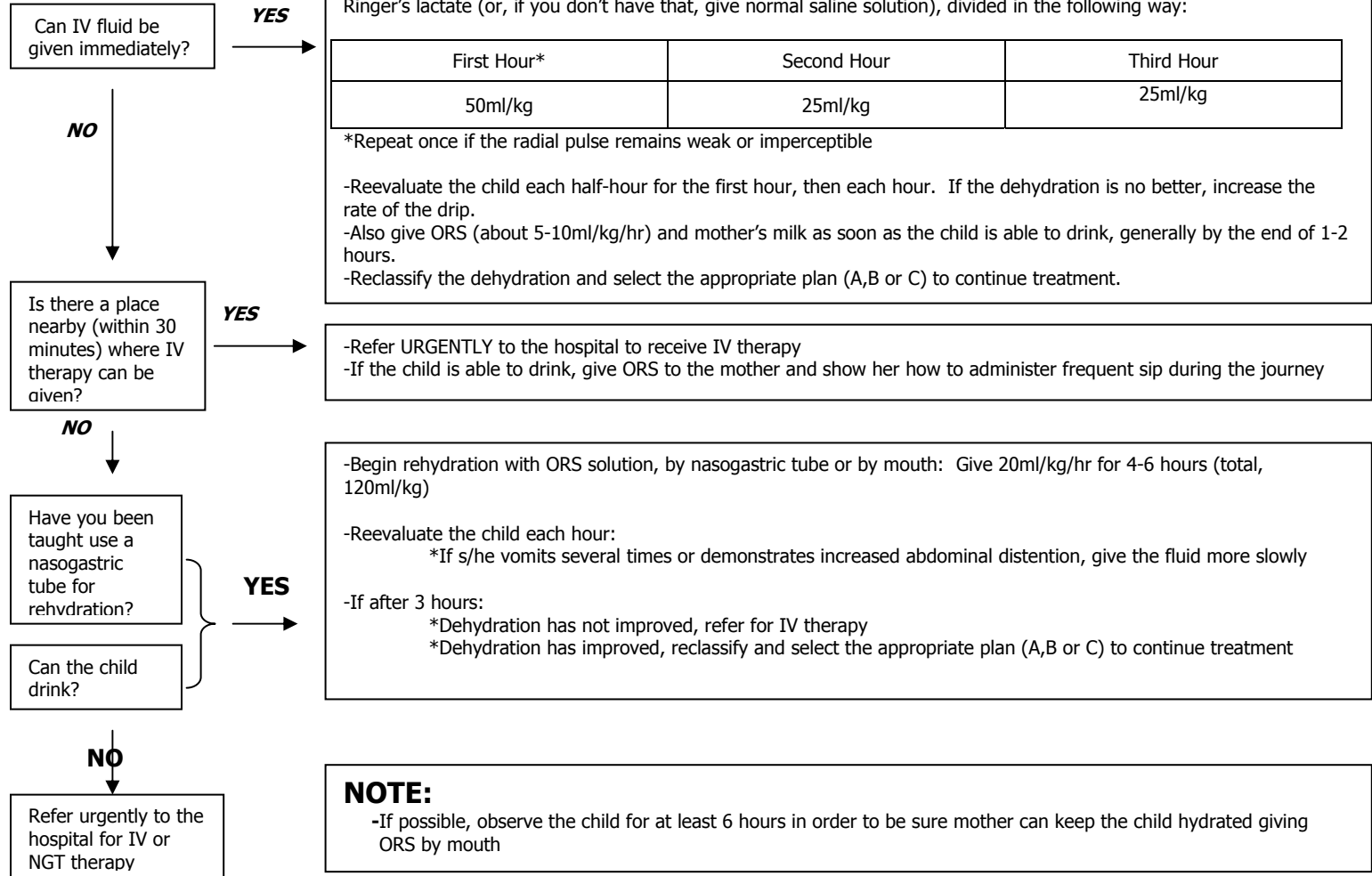
## GIVE MORE FLUIDS FOR DIARRHEA AND CONTINUE FEEDING

(Check the instructions on FOOD in the chart REACH AGREEMENTS WITH THE MOTHER OR ACCOMPANYING ADULT)

➤ **PLAN C: Treat serious dehydration quickly**

> FOLLOW THE ARROWS: IF THE ANSWER IS YES, GO TO THE RIGHT;  
IF THE ANSWER IS NO, GO DOWNWARDS

### START HERE



## ***EVALUATE NUTRITION AND REACH AGREEMENTS WITH THE MOTHER OR ACCOMPANYING ADULT***

### **Evaluate the child's nutrition**

Ask questions about the child's usual nutrition, and in particular about the nutrition at this time. Compare the mother's responses with the Recommendations for adequate nourishment of a growing child.

- ASK**
- > Do you nurse the child?
    - How many times in 24 hours?
    - For how long?
    - Do you nurse the child during the night?
  
  - > Does the child eat any other food or drink any other liquid?
    - If you give other foods, which ones?
    - How many times a day?
    - What do you use to give her/him the food?
    - What is the size of the portions?
    - Does the child receive her/his own portion?
    - Who gives the food to the child, and how?
  
  - > If s/he is or has been sick, has there been any change in the child's feeding?  
If there has been a change, what is it? Is s/he hungry?

