

**INTEGRATED
MANAGEMENT OF
NEONATAL AND
CHILDHOOD
ILLNESS**

*Assess and Classify
the Sick Child
Age 2 Months up to 5 Years*

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INTRODUCTION

The chart *ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS* describes how to assess and classify sick children so that signs of disease are not overlooked. According to the chart, you should ask the mother about the child's problem and check the child for general danger signs. Then ask about the four main symptoms: cough or difficult breathing, diarrhoea, fever and ear problem. A child who has one or more of the main symptoms could have a serious illness. When a main symptom is present, ask additional questions to help classify the illness. Check the child for malnutrition and anaemia. Also check the child's immunization status and assess other problems the mother has mentioned.

LEARNING OBJECTIVES

This section of the module will describe and allow you to practice the following skills:

- * Asking the mother about the child's problem.
- * Checking for general danger signs.
- * Asking the mother about the four main symptoms:
 - cough or difficult breathing
 - diarrhoea
 - fever
 - ear problem.
- * When a main symptom is present:
 - assessing the child further for signs related to the main symptom
 - classifying the illness according to the signs which are present or absent.
- * Checking for signs of malnutrition and anaemia and classifying the child's nutritional status.
- * Checking the child's immunization status and deciding if the child needs any immunizations today.
- * Assessing any other problems.

Your facilitator will tell you more about the *ASSESS & CLASSIFY* chart.

1.0 ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

Record what the mother tells you about the child's problems. Use good communication skills as you have learnt earlier.

2.0 CHECK FOR GENERAL DANGER SIGNS

Check ALL sick children for general danger signs.

A general danger sign is present if:

- the child is not able to drink or breastfeed
- the child vomits everything
- the child has had convulsions
- the child is lethargic or unconscious.

A child with a general danger sign has a serious problem. Most children with a general danger sign need URGENT referral to hospital. They may need lifesaving treatment with injectable antibiotics, oxygen or other treatments which may not be available in your clinic. Complete the rest of the assessment immediately. How to provide urgent treatment is described in the module *Identify Treatment*.

Here is the first box in the "Assess" column. It tells you how to check for general danger signs.

ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

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

CHECK FOR GENERAL DANGER SIGNS

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <p>ASK:</p> <ul style="list-style-type: none">• Is the child able to drink or breastfeed?• Does the child vomit everything?• Has the child had convulsions? | <p>LOOK:</p> <ul style="list-style-type: none">• See if the child is lethargic or unconscious. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|

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

When you check for general danger signs:

ASK: Is the child able to drink or breastfeed?

A child has the sign "not able to drink or breastfeed" if the child is not able to suck or swallow when offered a drink or breastmilk.

When you ask the mother if the child is able to drink, make sure that she understands the question. If she says that the child is not able to drink or breastfeed, ask her to describe what happens when she offers the child something to drink. For example, is the child able to take fluid into his mouth and swallow it? If you are not sure about the mother's answer, ask her to offer the child a drink of clean water or breastmilk. Look to see if the child is swallowing the water or breastmilk.

A child who is breastfed may have difficulty sucking when his nose is blocked. If the child's nose is blocked, clear it. If the child can breastfeed after his nose is cleared, the child does not have the danger sign, "not able to drink or breastfeed."

ASK: Does the child vomit everything?

A child who is not able to hold anything down at all has the sign "vomits everything." What goes down comes back up. A child who vomits everything will not be able to hold down food, fluids or oral drugs. A child who vomits several times but can hold down some fluids does not have this general danger sign.

When you ask the question, use words the mother understands. Give her time to answer. If the mother is not sure if the child is vomiting everything, help her to make her answer clear. For example, ask the mother how often the child vomits. Also ask if each time the child swallows food or fluids, does the child vomit? If you are not sure of the mother's answers, ask her to offer the child a drink. See if the child vomits.

ASK: Has the child had convulsions?

Ask the mother if the child has had convulsions during this current illness.

LOOK: See if the child is lethargic or unconscious.

A lethargic child is not awake and alert when he should be. He is drowsy and does not show interest in what is happening around him. Often the lethargic child does not look at his mother or watch your face when you talk. The child may stare blankly and appear not to notice what is going on around him.

An unconscious child cannot be wakened. He does not respond when he is touched, shaken or spoken to.

Ask the mother if the child seems unusually sleepy or if she cannot wake the child. Look to see if the child awakens when the mother talks or shakes the child or when you clap your hands.

Note: If the child is sleeping and has cough or difficult breathing, count the number of breaths first before you try to wake the child.

If the child has a general danger sign, complete the rest of the assessment immediately. This child has a severe problem. There must be no delay in his treatment.

* * *

Your facilitator will now show you the **Recording Form** for the sick child age 2 months up to 5 years.

* * *

3.0 ASSESS AND CLASSIFY COUGH OR DIFFICULT BREATHING

Respiratory infections can occur in any part of the respiratory tract such as the nose, throat, larynx, trachea, air passages or lungs. A child with cough or difficult breathing may have pneumonia or another severe respiratory infection. Pneumonia is an infection of the lungs. Both bacteria and viruses can cause pneumonia. In developing countries, pneumonia is often due to bacteria. The most common are *Streptococcus pneumoniae* and *Hemophilus influenzae*. Children with bacterial pneumonia may die from hypoxia (too little oxygen) or sepsis (generalized infection).

There are many children who come to the clinic with less serious respiratory infections. Most children with cough or difficult breathing have only a mild infection. For example, a child who has a cold may cough because nasal discharge drips down the back of the throat. Or, the child may have a viral infection of the bronchi called bronchitis. These children are not seriously ill. They do not need treatment with antibiotics. Their families can treat them at home.

Doctors need to identify the few, very sick children with cough or difficult breathing who need treatment with antibiotics. Fortunately, doctors can identify almost all cases of pneumonia by checking for these two clinical signs: fast breathing and chest indrawing.

When children develop pneumonia, their lungs become stiff. One of the body's responses to stiff lungs and hypoxia (too little oxygen) is fast breathing.

When the pneumonia becomes more severe, the lungs become even stiffer. Chest indrawing may develop. Chest indrawing is a sign of severe pneumonia.

3.1 ASSESS COUGH OR DIFFICULT BREATHING

A child with cough or difficult breathing is assessed for:

- How long the child has had cough or difficult breathing
- Fast breathing
- Chest indrawing
- Stridor in a calm child.

Here is the box in the "Assess" column that lists the steps for assessing a child for cough or difficult breathing:

| | |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| THEN ASK ABOUT MAIN SYMPTOMS: Does the child have cough or difficult breathing? | |
| IF YES, ASK: LOOK, LISTEN, FEEL: | |
| <ul style="list-style-type: none">• For how long? | <ul style="list-style-type: none">• Count the breaths in one minute.• Look for chest indrawing.• Look and listen for stridor. |
| } CHILD MUST BE CALM | |

For ALL sick children, ask about cough or difficult breathing.

ASK: Does the child have cough or difficult breathing?

"Difficult breathing" is any unusual pattern of breathing. Mothers describe this in different ways. They may say that their child's breathing is "fast" or "noisy" or "interrupted."