➤ **RECOMMENDATIONS FOR FEEDING A NORMALLY GROWING CHILD**

<b>Up to 6 months of age</b>	<b>6 months to 8 months</b>	<b>9 months to 11 months</b>	<b>12 months to 24 months</b>	<b>2 years or more</b>
<p>*Give mother's milk as many times as the child wants, day and night, at least 10 times a day</p> <p>*Do not give water, nor other milk, nor other liquids or foods to your child</p>	<p>*Give mother's milk as many times as the child wants, day and night</p> <p>*Start to give complementary food</p> <p>-Give soft, broken up food such as rice, potato, custard, tortilla, beans, squash</p> <p>-Begin to give 2-3 teaspoons of a single food once a day</p> <p>-At 7-8 months, give foods up to 3 times a day after nursing, 3 spoonfuls at a time</p> <p>*Use soft, mixed food such as rice and beans, tortilla with beans</p> <p>*If you give the child soup, mix the food with a little broth</p>	<p>*Give the child all the foods served to the family, such as: tortilla, beans, rice, potato, custard or banana; Dairy products, meat, chicken, eggs and fish; Fruits: banana, mango Vegetables: squash, carrot</p> <p>*Give breast milk whenever the child wants, day or night</p> <p>*Give food in small pieces</p> <p>*Give combinations of foods such as tortilla with beans, rice and beans</p> <p>*Give three meals a day plus a snack such as fruit, tortilla or fried banana</p> <p>*Give at least 4 spoonfuls food at each meal</p>	<p>*Give the child all the foods served to the family</p> <p>*Give three meals and 2 snacks</p> <p>*At each meal give 5 spoonfuls of food plus tortilla</p> <p>*Snacks can be: custard, tortilla with beans, fried banana, fruits or any food the family has</p> <p>*Nurse whenever the child wants, day and night, and after meals</p>	<p>*Give three meals a day, the same food that is served to the family</p> <p>*Progressively increase the portions of food. S/he can eat a portion equal to half what an adult eats</p> <p>*Twice a day also give the child snacks between meals</p> <p>*Snacks can be: custard, tortilla with beans, fried banana, fruits, or any food that is available</p> <p>*If the child wishes, nurse whenever s/he wants after meals</p> <p>*Give one fried food a day</p>

## ? **DIETARY RECOMMENDATIONS FOR CHILDREN WITH PROBLEMS OF NUTRITION, GROWTH OR ILLNESS**

### **Less than 6 months**

#### **\*Nursing problems**

-If necessary show the mother the correct position for holding the baby while nursing (Consult the chart titled THE CHILD LESS THAN 2 MONTHS OF AGE)

#### **\*If mother does not nurse exclusively**

-Instill confidence in the mother that she can produce all the milk the child needs

-Suggest that she nurse the child more frequently and for a longer period, day and night, and that she gradually reduce other kinds of milk, food or water

-Increase the frequency of nursing at night

#### **\*If she gives the child a bottle:**

-Recommend she use a cup in place of the bottle  
-Show her how to feed the child with a cup

#### **\*If the child is 5 months and already receives food:**

-Give her/him soft broken up food with breast milk, such as potato, banana, sorghum or cooked rice  
-Don't give her/him soup or thin maize drink

### **6-8 months**

#### **\*Problem of frequency**

-Nurse her/him at least 6-8 times daily  
-Give food twice daily. Give one more meal when the child reaches 7 months  
-Increase the quantity of food from 1 small spoonful to 3 large spoonfuls at 7 or 8 months

#### **\*Problem of food quality**

-give only thick food. When giving soups, give thick soups; don't give diluted food  
-If feeding is started, increase the number of meals from 1 to 3 times daily

#### **\*If the child is not nursing**

-Give three spoonfuls of food if s/he is 7-8 months old  
-Give 4 cups of boiled cow's milk. Add to one of these minced rice or oats

#### **\*If the child has no incentive to eat**

-Assist the child while eating in order to finish the meal  
-Insist that s/he eat

#### **\*If the child gets a bottle**

-Recommend the use of a cup instead of a bottle  
-Demonstrate how to feed the child with a cup

#### **\*If the child is not hungry**

-Nurse more frequently  
-Continue to offer foods as usual  
-Give small amounts more frequently  
-Watch and encourage the child while s/he eats

### **9-11 months**

#### **\*Problem of frequency**

-Increase the frequency of meals  
-Give 3 meals and 2 snacks  
-Give at least 4 large spoonfuls of food each time  
-Nurse the child at least 6 times daily

#### **\*Problem of food quality**

-Give only thick foods. When giving soups, give them thickened; don't give diluted foods  
-Give one fried preparation daily  
-Give small pieces (without water) of whatever foods the family eats

#### **\*If the child is not nursing**

-Give boiled cow's milk twice daily

#### **\*If the child has no incentive to eat**

-Put the food to her/his mouth, assuring that s/he finishes the meal  
-Insist that s/he eat

#### **\*If the child gets a bottle**

-Recommend the use of a cup instead  
-Demonstrate how to feed the child with a cup

#### **\*If the child is not hungry**

-Nurse more frequently  
-Continue to offer foods as usual  
-Give small amounts more frequently  
-Watch and encourage the child while s/he eats

### **1-4 years**

#### **\*Problem of frequency**

-Increase the amount and number of foods each time  
-Give 3 meals and 2 snacks. A child over 2 years eats approximately half an adult portion

#### **\*If s/he is 12-24 months**

-Give at least 5-6 spoonfuls at each meal and nurse day and night

#### **\*Problem of food quality**

-Give only thick foods. When giving soups give them thickened; don't give diluted foods

-Give special foods such as avocado, cheese, fried eggs, milk with sugar or rice

-Give one fried preparation daily

-Give the child all the foods that are served to the family

-Give the child all the foods that are served to the family

#### **\*If the child has no incentive to eat**

-Help the child while eating in order to finish the meal  
-Insist that s/he eat

#### **\*If the child gets a bottle**

-Recommend she use a cup instead of the bottle  
-Demonstrate how to feed the child with a cup

#### **\*If the child is not hungry**

-Continue to offer foods as usual  
-Give small quantities more frequently  
-Watch and encourage the child while s/he eats

### **Recommendations for feeding a child with PERSISTENT DIARRHEA**

- If the child is still nursing, nurse more frequently for a longer time, day and night
  - If s/he receives other food, follow the recommendations regarding appropriate food for the child's age
  - If s/he takes another kind of milk:
    - Preferably use soy milk
    - Reduce the amount of cow's milk given the child, substituting thickened foods
- Make a follow up appointment for any nutritional problem in 5 days

## WHEN TO RETURN TO THE HEALTH SERVICE

### ? **INSTRUCT THE MOTHER ABOUT WHEN TO RETURN TO THE HEALTH SERVICE**

#### **WHEN TO RETURN IMMEDIATELY**

Recommend that the mother return immediately if the child presents any of the following signs:	
Any child who:	<ul style="list-style-type: none"> <li>! gets worse</li> <li>• is difficult to arouse</li> <li>• is not able to drink or nurse</li> <li>• vomits everything</li> <li>• has seizures</li> <li>• develops a fever</li> </ul>
If the child DOES NOT HAVE PNEUMONIA, COUGH OR COLD, return if s/he has:	<ul style="list-style-type: none"> <li>* rapid respirations</li> <li>* difficulty breathing</li> </ul>
If the child has diarrhea, return if s/he Has:	<ul style="list-style-type: none"> <li>* blood in the stool</li> <li>* increase in watery stools</li> </ul>

#### **WHEN TO RETURN FOR A FOLLOW UP APPOINTMENT**

Advise the mother to return for follow up consultation at the following times:

If the child has	Return for follow up in
PNEUMONIA DYSENTERY MALARIA if fever persists FEBRILE ILLNESS if fever persists SUSPECTED MEASLES	2 days
PERISSTENT DIARRHEA ACUTE OTITIS MEDIA CHRONIC OTITIS MEDIA NUTRITION PROBLEM ANY OTHER ILLNESS if no improvement	5 days
INADEQUATE GROWTH	15 days
ANEMIA AND PROBABLE ABNORMAL DEVELOPMENT	30 days

#### **WHEN TO RETURN FOR A CHECKUP**

Less than 1 year	Every 30 days
1-2 years	Every 2 months
More than 3 years	Every 3 months
Coordinate this visit with the next vaccine, according to the <b>Schedule for vaccination, supplementation of iron and vitamin A, and for administering Mebendazole</b>	

## WHEN TO RETURN

### PROVIDE FOLLOW UP CONSULTATION

- See the child returning for follow up according to the instructions in the charts corresponding to the previous condition of the child
- If the child presents with a new problem, evaluate, classify and treat the new problem according to the tables **EVALUATE, CLASSIFY AND DETERMINE THE TREATMENT**

#### >PNEUMONIA

##### After 2 days

Examine the child for general signs of danger  
Examine the child for cough or difficulty breathing } Consult the chart  
**EVALUATE AND CLASSIFY**

##### Ask:

- Does the child breathe more slowly?
- Has the fever gone down?
- Is the child eating better

##### Treatment:

>S/he has worsened:

**If there is subcostal retraction or any general sign of danger** give one dose of a selected antibiotic (trimethoprim-sulfamethoxazole, ampicillin or procaine penicillin) not used before. Then refer URGENTLY to the hospital

>S/he remains the same

**If the respiratory rate and fever remain unchanged** go to another available, selected antibiotic (trimethoprim-sulfamethoxazole, ampicillin or procaine penicillin) not used before. Observe the child for 24 hours and evaluate or refer

>S/he is better

**If breathing is slower and the fever has gone down**, complete the 7-day course of antibiotics

#### >PERSISTENT DIARRHEA

After 5 days

##### Ask:

- Has the diarrhea stopped?
- How many times a day does the child have a watery stool?

##### Treatment

>S/he has worsened or remains the same

**If the diarrhea has not stopped (the child continues to have at least 3 watery stools a day)**, perform a new complete examination of the child. Give whatever treatments/he needs. Then refer to the hospital

>S/he is better

**If the diarrhea stopped (the child has fewer than 3 watery stools a day)**

Tell the mother to continue following recommendations about regular feeding according to the child's age

#### >DYSENTERY

##### After 2 days

**Evaluate the child with respect to the diarrhea > Consult the chart**  
**EVALUATE AND CLASSIFY.**

##### Ask:

- Are the stools diminishing?
- Is there less blood in the stools
- Is the fever down?
- Is the abdominal pain lessening?
- Is the child eating better?