If the mother answers NO, look to see if you think the child has cough or difficult breathing. If the child does not have cough or difficult breathing, ask about the next main symptom, diarrhoea. Do not assess the child further for signs related to cough or difficult breathing.

If the mother answers YES, ask the next question.

ASK: For how long?

A child who has had cough or difficult breathing for more than 30 days has a chronic cough. This may be a sign of tuberculosis, asthma, whooping cough or another problem.

COUNT the breaths in one minute.

Normal breathing rates are higher in children age 2 months up to 12 months than in children age 12 months up to 5 years. For this reason, the cut-off for identifying fast breathing is higher in children 2 months up to 12 months than in children age 12 months up to 5 years.

| If the child is: | The child has fast breathing if you count: |
|---------------------------|---------------------------------------------------|
| 2 months up to 12 months: | 50 breaths per minute or more |
| 12 months up to 5 years: | 40 breaths per minute or more |

Note: The child who is exactly 12 months old has fast breathing if you count 40 breaths per minute or more.

LOOK for chest indrawing.

For chest indrawing to be present, it must be clearly visible and present all the time. If you only see chest indrawing when the child is crying or feeding, the child does not have chest indrawing. Any chest indrawing, even if it is not severe, is an indicator of severe pneumonia in a child age 2 months up to 5 years.

LOOK and LISTEN for stridor.

Stridor is a harsh noise made when the child breathes IN. Stridor happens when there is a swelling of the larynx, trachea or epiglottis. This swelling interferes with air entering the lungs. It can be life-threatening when the swelling causes the child's airway to be blocked. A child who has stridor when calm has a dangerous condition.

To look and listen for stridor, look to see when the child breathes IN. Then listen for stridor. Put your ear near the child's mouth because stridor can be difficult to hear.

Sometimes you will hear a wet noise if the nose is blocked. Clear the nose, and listen again. A child who is not very ill may have stridor only when he is crying or upset. Be sure to look and listen for stridor when the child is calm.

You may hear a wheezing noise when the child breathes OUT. This is not stridor.

3.2 CLASSIFY COUGH OR DIFFICULT BREATHING

There are three possible classifications for a child with cough or difficult breathing. They are:

- SEVERE PNEUMONIA OR VERY SEVERE DISEASE or
- PNEUMONIA or
- NO PNEUMONIA: COUGH OR COLD

Here is the classification table for cough or difficult breathing.

| SIGNS | CLASSIFY | TREATMENT |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Any general danger sign or • Chest indrawing or • Stridor in calm child | SEVERE PNEUMONIA OR VERY SEVERE DISEASE | <ul style="list-style-type: none"> ➤ Give first dose of injectable chloramphenicol (if not possible give oral amoxycillin) ➤ Refer URGENTLY to hospital. |
| <ul style="list-style-type: none"> • Fast breathing | PNEUMONIA | <ul style="list-style-type: none"> ➤ Give Amoxycillin for 5 days. ➤ Soothe the throat and relieve the cough with a safe remedy if child is 6 months or older. ➤ Advise mother when to return immediately ➤ Follow up in 2 days. |
| No signs of pneumonia or very severe disease | NO PNEUMONIA: COUGH OR COLD | <ul style="list-style-type: none"> ➤ If coughing more than 30 days, refer for assessment ➤ Soothe the throat and relieve the cough with a safe home remedy if child is 6 months or older ➤ Advise mother when to return immediately ➤ Follow up in 5 days if not improving |

Here is a description of each classification for cough or difficult breathing.

SEVERE PNEUMONIA OR VERY SEVERE DISEASE

A child with cough or difficult breathing and with any of the following signs -- any general danger sign, chest indrawing or stridor in a calm child -- is classified as having SEVERE PNEUMONIA OR VERY SEVERE DISEASE.

A child with chest indrawing usually has severe pneumonia. Or the child may have another serious acute lower respiratory infection such as bronchiolitis, pertussis, or a wheezing problem.

Chest indrawing develops when the lungs become stiff. The effort the child needs to breathe in is much greater than normal.

A child with chest indrawing has a higher risk of death from pneumonia than the child who has fast breathing and no chest indrawing. If the child is tired, and if the effort the child needs to expand the stiff lungs is too great, the child's breathing slows down. Therefore, a child with chest indrawing may not have fast breathing. Chest indrawing may be the child's only sign of severe pneumonia.

Treatment

In developing countries, bacteria cause most cases of pneumonia. These cases need treatment with antibiotics. Viruses also cause pneumonia. But there is no reliable way to find out if the child has bacterial pneumonia or viral pneumonia. Therefore, whenever a child shows signs of pneumonia, give the child an appropriate antibiotic.

A child classified as having SEVERE PNEUMONIA OR VERY SEVERE DISEASE is seriously ill. He needs urgent referral to a hospital for treatments such as oxygen, a bronchodilator or injectable antibiotics. Before the child leaves your clinic, give the first dose of injectable chloramphenicol (if not possible give oral amoxicillin). The antibiotic helps prevent severe pneumonia from becoming worse. It also helps treat other serious bacterial infections such as sepsis or meningitis.

PNEUMONIA

A child with cough or difficult breathing who has fast breathing and no general danger signs, no chest indrawing and no stridor when calm is classified as having PNEUMONIA.

Treatment

Treat PNEUMONIA with oral amoxicillin. If amoxicillin is not available give oral cotrimoxazole. Show the mother how to give the antibiotic. Advise her when to return for follow-up and when to return immediately.

NO PNEUMONIA: COUGH OR COLD

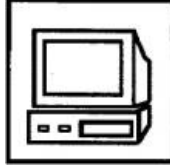
A child with cough or difficult breathing who has no general danger signs, no chest indrawing, no stridor when calm and no fast breathing is classified as having NO PNEUMONIA: COUGH OR COLD.

Treatment

A child with NO PNEUMONIA: COUGH OR COLD does not need an antibiotic. The antibiotic will not relieve the child's symptoms. It will not prevent the cold from developing into pneumonia. But the mother brought her child to the clinic because she is concerned about her child's illness. Give the mother advice about good home care. Teach her to soothe the throat and relieve the cough with a safe remedy such as warm tea with sugar. Advise the mother to watch for fast or difficult breathing and to return if either one develops.

A child with a cold normally improves in one to two weeks. However, a child who has a chronic cough (a cough lasting more than 30 days) may have tuberculosis, asthma, whooping cough or another problem. Refer the child with a chronic cough to hospital for further assessment.

* * *



EXERCISE A

In this video exercise you will practice identifying general danger signs. You will also practice assessing cough or difficult breathing.

- For each of the children shown, answer the question:

| | Is the child lethargic or unconscious? | |
|----------------|----------------------------------------|----|
| | YES | NO |
| Child 1 | | |
| Child 2 | | |
| Child 3 | | |
| Child 4 | | |

Video Case Study: Watch the case study. Record the child's signs and symptoms on the Recording Form excerpt below. Then classify the child's illness.