##### Treatment

➤ **S/he is worse**

**If any general sign of danger is present**, refer URGENTLY to the hospital  
If the child is **dehydrated**, treat the dehydration and refer

➤ **S/he remains the same:**

**The number of stools, the quantity of blood in the feces, the fever, the abdominal pain or the nutrition remain the same**

Proceed to the second line antibiotic recommended in your area for Shigella.  
Administer for 5 days. Tell the mother to return in 2 days

##### Exceptions: If the child

- Is less than 12 months old or
  - Was dehydrated at the first visit or
  - Had measles in the past 3 months
- } Refer to the hospital

➤ **S/he is improved**

**The child defecates less, has less blood in the stool, the fever has gone down, the abdominal pain is less and ands/he is eating better**, continue the same antibiotic for the duration

**PROVIDE FOLLOW UP CONSULTATION**

- **Attend to the child who returns for follow up according to the previous diagnoses**
- **If the child presents with a new problem,, evaluate, diagnose and treat the new problem according to the chart *EVALUATE, DIAGNOSE AND DETERMINE THE TREATMENT***

- **EAR PROBLEM**

- **After 5 days**

- Reevaluate the ear problem. >Consult the chart *EVALUATE AND DIAGNOSE*.
    - Take the child's temperature
    - Treatment:

- **S/he is worse**

- If there is **tender swelling behind the ear or high fever (38.5 or more)**, refer URGENTLY to the hospital

- **S/he remains the same**

- Acute otitis media:** *if earache or drainage persist and there is no fever, treat with the same antibiotic for five more days. Continue drying the ear with absorbent wicks. Follow up after 5 days. Check that s/he has completed 10 days of treatment*

- Chronic otitis media:** assure that mother has been drying the ear correctly with absorbent wicks. Encourage her to continue the antibiotic for 9 days more

- If ear drainage persists** for more than a month, refer to otorhinolaryngology

- **S/he is better**

- If **there is no earache or drainage**, congratulate the mother for providing careful treatment. If the 10 day treatment with antibiotics is not yet completed, tell her to continue administering it until it is finished.

- **MALARIA**

- If fever persists after 2 days:

- Repeat a complete examination of the child. Consult the table EVALUATE AND DIAGNOS E. Examine the child to determine if s/he presents other causes of fever

- Treatment:

- If the child presents **any general sign of danger or nuchal rigidity**, treat as a VERY SERIOUS FEBRILE ILLNESS

- If the child presents **any other cause of fever which is not malaria, complete antimalarial treatment and begin specific treatment**

- If **malaria is the only apparent cause of fever, refer to the hospital**

- **FEBRILE ILLNESS**

- If fever persists after 2 days:

- Repeat a complete examination of the child. >Consult the chart *EVALUATE AND DIAGNOSE*. Examine the child to determine if s/he presents other causes of fever

- Treatment:

- **S/he is worse**

- If the child presents **any general sign of danger or nuchal rigidity**, treat as a **VERY SERIOUS FEBRILE ILLNESS**

- If the child presents **any other cause which explains the fever. administer treatment.**

- If s/he has had fever for more than 7 days, refer

- **S/he remains the same**

- If the cause of fever is not identified and the course is less than 7 days, check in 2 days if the fever persists

- **SUSPECTED MEASLES**

- After 2 days

- EVALUATE AND DIAGNOSE.

- Determine if any complication of measles is present

- Treatment:

- **S/he is worse**

- If the child shows **any general sign of danger, resting stridor, rapid breathing, diarrhea, suppurative conjunctivitis or suppuration from the ear**, refer to the hospital

- **S/he is better**

- If the child **shows improvement**, continue the same management

## PROVIDE FOLLOW UP CONSULTATION

### ➤ MILD ANEMIA

#### **After 30 days**

- Check that the child has been receiving adequate iron
- Supply iron monthly for three months
- If the child demonstrates palmar pallor after three months of treatment, refer him/her to the hospital for evaluation

### ➤ NUTRITION PROBLEM

#### **After 5 days:**

Reevaluate nutrition. >Check the questions in the upper part of the chart *EVALUATE NUTRITION AND REACH AN UNDERSTANDING WITH MOTHER OR ACCOMPANYING ADULT*

#### **Ask about any nutrition problem identified at the first consultation**

- Make recommendation to the mother with regard to any new or persistent nutrition problem. If important changes in nutrition are recommended to the mother, tell her to bring the child back in 15 days

**IF MORE FOLLOW UP CONSULTATIONS BECOME NECESSARY, ACCORDING TO THE RESULTS OF THE FIRST APPOINTMENT OR THIS ONE, INFORM THE MOTHER ABOUT THE NEXT FOLLOW UP APPOINTMENT.**

♦

ALSO INDICATE TO THE MOTHER WHEN SHE SHOULD RETURN IMMEDIATELY  
(CONSULT THE CHART **WHEN TO RETURN**)

### ➤ INADEQUATE GROWTH

#### **After 15 days**

Weigh the child and determine the growth trend

- ***If weight gain is inadequate***
  - \*Give treatment as indicated
  - \*Refer for counseling with the AIN-C Monitor
  - \*Make a home visit
  - \*Come to some agreement with the mother about the nutrition problems encountered
  - \*Solicit help from the sector
  - \*Reevaluate in 15 days
- ***If weight gain is adequate***
  - \*Congratulate the mother for taking such good care of her child
  - \*Encourage her to attend regularly at FULL ATTENTION TO THE CHILD at the Health Center or in her community

### ➤ PROBABLE DEVELOPMENTAL ABNORMALITY

#### **After 30 days:**

Determine the age of the child in months  
Perform a new evaluation of the child's development using the table SCHEMATIC EVOLUTION OF BEHAVIORAL DEVELOPMENT, and an in-depth evaluation

Treatment:

- If ***s/he remains the same***, guide and reinforce the mother so that the child develops the ability. Arrange follow up in 30 days. If after 2 check ups the child is no better, refer
- If s/he shows ***improvement***, congratulate the mother and encourage her to continue. Give the corresponding educational pamphlet (according to the child's age).

## EVALUATE, DIAGNOSE AND TREAT THE CHILD LESS THAN 2 MONTHS OF AGE

### EVALUATE

### CLASSIFY

### DETERMINE TREATMENT

#### ASK THE MOTHER WHAT PROBLEMS THE CHILD HAS

- Determine if this is the first or a follow up consultation for this problem.
  - If it is a follow up visit, follow the instructions in the table *WHEN TO RETURN*.
  - If it is the first consultation, examine the child in the following manner.

#### SIGNS

#### CLASSIFY AS

#### TREATMENT

(Urgent treatments that are administered before referral are indicated in boldface)

#### **DETERMINE IF IT IS POSSIBLE YOU ARE TREATING A BACTERIAL INFECTION**

##### **OBSERVE, LISTEN, PALPATE:**

\* Has s/he had convulsions?

- \* Count respirations for one minute  
Repeat if the count is high
- \* Determine if there is:
  - Deep subcostal retraction
  - Nasal flaring
  - Moaning
  - Bulging of the fontanelles
  - Suppuration from the ear
  - Redness or suppuration from the umbilicus
    - Does the redness extend to the surrounding skin?
  - Fever: temperature of 37.5 C or more, or hot to the touch
  - Cooling: temperature of 35.5 C or less, or cold to the touch
  - Skin pustules: Are they many or extensive? Are they small or isolated?
  - Purulent secretion in the eyes:
    - Less than 15 days of age
    - More than 15 days of age
  - Determine if s/he is
    - Lethargic or unconscious
    - Is s/he moving less than normal?

} The child should be quiet

**Classify ALL BABIES LESS THAN 2 MONTHS**

- \*Rapid breathing (60 or more per minute)
- \*Deep subcostal retraction or
- \*Nasal flaring or
- \*Moaning or
- \*Bulging of the fontanelles or
- \*Pus from the ear or
- \*Redness of the umbilicus which extends to the skin or
- \*Fever (37.5 C or more) or low body temperature (less than 35.5 C) or
- \*Pustules, many or extensive or
- \*Pus in the eyes of a child less than 15 days or
- \*Lethargic or unconscious, or s/he moves less than normal, or s/he has had a convulsion

**POSSIBLE SERIOUS BACTERIAL INFECTION**

- > **Give the 1<sup>st</sup> dose of anti-bi-otic intramuscularly**
- > **Give treatment to prevent hypoglycemia**
- > **Give instructions to the mother to keep the child warm on the trip to the hospital**
- > **Refer URGENTLY to the hospital**
- > **Apply wet clothes to area of body (armpits, legs, belly) if there is fever**
- > **Acetaminophen 1.5 ml for high fever ( $\geq 38.5$  C)**

- \*Umbilicus with localized suppuration
- \*Skin pustules, small or isolated
- \*Purulent secretion in the eyes in a child more than 15 days of age

**LOCAL BACTERIAL INFECTION**

- > **Administer an appropriate oral antibiotic**
- > Treat the purulent secretion From the eyes with ophthalmic ointment
- > Teach the mother to treat localized infections at home
- > Make recommendation to the mother about care for the child at home
- > Tell the mother when to return immediately
- > Follow up after 2 days

**NEXT, ASK:  
Does the child under 2 months have diarrhea?**

**IF THEREPLY IS AFFIRMATIVE, ASK:**

- \* How long has it been?
- \* Is there blood in the feces?

**OBSERVE AND PALPATE**

- \* Determine the general condition of the child
- Is s/he:  
lethargic or unconscious?  
restless and irritable?
- \* Check if s/he has sunken eyes
- \* Skin fold sign:  
Does the skin return to its previous state:  
very slowly? (more than 2 seconds)  
slowly?