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

Name: _____ Age: _____ Sex: M _____ F _____ Weight: _____ kg

Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

| | | |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS | LETHARGIC OR UNCONSCIOUS | General danger sign present? Yes___ No___ Remember to use danger sign when selecting classifications |
| DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? | | Yes___ No___ |
| <ul style="list-style-type: none"> • For how long ? _____ Days | <ul style="list-style-type: none"> • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor. | |

4.0 ASSESS AND CLASSIFY DIARRHOEA

Diarrhoea is passage of frequent loose or watery stools. Mothers usually know when their children have diarrhoea. Diarrhoea is common in children especially in those between 6 months and 2 years of age. It is more common in children under 6 months who are drinking cow's milk or infant feeding formulas more so if they are bottle-fed.

Frequent passing of normal stool is not diarrhoea. The number of stool normally passed in a day varies with the diet and age of the child. In many regions diarrhoea is defined as 3 or more loose or watery stools in a 24 hrs period.

What are the Types of Diarrhoea?

Most diarrhoeas which cause dehydration are **loose or watery**. If an episode of diarrhoea lasts less than 14 days, it is **acute** diarrhoea. Acute watery diarrhoea causes dehydration and contributes to malnutrition. The death of a infant with acute diarrhoea is usually due to dehydration.

If the diarrhoea lasts 14 days ore more, it is **persistent** diarrhoea. Up to 20% of episodes of diarrhoea become persistent. Persistent diarrhoea often causes nutritional problems and contributes to deaths in children.

Diarrhoea with blood in the stool, with or without mucus, is called **dysentery**. The most common cause of dysentery is *Shigella* bacteria. Amoebic dysentery is not common in young children.

4.1 ASSESS DIARRHOEA

A child with diarrhoea is assessed for:

- how long the child has had diarrhoea
- blood in the stool to determine if the child has dysentery, and for
- signs of dehydration.

Look at the following steps for assessing a child with diarrhoea:

| Does the child have diarrhoea? | |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF YES, ASK: | LOOK AND FEEL: |
| <ul style="list-style-type: none">• For how long ?• Is there any blood in the stool? | <ul style="list-style-type: none">• Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable?• Look for sunken eyes.• Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?• Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? |

Ask about diarrhoea in ALL children:

ASK: Does the child have diarrhoea?

If the mother answers NO, ask about the next main symptom, fever. You do not need to assess the child further for signs related to diarrhoea.

If the mother answers YES, or if the mother said earlier that diarrhoea was the reason for coming to the clinic, record her answer. Then assess the child for signs of dehydration, persistent diarrhoea and dysentery.

ASK: For how long?

Diarrhoea which lasts *14 days or more* is persistent diarrhoea.

Give the mother time to answer the question. She may need time to recall the exact number of days.

ASK: Is there blood in the stool?

Ask the mother if she has seen blood in the stools at any time during this episode of diarrhoea.

Next, check for signs of *dehydration*.

LOOK and **FEEL** for the following signs:

LOOK at the child's general condition. Is the child lethargic or unconscious? restless and irritable?

When you checked for general danger signs, you checked to see if the child was *Lethargic or unconscious*. If the child is lethargic or unconscious, he has a general danger sign. Remember to use this general danger sign when you classify the child's diarrhoea. Look to see if the child is restless and irritable.

LOOK for sunken eyes.

Note: In a severely malnourished child who is visibly wasted (that is, who has marasmus), the eyes may always look sunken, even if the child is not dehydrated. Even though sunken eyes is less reliable in a visibly wasted child, still use the sign to classify the child's dehydration.

OFFER the child fluid. Is the child not able to drink or drinking poorly? drinking eagerly, thirsty?

Ask the mother to offer the child some water in a cup or spoon. Watch the child drink.

A child is *not able to drink* if he is not able to suck or swallow when offered a drink.

A child may not be able to drink because he is lethargic or unconscious.

A child is *drinking poorly* if the child is weak and cannot drink without help. He may be able to swallow only if fluid is put in his mouth.

A child has the sign *drinking eagerly, thirsty* if it is clear that the child wants to drink. Look to see if the child reaches out for the cup or spoon when you offer him water. When the water is taken away, see if the child is unhappy because he wants to drink more.

If the child takes a drink only with encouragement and does not want to drink more, he does not have the sign "drinking eagerly, thirsty."

PINCH the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly?

Note: In a child with marasmus (severe malnutrition), the skin may go back slowly even if the child is not dehydrated. In an overweight child, or a child with oedema, the skin may go back immediately even if the child is dehydrated. Even though skin pinch is less reliable in these children, still use it to classify the child's dehydration.

EXERCISE B

In this exercise you will look at photographs of children with diarrhoea and identify signs of dehydration.

Part 1: Look at photographs 30 and 31 in the photograph booklet. Read the explanation for each photograph:

Photograph 30: This child's eyes are sunken.

Photograph 31: The skin pinch for this child goes back very slowly.

Part 2: Study photographs 32 through 36. Then write your answers to these questions:

Photograph 32: Look at the child's eyes. Are they sunken?

Photograph 33: Look at the child's eyes. Are they sunken?

Photograph 34-35: Look at the child's eyes. Are they sunken?

Photograph 36: Look at this photo of a skin pinch. Does the skin go back slowly or very slowly?

When you have identified the signs of dehydration in these photographs, discuss your answers with the facilitator.

4.2 CLASSIFY DIARRHOEA

There are three classification tables for classifying diarrhoea.

- * All children with diarrhoea are classified for dehydration.
- * If the child has had diarrhoea for 14 days or more, classify the child for persistent diarrhoea.
- * If the child has blood in the stool, classify the child for dysentery.

4.2.1 CLASSIFY DEHYDRATION

There are three possible classifications of dehydration in a child with diarrhoea:

- SEVERE DEHYDRATION
- SOME DEHYDRATION
- NO DEHYDRATION

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Two of the following signs:</p> <ul style="list-style-type: none"> • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly. | <p>SEVERE DEHYDRATION</p> | <ul style="list-style-type: none"> ➤ If child has no other severe classification: - Give fluid for severe dehydration (Plan C). ➤ <i>If child also has another severe classification: Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.</i> ➤ <i>If child is 2 years or older and there is cholera in your area, give doxycycline for cholera.</i> |
| <p>Two of the following signs:</p> <ul style="list-style-type: none"> • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly. | <p>SOME DEHYDRATION</p> | <ul style="list-style-type: none"> ➤ Give fluid, zinc supplement and food for some dehydration (Plan B). ➤ <i>If child also has a severe classification: Refer URGENTLY to hospital with mother giving frequent sips of ORS on the way. Advise the mother to continue breastfeeding.</i> ➤ Advise mother when to return immediately. ➤ Follow-up in 5 days if not improving. |
| <p>Not enough signs to classify as some or severe dehydration.</p> | <p>NO DEHYDRATION</p> | <ul style="list-style-type: none"> ➤ Give fluid, zinc supplement and food to treat diarrhoea at home (Plan A). ➤ Advise mother when to return immediately. ➤ Follow-up in 5 days if not improving |

To classify the child's dehydration, begin with the red (or top) row.

- If **two** or more of the signs in the red row are present, classify the child as having SEVERE DEHYDRATION.
- If **two** or more of the signs are not present in the red row, look at the yellow (or middle) row. If two or more of the signs are present in the yellow row, classify the child as having SOME DEHYDRATION.

- If **two** or more of the signs are not present in the red row or yellow row, classify the child as having **NO DEHYDRATION**. This child does not have enough signs to be classified as having **SEVERE/ SOME DEHYDRATION**. Some of these children may have one sign of dehydration or have lost fluids without showing signs.

* * *

Here is a description of each classification for dehydration:

SEVERE DEHYDRATION

If the child has two of the following signs -- lethargic or unconscious, sunken eyes, not able to drink or drinking poorly, skin pinch goes back very slowly -- classify the dehydration as **SEVERE DEHYDRATION**.

Treatment

Any child with dehydration needs extra fluids. A child classified with **SEVERE DEHYDRATION** needs fluids quickly. Treat with IV (intravenous) fluids. The box "Plan C: Treat Severe Dehydration Quickly" on the *TREAT* chart describes how to give fluids to severely dehydrated children. You will learn more about Plan C in the module *Treat The Child*.

SOME DEHYDRATION

If the child does not have signs of **SEVERE DEHYDRATION**, look at the next row. Does the child have signs of **SOME DEHYDRATION**?

If the child has two or more of the following signs – restless/ irritable, sunken eyes, drinks eagerly, thirsty, skin pinch goes back slowly -- classify the child's dehydration as **SOME DEHYDRATION**.

Treatment

A child who has **SOME DEHYDRATION** needs fluid and foods. Treat the child with ORS solution. In addition to fluid, the child with **SOME DEHYDRATION** needs food. Breastfed children should continue breastfeeding. Other children should receive their usual milk or some nutritious food after 4 hours of treatment with ORS. Children with some dehydration are also given daily dose of zinc supplement for 14 days. Zinc should be given as soon as the child can eat and has successfully completed 4 hours of rehydration.

This treatment is described in the box "Plan B: Treat Some Dehydration With ORS" on the *TREAT* chart.

NO DEHYDRATION

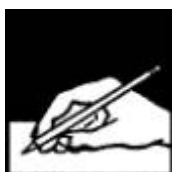
A child who does not have two or more signs in either the red or yellow row is classified as having NO DEHYDRATION.

Treatment

This child needs extra fluid to prevent dehydration. A child who has NO DEHYDRATION needs home treatment. The 3 rules of home treatment are:

1. Give extra fluid
2. Give zinc supplement daily for 14 days. The first tablet should be given in the health centre, demonstrating to the mother how to dissolve it in water or breastmilk, if necessary.
3. Continue feeding
4. When to return.

"Plan A: Treat Diarrhoea At Home" describes what fluids to teach the mother to use and how much she should give. A child with NO DEHYDRATION also needs zinc supplement, food and the mother needs advice about when to return to the clinic. Feeding recommendations and information about when to return are on the chart *COUNSEL THE MOTHER*.



EXERCISE C

In this exercise, you will practice assessing and classifying dehydration in a child with diarrhoea. Read the following case study. Use the dehydration classification table in the chart.

Case: Pano has had diarrhoea for five days. He has no blood in the stool. He is irritable. His eyes are sunken. His father and mother also think that Pano's eyes are sunken. The doctor offers Pano some water, and the child drinks eagerly. When the doctor pinches the skin on the child's abdomen, it goes back slowly. Record the child's signs and classification for dehydration on the Recording Form.

| DOES THE CHILD HAVE DIARRHOEA ? | | Yes ___ No ___ |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <ul style="list-style-type: none"> • For how long ? _____ Days • Is there any blood in the stool ? | <ul style="list-style-type: none"> • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable? • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | |

Circle the child's signs on the classification table below to show how you selected the child's classification.

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <p>Two of the following signs:</p> <ul style="list-style-type: none"> • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly. | SEVERE DEHYDRATION |
| <p>Two of the following signs:</p> <ul style="list-style-type: none"> • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly. | SOME DEHYDRATION |
| <p>Not enough signs to classify as some or severe dehydration</p> | NO DEHYDRATION |

4.2.2 CLASSIFY PERSISTENT DIARRHOEA

After you classify the child's dehydration, classify the child for persistent diarrhoea if the child has had diarrhoea for 14 days or more. There are two classifications for persistent diarrhoea:

- SEVERE PERSISTENT DIARRHOEA
- PERSISTENT DIARRHOEA

| | | |
|---------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Dehydration present | SEVERE PERSISTENT DIARRHOEA | <ul style="list-style-type: none"> ➤ <i>Treat dehydration before referral unless the child has another severe classification.</i> ➤ <i>Refer to hospital</i> |
| <ul style="list-style-type: none"> • <input type="checkbox"/> No Dehydration | PERSISTENT DIARRHOEA | <ul style="list-style-type: none"> ➤ Advise the mother on feeding a child who has PERSISTENT DIARRHOEA ➤ Give single dose of vitamin A ➤ Give zinc sulphate daily for 14 days. ➤ Follow-up in 5 days. |

SEVERE PERSISTENT DIARRHOEA

If a child has had diarrhoea for 14 days or more and also has some or severe dehydration, classify the child's illness as SEVERE PERSISTENT DIARRHOEA.

Treatment

Children with diarrhoea lasting 14 days or more who are also dehydrated need referral to hospital. These children need special attention to help prevent loss of fluid. They may also need a change in diet. They may need laboratory tests of stool samples to identify the cause of the diarrhoea.

Treat the child's dehydration before referral unless the child has another severe classification. Treatment of dehydration in children with severe disease can be difficult. These children should be treated in a hospital.

PERSISTENT DIARRHOEA

A child who has had diarrhoea for 14 days or more and who has no signs of dehydration is classified as having PERSISTENT DIARRHOEA.

Treatment

Special feeding is the most important treatment for persistent diarrhoea. Feeding recommendations for persistent diarrhoea are explained in the module *Counsel The Mother*. Children with persistent diarrhoea are also given single dose of vitamin A and a daily dose of zinc sulphate for 14 days.

4.2.3 CLASSIFY DYSENTERY

There is only one classification for dysentery:

Classify a child with diarrhoea and blood in the stool as having DYSENTERY.

| | | |
|-----------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Blood in the stool. | DYSENTERY | <ul style="list-style-type: none"> ➤ Give ciprofloxacin for 3 dayse. ➤ Give zinc supplements daily for 14 days. ➤ Follow-up in 2 days |
|-----------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Treatment

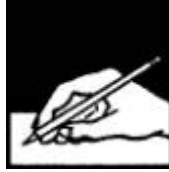
Treat the child's dehydration. Also give ciprofloxacin for Shigella because:

- *Shigella* cause about 60% of dysentery cases seen in clinics.
- *Shigella* cause nearly all cases of life-threatening dysentery.

Finding the actual cause of the dysentery requires a stool culture. It can take at least 2 days to obtain the laboratory test results.

Note: A child with diarrhoea may have one or more classifications for diarrhoea. Record any diarrhoea classifications the child has in the Classify column on the Recording Form. For example, this child was classified as having NO DEHYDRATION and DYSENTERY. Here is how the doctor recorded his classifications:

| | | |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| DOES THE CHILD HAVE DIARRHOEA ? | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| <ul style="list-style-type: none"> • For how long ? <u>2</u> Days • Is there any blood in the stool ? | <ul style="list-style-type: none"> • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable? • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | <p><i>No Dehydration Dysentery</i></p> |



EXERCISE D

In this exercise, you will practice classifying a child with diarrhoea. Read the following case study. Record the child's signs and classify them on the Recording Form. Refer to your chart.