**CLASSIFY THE DIARRHEA**

**DEHYDRATION**

Two of the following signs:  *Lethargy or unconsciousness *Sunken eyes *Skin tenting: the skin returns very slowly to its previous state	<b>SEVERE DEHYDRATION</b>	If the child has a POSSIBLE SEVERE BACTERIAL INFECTION or is less than 1 month old: >Refer <b>URGENTLY to the hospital, with the mother giving frequent sips of ORS during the trip</b> If the child doesn't have a POSSIBLE SEVERE BACTERIAL INFECTION and is less older than 1 month: >Give fluids for severe dehydration (Plan C) or refer <b>URGENTLY to the hospital, with mother giving sip of ORS during the trip</b> >Advise mother to continue to nurse
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Two of the following signs:  *restless and irritable *sunken eyes *skin tenting: skin returns slowly to the previous state	<b>DEHYDRATION</b>	>If the child has a POSSIBLE SEVERE BACTERIAL INFECTION *Refer <b>URGENTLY to the hospital, with mother giving frequent sips of ORS during the trip</b> >If the child doesn't have a POSSIBLE SEVERE BACTERIAL INFECTION *Give fluids for dehydration (Plan B) and continue to nurse *Instruct the mother when she should return immediately
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There are not enough signs to diagnose dehydration or severe dehydration	<b>NO DEHYDRATION</b>	>Give fluids to treat diarrhea at home >Instruct the mother when to return immediately
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**DIARRHEA FOR 14 DAYS OR MORE**

S/he has diarrhea for 14 days or more	<b>PERSISTENT SEVERE DIARRHEA</b>	> <b>If the child is dehydrated</b> , treat before referring, unless s/he also has a POSSIBLE SEVERE BACTERIAL INFECTION >Refer <b>URGENTLY to the hospital</b>
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**BLOOD IN THE STOOL**

Blood in the stool	<b>PROBABLE ENTEROCOLITIS</b>	>Refer <b>URGENTLY to the hospital</b>
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**NEXT, DETERMINE IF THERE IS A GROWTH PROBLEM**

- Determine inadequate weight gain
  - Weight loss
  - No weight gain
  - Insufficient weight gain

*Classification of GROWTH*

*Weight loss *No weight gain *inadequate weight gain	<b>INADEQUATE GROWTH</b>	?Register in Nutrition Center >Follow up in 15 days
*Adequate weight gain	<b>ADEQUATE WEIGHT GAIN</b>	>Instruct mother to care for the child at home >Congratulate mother for taking good care of the child >Teach about prevention of illnesses >Give instruction about danger signals

\*If it is only one pound. Do not classify, and make an appointment in 15 days for a check up.

**NEXT, DETERMINE IF THERE IS A NUTRITION PROBLEM**

<p><b>ASK:</b></p> <ul style="list-style-type: none"> <li>*Does s/he have difficulty eating?</li> <li>*Does s/he nurse?</li> <li>*If the answer is affirmative,             <ul style="list-style-type: none"> <li>How many times a day</li> <li>For how long?</li> </ul> </li> <li>*Does the child get any other food or drink?</li> <li>*How often?</li> <li>*Does s/he use a bottle?</li> <li>*What is used to give other food?</li> <li>*Does s/he have white plaques or ulcers in the mouth (candidiasis)?</li> </ul> <hr style="border-top: 1px dashed black;"/> <p>IF THE MOTHER ANSWERS THAT</p> <ul style="list-style-type: none"> <li>• <b>S/he has trouble feeding her/himself</b></li> <li>• <b>S/he nurses fewer than 10 times in 24 hours</b></li> <li>• <b>S/he gets other food or liquids</b></li> <li>• <b>S/he uses a bottle</b></li> </ul> <p><b>THEN EVALUATE BREAST FEEDING</b></p> <ul style="list-style-type: none"> <li>*Has the child nursed in the last hour? If the child hasn't fed during the last hour, tell the mother to give her/him the breast. Watch the feeding for 4 minutes.</li> </ul>	<p><b>LOOK, LISTEN, PALPATE:</b></p> <p>Check for white plaques or ulcers in the Mouth</p>
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Classify nutrition

<ul style="list-style-type: none"> <li>*S/he can't feed him/herself or</li> <li>*There is no grasp or</li> <li>*S/he doesn't suckle</li> </ul>	<p><b>POSSIBLE SEVERE BACTERIAL INFECTION</b></p>	<ul style="list-style-type: none"> <li>&gt;Give the first dose of antibiotic IM</li> <li>&gt;Administer therapy to prevent hypoglycemia</li> <li>&gt;Instruct the mother to keep her/him wrapped up on the way to the hospital</li> <li>&gt;Refer <b>URGENTLY</b> to the hospital</li> </ul>
<ul style="list-style-type: none"> <li>*Weak grasp</li> <li>*Doesn't suckle well or</li> <li>*Nurses fewer than 10 times in 24 hours or</li> <li>*Receives other food or drink or</li> <li>*Has white plaques or ulcers in the mouth (candidiasis)</li> </ul>	<p><b>NUTRITION PROBLEMS</b></p>	<ul style="list-style-type: none"> <li>&gt;Register at Nutrition Center.</li> <li>&gt;Have the mother agree to nurse her/him as often as and whenever the child wishes, day or night</li> <li>&gt;If the child doesn't grasp well or suckle well, show the mother the correct position and grasp</li> <li>&gt;If s/he receives other food or liquids, advise the mother to nurse more often, cutting back on other foods and liquids</li> <li>&gt;If the child does not feed at the breast Refer for assessment of maternal lactation Demonstrate</li> <li>&gt;If the child has thrush, give nystatin and show the mother how to treat thrush at home</li> <li>&gt;Arrange follow up in two days for any nutrition problem or for thrush</li> <li>&gt;Indicate when they should return immediately</li> </ul>
<p>There is no sign of inadequate nutrition</p>	<p><b>THERE IS NO NUTRITION PROBLEM</b></p>	<ul style="list-style-type: none"> <li>&gt;Instruct the mother how to care for the child at home</li> <li>&gt;Congratulate mother for taking such good care of the child</li> <li>&gt;Give instruction on how to maintain maternal lactation</li> <li>&gt;Provide education about preventing illness</li> </ul>