Case: Maya

Maya is at the clinic today because she has had diarrhoea for 4 days. She is 25 months old. She weighs 9 kg. Her temperature is 37.0°C. Maya has no general danger signs. She does not have cough or difficult breathing.

The doctor said to the mother, "When Maya has diarrhoea, is there any blood in the stool?" The mother said, "No." The doctor checked for signs of dehydration. Maya is not lethargic or unconscious. She is not restless or irritable. Her eyes are not sunken. Maya drinks eagerly when offered some water. Her skin pinch goes back immediately. Record Maya's signs on the Recording Form and classify them.

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

Name: _____ Age: _____ Sex: M ___ F ___ Weight: _____ kg

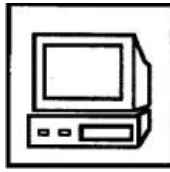
Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <p>CHECK FOR GENERAL DANGER SIGNS</p> <p>NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS</p> <p>VOMITS EVERYTHING</p> <p>CONVULSIONS</p> | <p>General danger sign present? Yes ___ No ___</p> <p>Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor. | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | |



EXERCISE E

In this video exercise, you will see a demonstration of how to assess and classify a child with diarrhoea. You will see examples of signs and practice identifying them. Then you will see a case study and practice assessing and classifying the child's illness.

- For each of the children shown, answer the question:

| | Does the child have sunken eyes? | |
|----------------|----------------------------------|----|
| | YES | NO |
| Child 1 | | |
| Child 2 | | |
| Child 3 | | |
| Child 4 | | |
| Child 5 | | |
| Child 6 | | |

- For each of the children shown, answer the question:

| | Does the skin pinch go back: | | |
|----------------|------------------------------|---------|--------------|
| | very slowly? | slowly? | immediately? |
| Child 1 | | | |
| Child 2 | | | |
| Child 3 | | | |
| Child 4 | | | |
| Child 5 | | | |

Video Case Study: Watch the case study and record the child's signs on this Recording Form. Then classify the illness.

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

Name: _____ Age: _____ Sex: M ___ F ___ Weight: _____ kg

Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS VOMITS EVERYTHING CONVULSIONS</p> | <p>General danger sign present? Yes ___ No ___ Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor. | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | |

At the end of this video exercise, there will be a group discussion.

5.0 ASSESS AND CLASSIFY FEVER

A child with fever may have malaria, measles or another severe disease. Or, a child with fever may have a simple cough or cold or other viral infection.

MALARIA: Malaria is caused by four species of plasmodia transmitted through the bite of female anopheles mosquitoes, the dangerous one being *Plasmodium falciparum*. The most common species is *Plasmodium vivax*.

Fever is the main symptom of malaria. It can be present all the time or go away and return at regular intervals. Other signs of malaria are shivering, sweating and vomiting.

Signs of malaria can overlap with signs of other illnesses. For example, a child may have malaria and cough with fast breathing, a sign of pneumonia. This child needs treatment for both falciparum malaria and pneumonia. Children with malaria may also have diarrhoea. They need an antimalarial and treatment for the diarrhoea.

In areas with very high malaria transmission, malaria is a major cause of death in children. A case of uncomplicated malaria can develop into severe malaria as soon as 24 hours after the fever first appears. Severe malaria is malaria with complications such as cerebral malaria or severe anaemia. The child can die if he does not receive urgent treatment.

Deciding Malaria Risk: To classify and treat children with fever, you must know the malaria risk in your area. The National Anti-Malaria Program classifies areas as high or low malaria risk areas.

* * *

MEASLES: Fever and a generalized rash are the main signs of measles. Measles is highly infectious. Maternal antibody protects young infants against measles for about 6 months. Then the protection gradually disappears. Most cases occur in children between 6 months and 2 years of age. Overcrowding and poor housing increase the risk of measles occurring early.

Measles is caused by a virus. It infects the skin and the layer of cells that line the lung, gut, eye, mouth and throat. The measles virus damages the immune system for many weeks after the onset of measles. This leaves the child at risk for other infections.

Complications of measles occur in about 30% of all cases. The most important are:

- diarrhoea (including dysentery and persistent diarrhoea)
- pneumonia
- stridor
- mouth ulcers
- ear infection and
- severe eye infection (which may lead to corneal ulceration and blindness).

Encephalitis occurs in about one in one thousand cases. A child with encephalitis may have a general danger sign such as convulsions or lethargic or unconscious.

Measles contributes to malnutrition because it causes diarrhoea, high fever and mouth ulcers. These problems interfere with feeding. Malnourished children are more likely to have severe complications due to measles. This is especially true for children who are deficient in vitamin A. One in ten severely malnourished children with measles may die. For this reason, it is very important to help the mother to continue to feed her child during measles.

5.1 ASSESS FEVER

A child has the main symptom fever if:

- * the child has a history of fever or
- * the child feels hot or
- * the child has an axillary temperature of 37.5°C or above.

Decide the malaria risk (high or low).

Then assess a child with fever for:

- how long the child has had fever
- history of measles
- stiff neck
- bulging fontanelle
- runny nose
- signs suggesting measles -- which are generalized rash and one of these: cough, runny nose, or red eyes.
- if the child has measles now or within the last 3 months, assess for signs of measles complications. They are: mouth ulcers, pus draining from the eye and clouding of the cornea.

The box shown below lists the steps for assessing a child for fever. There are two parts to the box. The main box describes how to assess the child for signs of malaria, measles, meningitis and other causes of fever. The extended arm of the main box is connected to another box which describes how to assess the child for signs of measles complications if the child has measles now or within the last 3 months.

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF YES: Decide Malaria Risk: High Low Make a smear/perform RDT | |
| THEN ASK: | LOOK AND FEEL: |
| <ul style="list-style-type: none"> • Fever for how long? • If more than 7 days, has fever been present every day? • Has the child had measles within the last 3 months? | <ul style="list-style-type: none"> • Look or feel for stiff neck. • Look and feel for bulging fontanelle. • Look for runny nose. <p>Look for signs of MEASLES</p> <ul style="list-style-type: none"> • Generalized rash and • One of these: cough, runny nose or red eyes. |
| ----- | |
| <i>If the child has measles now or within the last 3 months:</i> | <ul style="list-style-type: none"> • Look for mouth ulcers. Are they deep and extensive? • Look for pus draining from the eye. • Look for clouding of the cornea. |

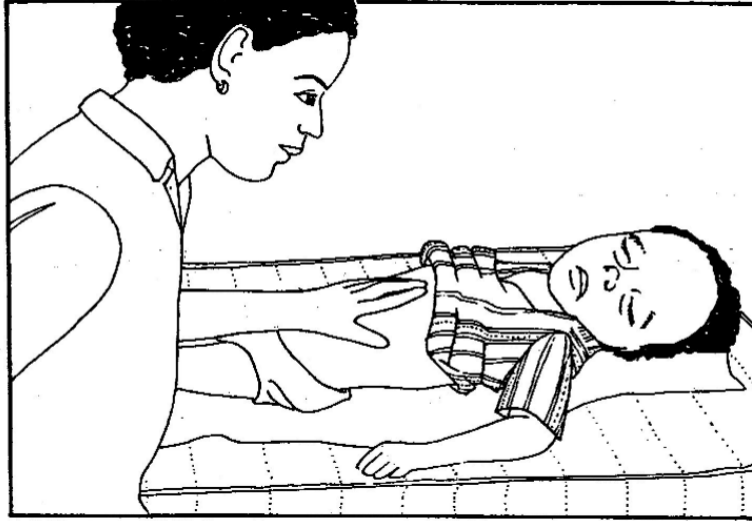
Ask about (or measure) fever in ALL sick children.

ASK: Does the child have fever?

Check to see if the child has a history of fever, feels hot or has a temperature of 37.5°C or above.

The child has a history of fever if the child has had any fever with this illness. Use words for "fever" that the mother understands. Make sure the mother understands what fever is. For example, ask the mother if the child's body has felt hot. Feel the child's abdomen or axilla and determine if the child feels hot.

Look to see if the child's temperature was measured today and recorded on the child's chart. If the child has a temperature of 37.5°C or above, the child has fever. If the child's temperature has not been measured, and you have a thermometer, measure the child's temperature.



If the child does not have fever (by history, feels hot or temperature 37.5°C or above), tick (_) NO on the Recording Form. Ask about the next main symptom, ear problem. Do not assess the child for signs related to fever.

If the child has fever (by history, feels hot or temperature 37.5°C or above), assess the child for additional signs related to fever. Assess the child's fever even if the child does not have a temperature of 37.5°C or above or does not feel hot now. History of fever is enough to assess the child for fever.

DECIDE Malaria Risk: high or low

Decide if the malaria risk is high or low. Circle the malaria risk (high or low) on the Recording Form. You will use this information when you classify the child's fever.

ASK: For how long? If more than 7 days, has fever been present every day?

Ask the mother how long the child has had fever. If the fever has been present for more than 7 days, ask if the fever has been present every day.

Most fevers due to viral illnesses go away within a few days. A fever which has been present every day for more than 7 days can mean that the child has a more severe disease such as typhoid fever. Refer this child for further assessment.

ASK: Has the child had measles within the last 3 months?

Measles damages the child's immune system and leaves the child at risk for other infections for many weeks.

A child with fever and a history of measles within the last 3 months may have an infection due to complications of measles such as an eye infection.

LOOK or FEEL for stiff neck.

A child with fever and stiff neck may have meningitis. A child with meningitis needs urgent treatment with injectable antibiotics and referral to a hospital.

While you talk with the mother during the assessment, look to see if the child moves and bends his neck easily as he looks around. If the child is moving and bending his neck, he does not have a stiff neck.



If you did not see any movement, or if you are not sure, draw the child's attention to his umbilicus or toes. For example, you can shine a flashlight on his toes or umbilicus or tickle his toes to encourage the child to look down. Look to see if the child can bend his neck when he looks down at his umbilicus or toes.

If you still have not seen the child bend his neck himself, ask the mother to help you lie the child on his back. Lean over the child, gently support his back and shoulders with one hand. With the other hand, hold his head. Then carefully bend the head forward toward his chest. If the neck bends easily, the child does not have stiff neck. If the neck feels stiff and there is resistance to bending, the child has a stiff neck. Often a child with a stiff neck will cry when you try to bend the neck.

FEEL for bulging fontanelle

The fontanelle is open for most of the period of infancy before it is closed by the growth of the surrounding bones. If the fontanelle is open, feel for bulging fontanelle just as you did for young infants.

LOOK for runny nose.

A runny nose in a child with fever may mean that the child has a common cold. If the child has a runny nose, ask the mother if the child has had a runny nose only with this illness. If she is not sure, ask questions to find out if it is an acute or chronic runny nose.

When malaria risk is low , a child with fever and a runny nose does not need an antimalarial. This child's fever is probably due to the common cold.

LOOK for signs suggesting MEASLES.

Assess a child with fever to see if there are signs suggesting measles. Look for a generalized rash and for one of the following signs: cough, runny nose, or red eyes.

Generalized rash

In measles, a red rash begins behind the ears and on the neck. It spreads to the face. During the next day, the rash spreads to the rest of the body, arms and legs. After 4 to 5 days, the rash starts to fade and the skin may peel. Some children with severe infection may have more rash spread over more of the body. The rash becomes more discoloured (dark brown or blackish), and there is more peeling of the skin.

A measles rash does not have vesicles (blisters) or pustules. The rash does not itch. Do not confuse measles with other common childhood rashes such as chicken pox, scabies or heat rash. (The chicken pox rash is a generalized rash with vesicles. Scabies occurs on the hands, feet, ankles, elbows, buttocks and axilla. It also itches. Heat rash can be a generalized rash with small bumps and vesicles which itch. A child with heat rash is not sick.) You can recognize measles more easily during times when other cases of measles are occurring in your community.

Cough, Runny Nose, or Red Eyes

To classify a child as having measles, the child with fever must have a generalized rash AND one of the following signs: cough, runny nose, or red eyes. The child has "red eyes" if there is redness in the white part of the eye. In a healthy eye, the white part of the eye is clearly white and not discoloured.

EXERCISE F

Part 1: Study the photographs numbered 37 through 40. They show examples of common childhood rashes. Read the explanation for each of these photographs.

Photograph 37: This child has the generalized rash of measles and red eyes.

Photograph 38: This example shows a child with heat rash. It is not the generalized rash of measles.

Photograph 39: This is an example of scabies. It is not the generalized rash of measles.

Photograph 40: This is an example of a rash due to chicken pox. It is not a measles rash.

Part 2: Study photographs 41 through 50 showing children with rashes. For each photograph, tick whether the child has the generalized rash of measles. Use the following answer sheet:

| | Is the generalized rash of measles present? | |
|---------------|---------------------------------------------|----|
| | YES | NO |
| Photograph 41 | | |
| Photograph 42 | | |
| Photograph 43 | | |
| Photograph 44 | | |
| Photograph 45 | | |
| Photograph 46 | | |
| Photograph 47 | | |
| Photograph 48 | | |
| Photograph 49 | | |
| Photograph 50 | | |

If the child has MEASLES now or within the last 3 months: Look to see if the child has mouth or eye complications. Other complications of measles such as stridor in a calm child, pneumonia, and diarrhoea are assessed earlier; malnutrition and ear infection are assessed later.

LOOK for mouth ulcers. Are they deep and extensive?

Look inside the child's mouth for mouth ulcers. Ulcers are painful open sores on the inside of the mouth and lips or the tongue. They may be red or have white coating on them. In severe cases, they are deep and extensive. When present, mouth ulcers make it difficult for the child with measles to drink or eat.

Mouth ulcers are different than the small spots called Koplik spots. Koplik spots occur in the mouth inside the cheek during early stages of the measles infection. Koplik spots are small, irregular, bright red spots with a white spot in the center. They do not interfere with drinking or eating. They do not need treatment.

EXERCISE G

In this exercise, you will look at photographs of children with measles. You will practice identifying mouth ulcers.

Part 1: Study photographs 51 through 53, and read the explanation for each one.

Photograph 51: This is an example of a normal mouth. The child does not have mouth ulcers.