### ***NEXT, COME TO AN UNDERSTANDING ABOUT PROMOTING DEVELOPMENT***

#### **PROMOTE DEVELOPMENT:**

For any child less than 2 months old who presents in a grave condition or whose general status is very compromised (Classification *red* or *yellow*) postpone developmental stimulation until the next consultation

- For any child under 2 months, hand over and explain to the mother or accompanying person the pamphlet for stimulation of development corresponding to the next developmental stage

### **VERIFY THE VACCINATION HISTORY OF CHILDREN UNDER 2 MONTHS:**

**BIRTH**

**VACCINATION SCHEME**

BCG

Sabin

*\*If BCG has not been given, vaccinate*

### **EVALUATE OTHER PROBLEMS**

**TREAT CHILDREN UNDER 2 MONTHS****> Give an Appropriate Oral Antibiotic**

For a localized bacterial infection: Infection of the umbilicus and pustules

Antibiotic of first choice: Ampicillin

Antibiotic of second choice: Trimethoprim-sulfamethoxazole

AGE OR WEIGHT	<b>AMOXICILLIN</b> Three times a day for 5 days	<b>TRIMETHOPRIM-SULFAMETHOXAZOLE</b> Give every 12 hours for 5 days	
	<i>Syrup 250mg/5ml</i>	<i>Pediatric tablet (20mg trimethoprim + 100mg sulfamethoxazole)</i>	<i>Syrup (40mg trimethoprim + 200mg sulfamethoxazole)</i>
From 0 to 30 days (>3kg)	2ml *	½	1.25ml
From 31 to 60 days (3 - 4kg)	3ml	1	2.5ml

\*In cases of premature birth or jaundice, do not use trimethoprim-sulfamethoxazole

**> Give the First Dose of Antibiotic by the Intramuscular Route**

> Give the first dose of procaine penicillin as well as gentamicin by the intramuscular route

	<b>GENTAMICIN</b> 2.5 mg/kg/dose OR 2ml ampule at 40mg/ml (diluted in 6ml sterile water)		<b>PROCAINE PENICILLIN</b> 50,000 units/kg/day 4,000,000 Units diluted in 8cc sterile water
	2ml ampule at 20mg/ml (undiluted)		
1kg	0.10ml	0.25ml	50,000 IU (0.2ml)
2kg	0.30ml	0.50ml	100,000 IU (0.3ml)
3kg	0.40ml	0.75ml	150,000 IU (0.4ml)
4kg	0.50ml	1.00ml	200,000 IU (0.5ml)
5kg	0.60ml	1.25ml	250,000 IU (0.6ml)

- Do not use Gentamicin in concentrations of 40mg/ml without dilution.
- For the children less than 2 months with a POSSIBLE SEVERE BACTERIA INFECTION the best is to refer him/her. If it's not possible, give him/her Procaine Penicillin every 12 hours PLUS Gentamicin every 8 hours. For the 1 week old boy/girl, give Gentamicin every 12 hours.

## > **TO TREAT DIARRHEA, CONSULT THE CHART 'TREAT THE CHILD'**

### TREAT THE CHILD UNDER 2 MONTHS OF AGE

#### > ***Teach mother to treat localized infections***

- > Explain how to administer the treatment
- > Observe her while administering the first treatment at the Health Center
- > Orient her to administer the treatment twice a day. The mother should return to the Health Center the next day if the infection has worsened

#### **To treat skin pustules or umbilical infections**

The mother should:

- > Wash her hands
- > Wash the wound gently with soap and water to remove pus and dirt
- > Dry the area
- > Wash her hands

#### **To treat oral candidiasis (ulcers or white plaques in the mouth)**

The mother should:

- > Wash her hands
- > Wash the child's mouth with a soft cloth wrapped around a finger and moistened with salt water
- > Apply oral nystatin, 1 drop (1ml) 3 times a day for 5 days
- > Apply nystatin to the mother's nipples twice a day
- > Wash her hands

#### > ***Treat eye infections with tetracycline ophthalmic ointment***

- > Wash both eyes three times a day
  - \*Wash her hands
  - \*Use a clean cloth and water to wash and gently remove all pus
- > Next, apply tetracycline ointment to both eyes three times a day
  - \*Apply a small amount of ointment to the inner surface of the lower lid
  - \*Wash her hands once again
- > Treat until the redness disappears
- > Don't use any other ointment or eye drops, nor put anything else in the eyes
- > If no improvement in two days, refer to the ophthalmologist

**EVALUATE FEEDING AND REACH AN UNDERSTANDING WITH MOTHER OR ACCOMPANYING PERSON****> DEMONSTRATE THE CORRECT POSITION AND GRASP FOR FEEDING**