Photograph 52: This child has Koplik spots. These spots occur in the mouth inside the cheek early in a measles infection. They are not mouth ulcers.

Photograph 53: This child has a mouth ulcer.

Part 2: Study photographs 54 through 56 showing children with measles. Look at each photograph and tick if the child has mouth ulcers.

| | Does the child have mouth ulcers? | |
|---------------|-----------------------------------|----|
| | YES | NO |
| Photograph 54 | | |
| Photograph 55 | | |
| Photograph 56 | | |

Tell your facilitator when you are ready to discuss your answers to this exercise.

LOOK for pus draining from the eye.

Pus draining from the eye is a sign of conjunctivitis. Conjunctivitis is an infection of the conjunctiva, the inside surface of the eyelid and the white part of the eye. If you do not see pus draining from the eye, look for pus on the conjunctiva or on the eyelids.

Often the pus forms a crust when the child is sleeping and seals the eye shut. It can be gently opened with clean hands. Wash your hands after examining the eye of any child with pus draining from the eye.

LOOK for clouding of the cornea.

The cornea is usually clear. When clouding of the cornea is present, there is a hazy area in the cornea. Look carefully at the cornea for clouding. The cornea may appear clouded or hazy. The clouding may occur in one or both eyes.

Corneal clouding is a dangerous condition. The corneal clouding may be due to vitamin A deficiency which has been made worse by measles. If the corneal clouding is not treated, the cornea can ulcerate and cause blindness. A child with clouding of the cornea needs urgent treatment with vitamin A.

A child with corneal clouding may keep his eyes tightly shut when exposed to light. The light may cause irritation and pain to the child's eyes. To check the child's eye, wait for the child to open his eye. Or, gently pull down the lower eyelid to look for clouding.

If there is clouding of the cornea, ask the mother how long the clouding has been present. If the mother is certain that clouding has been there for some time, ask if the clouding has already been assessed and treated at the hospital. If it has, you do not need to refer this child again for corneal clouding.

EXERCISE H

In this photograph exercise, you will practice identifying eye complications of measles.

Part 1: Study photographs 57 through 59.

Photograph 57: This is a normal eye showing the iris, pupil, conjunctiva and cornea. The child has been crying. There is no pus draining from the eye.

Photograph 58: This child has pus draining from the eye.

Photograph 59: This child has clouding of the cornea.

Part 2: Now look at photographs 60 through 66. For each photograph, answer each question by writing "yes" or "no" in each column. If you cannot decide if pus is draining from the eye or if clouding of the cornea is present, write "not able to decide."

| | Does the child have: | |
|---------------|----------------------------|-------------------------|
| | Pus draining from the eye? | Clouding of the cornea? |
| Photograph 60 | | |
| Photograph 61 | | |
| Photograph 62 | | |
| Photograph 63 | | |
| Photograph 64 | | |
| Photograph 65 | | |
| Photograph 66 | | |

Tell your facilitator when you are ready to discuss your answers to this exercise.

5.2 CLASSIFY FEVER

If the child has fever and no signs of measles, classify the child for fever only.

If the child has signs of both fever and measles, classify the child for fever and for measles.

There are two fever classification tables on the *ASSESS & CLASSIFY* chart. One is for classifying fever when the risk of malaria is high. The other is for classifying fever when the risk of malaria is low. To classify fever, you must know if the malaria risk is high or low. Then you select the appropriate classification table.

HIGH MALARIA RISK:

There are two possible classifications of fever when the malaria risk is high.

- VERY SEVERE FEBRILE DISEASE
- MALARIA

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Any general danger sign or • Stiff neck or • Bulging fontanelle. | VERY SEVERE FEBRILE DISEASE | <ul style="list-style-type: none"> ➤ Give first dose of IM quinine after RDT / smear. ➤ Give first dose of IV or IM chloramphenicol (If not possible, give oral amoxicillin). ➤ Treat the child to prevent low blood sugar. ➤ Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above). ➤ Refer URGENTLY to hospital. |
| <ul style="list-style-type: none"> • Fever (by history or feels hot or temperature 37.5°C or above). | MALARIA | <ul style="list-style-type: none"> ➤ Give oral antimalarials for HIGH malaria risk area after RDT/ smear ➤ Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above) ➤ Advise mother when to return immediately. ➤ Follow-up in 2 days. ➤ If fever is present every day for more than 7 days, refer for assessment. |

VERY SEVERE FEBRILE DISEASE (High Malaria Risk)

If the child with fever has any general danger sign, bulging fontanelle or a stiff neck, classify the child as having VERY SEVERE FEBRILE DISEASE.

Treatment

A child with fever and any general danger sign or stiff neck may have meningitis, severe malaria (including cerebral malaria) or sepsis. It is not possible to distinguish between these severe diseases without laboratory tests. A child classified as having VERY SEVERE FEBRILE DISEASE needs urgent treatment and referral. Before referring urgently, you will give several treatments for the possible severe diseases.

Give the child an injection of quinine for malaria after RDT/ making a blood smear. Also give first dose of injectable chloramphenicol (If not possible give oral amoxicillin) for meningitis or other severe bacterial infection. You should also treat the child to prevent low blood sugar. Also give paracetamol if there is a high fever.

MALARIA (*High Malaria Risk*)

If a general danger sign or stiff neck is not present, look at the yellow row. Because the child has a fever (by history, feels hot, or temperature 37.5°C or above) in a high malaria risk area, classify the child as having MALARIA.

When the risk of malaria is high, the chance is also high that the child's fever is due to malaria.

Treatment

Give Oral antimalarials for high malaria risk areas according to the National Anti-Malaria Program policy.

- If smear or RDT is positive for *P.falciparum* give Artesunate, Sulphapyrimethamine, and Primaquine on day 1; and Artesunate on Day 2 and Day 3.
- If smear is positive for *P.vivax* give chloroquine for 3 days and primaquine for 14 days.
- If both RDT and blood smear is **negative** or not available, give chloroquine for 3 days.

Give paracetamol to a child with high fever (axillary temperature of 38.5°C or above).

Most viral infections last less than a week. A fever that persists every day for more than 7 days may be a sign of typhoid fever or other severe disease. If the child's fever has persisted every day for more than 7 days, refer the child for additional assessment.

FOR LOW MALARIA RISK

If risk of malaria in your area is low, use the Low Malaria Risk classification table.

There are three possible classifications of fever in a child with low malaria risk.