- > Show the mother how to support the child properly
  - the child's head resting in the crook of the mother's arm
  - the child's belly facing the mother's belly
  - the child facing the mother's breast with the mouth and nose at the level of the nipple
  - the child's entire body is aligned with the head and receiving support
  
- > Show the mother how to facilitate the grasp. The mother should:
  - touch the child's lips with the nipple
  - wait until the child opens her/his mouth well
  - move the child quickly toward the breast and make sure the child's lower lip remains well below the nipple
  
- > Check for signs of good grasp and sucking. If they aren't good, try again

**> SIGNS OF GOOD GRASP**

- Touches the breast with her/his chin
- Mouth wide open
- Lower lip turned out
- More areola is visible above the mouth than below

**> SIGNS OF GOOD SUCKING**

- Sucking is slow and deep
- Occasional pauses
- Sucking and swallowing are audible

**> ADVISE MOTHER ABOUT CARING FOR THE CHILD AT HOME**

FEEDING



Breastfeed frequently, as often as and at such times as the child wants, day and night, whether sick or healthy, at least 10 times every 24 hours

**MAKE SURE THAT ANY CHILD UNDER 2 MONTHS IS ALWAYS WELL BUNDLED**

- If it is cool, cover the hands and feet and put on additional clothing

## > WHEN TO RETURN

### WHEN TO RETURN IMMEDIATELY

**Advise the mother to return immediately if the child presents any of the following**

**Signs:**

Does not nurse or drinks poorly  
Worsening condition  
Fever  
Rapid breathing  
Difficulty breathing  
Blood in the stool

### WHEN TO RETURN FOR FOLLOW UP VISIT

<i>If the child has</i>	<i>Return for a follow up consultation in:</i>
LOCAL BACTERIAL INFECTION ANY FEEDING PROBLEM ORAL CANDIDIASIS (White plaques in the mouth)	2 days
TENDENCY TOWARD INADEQUATE GROWTH	15 days

### WHEN TO RETURN FOR ROUTINE CONSULTATION

**Every 30 days:**

Coordinate this visit with the next vaccination according to the vaccination schedule

## FOLLOW UP CONSULTATION FOR THE CHILD UNDER 2 MONTHS

### > LOCALIZED BACTERIAL INFECTION

After 2 days:

Examine the navel. Is there redness or pus? Does the redness extend to the skin? Examine the pustules on the skin. Are they many and extensive?

Treatment:

>There is worsening or no change

If **the pus or redness or pustules have worsened or the drainage from the ears has increased or remains unchanged**, refer to the hospital

>There is improvement

If the **pus and redness and pustules have improved or the drainage from the ears is diminished**, advise the mother to continue antibiotics to complete 5 days of treatment and continue treating the localized infection at home

## FOLLOW UP FOR THE CHILD UNDER 2 MONTHS

### > NUTRITION PROBLEMS

#### **After 2 days:**

Reevaluate nutrition. In accordance with the chart entitled "Next, determine if there is a growth or nutrition problem", ask about any feeding problem identified at the first visit.

- > If there is no improvement in the nutrition problem, make new agreements or reinforce suggestions and return in 5 days.
- > Come to agreement with mother about any problem new or persistent. If you recommend that the mother make important changes in feeding, tell her to bring the child back in 5 days.
- > If there is no feeding problem, congratulate the mother and encourage her to continue.

### > INAPPROPRIATE GROWTH

#### **After 15 days**

Weigh the child and determine her/his growing trend. Evaluate the child completely. In accordance with the chart titled "Next, determine if there is a problem with growth or feeding":

- > If ***the growth trend is inappropriate and/or there are nutrition problems, come*** to an understanding with the mother about the nutrition problem. Tell her to return in 5 days. Continue to examine the infant weekly until s/he is well nourished and gaining weight regularly, or until the growth trend becomes appropriate.
- > If ***the growth trend is appropriate and the child is well nourished***, congratulate the mother and encourage her to continue. Tell her to bring the child back in 30 days or when she returns for vaccination, and integrate her into AIN-C or a tutorial.

### > ORAL CANDIDIASIS

After 2 days

Check if there are white plaques or ulcers in the mouth (oral candidiasis).

Reevaluate nutrition. In accordance with the chart titled "Subsequently, determine if there is a problem with growth or nutrition":

- > If ***the candidiasis has worsened***, or if the child has ***problems with grasp or sucking***, refer her/him to the hospital.
- > If the ***candidiasis is the same or improved*** and ***if the child is eating well*** continue with oral nystatin and manage the local infection until completing 5 days of treatment.

***Offer courtesy services and advice to the mother concerning her own health***

- > **If the mother is sick, administer treatment or refer her**
- > **If health risks are identified in the mother, give counseling**
- > **If she has any problem with her breasts (such as congestion, sore nipples, mastitis), give treatment or refer her to a specialized center**
- > **Recommend that she eat all foods available at home and drink sufficient fluids in order to maintain health and strength**
- > **Give counseling regarding family planning, Pap smears, breast exam and prevention of STDs**
- > **Give advice about hygiene, self care and self esteem**
- > **Determine the mother's vaccination history and, if necessary, administer tetanus toxoid**
- > **Exercise birth control during the first month and give supplemental iron and Vitamin A**