- VERY SEVERE FEBRILE DISEASE
- MALARIA
- FEVER - MALARIA UNLIKELY

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Any general danger sign or • Stiff neck or • Bulging fontanelle. | <p>VERY SEVERE FEBRILE DISEASE</p> | <ul style="list-style-type: none"> ➤ Give first dose of IM quinine after making smear. ➤ Give first dose of IV or IM chloramphenicol (if not possible, give oral amoxicillin). ➤ Treat the child to prevent low blood sugar. ➤ Give one dose of paracetamol in clinic for high fever (temp 38.5°C or above). ➤ Refer URGENTLY to hospital[#]. |
| <ul style="list-style-type: none"> • NO runny nose and NO measles and NO other cause of fever. | <p>MALARIA</p> | <ul style="list-style-type: none"> ➤ Give oral antimalarials for LOW malaria risk area after making smear. ➤ Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above) . ➤ Advise mother when to return immediately. ➤ Follow-up in 2 days if fever persists. ➤ If fever is present every day for more than 7 days, refer for assessment. |
| <ul style="list-style-type: none"> • Runny nose PRESENT or • Measles PRESENT or • Other cause of fever PRESENT. | <p>FEVER -MALARIA UNLIKELY</p> | <ul style="list-style-type: none"> ➤ Give one dose of paracetamol in clinic for high fever (temp. 38.5°C or above). ➤ Advise mother when to return immediately. ➤ Follow-up in 2 days if fever persists. ➤ If fever is present every day for more than 7 days, refer for assessment. |

VERY SEVERE FEBRILE DISEASE (*Low Malaria Risk*)

If the child with fever has any general danger sign, bulging fontanelle or a stiff neck, classify the child as having VERY SEVERE FEBRILE DISEASE.

Treatment

Manage the child on the same lines as VERY SEVERE FEBRILE DISEASE in High Malaria Risk areas.

MALARIA (*Low Malaria Risk*)

If a general danger sign or stiff neck or bulging fontanelle is not present, look at the yellow row. If there is no NO runny nose, NO measles and NO other cause of fever (pneumonia, cough or cold, dysentery, diarrhoea, skin infection) in a low malaria risk area, classify the child as having MALARIA.

Treatment

Give oral antimalarials for low malaria risk areas according to the National Anti-Malaria Program policy.

- If smear is positive for *P.falciparum* with Chloroquine and Primaquine on day 1 and Chloroquine alone on Day 2 and Day 3.
- If smear is positive for *P.vivax* give Chloroquine for 3 days along with Primaquine for 14 days.
- If smear is ***negative*** or not available, give chloroquine for 3 days.

Give one dose of paracetamol in clinic for high fever (temperature 38.5°C or above).

FEVER-MALARIA UNLIKELY (*Low Malaria Risk*)

If a general danger sign or stiff neck or bulging fontanelle is not present, and Runny nose or Measles or Other cause of fever is PRESENT in a low malaria risk area, classify the child as having FEVER - MALARIA UNLIKELY.

Treatment

Give one dose of paracetamol in clinic for high fever (temperature 38.5°C or above), and 3 additional doses for use at home for high fever. If fever is present every day for more than 7 days, refer for assessment.

5.3 CLASSIFY MEASLES

A child who has the main symptom "fever" and measles now (or within the last 3 months) is classified both for fever and for measles. First you must classify the child's fever. Next you classify measles.

If the child has no signs suggesting measles, or has not had measles within the last three months, do not classify measles. Ask about the next main symptom, ear problem.

There are three possible classifications of measles:

- SEVERE COMPLICATED MEASLES
- MEASLES WITH EYE OR MOUTH COMPLICATIONS
- MEASLES

The table for classifying measles if present now or within the last 3 months is shown as follows:

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Any general danger sign or • Clouding of cornea or • Deep or extensive mouth ulcers. | SEVERE COMPLICATED MEASLES | <ul style="list-style-type: none"> ➤ Give first dose of Vitamin A. ➤ Give first dose of injectable chloramphenicol (If not possible give oral amoxycillin). ➤ If clouding of the cornea or pus draining from the eye, apply tetracycline eye ointment. ➤ Refer URGENTLY to hospital# |
| <ul style="list-style-type: none"> • Pus draining from the eye or • Mouth ulcers. | MEASLES WITH EYE OR MOUTH COMPLICATIONS | <ul style="list-style-type: none"> ➤ Give first dose of Vitamin A. ➤ If pus draining from the eye, treat eye infection with tetracycline eye ointment. ➤ If mouth ulcers, treat with gentian violet. ➤ Follow-up in 2 days. |
| <ul style="list-style-type: none"> • Measles now or within the last 3 months. | MEASLES | <ul style="list-style-type: none"> ➤ Give first dose of Vitamin A. |

SEVERE COMPLICATED MEASLES

If the child has any general danger sign, clouding of cornea, or deep or extensive mouth ulcers, classify the child as having SEVERE COMPLICATED MEASLES. This child needs urgent treatment and referral to hospital.

Children with measles may have other serious complications of measles. These include stridor in a calm child, severe pneumonia, severe dehydration, or severe malnutrition. You assess and classify these signs in other parts of the assessment. Their treatments are appropriate for the child with measles.

Treatment

Some complications are due to bacterial infections. Others are due to the measles virus which causes damage to the respiratory and intestinal tracts. Vitamin A deficiency contributes to some of the complications such as corneal ulcer. Any vitamin A deficiency is made worse by the measles infection. Measles complications can lead to severe disease and death.

All children with SEVERE COMPLICATED MEASLES should receive urgent treatment. Treat the child with first dose of vitamin A. Also give the first dose of injectable chloramphenicol (if not possible give oral amoxycillin) before referring the child.

If there is clouding of the cornea, or pus draining from the eye, apply tetracycline ointment. If it is not treated, corneal clouding can result in blindness. Ask the mother if the clouding has been present for some time. Find out if it was assessed and treated at the hospital. If it was, you do not need to refer the child again for this eye sign.

MEASLES WITH EYE OR MOUTH COMPLICATIONS

If the child has pus draining from the eye or mouth ulcers which are not deep or extensive, classify the child as having MEASLES WITH EYE OR MOUTH COMPLICATIONS. A child with this classification does not need referral.

You assess and classify the child for other complications of measles (pneumonia, diarrhoea, ear infection and malnutrition) in other parts of this assessment. Their treatments are appropriate for the child with measles.

Treatment

Identifying and treating measles complications early in the infection can prevent many deaths. Give two doses of Vitamin A (Give first dose in clinic and give mother one dose to give at home the next day.). It will help correct any vitamin A deficiency and decrease the severity of the complications. Teach the mother to treat the child's eye infection or mouth ulcers at home. Treating mouth ulcers helps the child to more quickly resume normal feeding.

MEASLES

A child with measles now or within the last 3 months and with none of the complications listed in the pink or yellow rows is classified as having MEASLES. Give the child vitamin A to help prevent measles complications.

All children with measles should receive two doses of Vitamin A (Give first dose in clinic and give mother one dose to give at home the next day.)

EXERCISE I

In this exercise, you will classify illness in children with signs of fever and, if present, signs suggesting measles. First, you will study an example. Then you will begin the exercise.

Read the example case study that begins on this page. Also study how the doctor classified this child's illness. When all the participants are ready, there will be a group discussion about this example.

* * *

EXAMPLE: Pawan is 10 months old. He weighs 8.2 kg. His temperature is 37.5°C. His mother says he has a rash and cough.

The doctor checked Pawan for general danger signs. Pawan was able to drink, was not vomiting, did not have convulsions and was not lethargic or unconscious.

The doctor next asked about Pawan's cough. The mother said Pawan had been coughing for 5 days. He counted 43 breaths per minute. He did not see chest indrawing. He did not hear stridor when Pawan was calm. Pawan did not have diarrhoea.

Next the doctor asked about Pawan's fever. The malaria risk is high. The mother said Pawan has felt hot for 2 days. Pawan did not have a stiff neck. He has had a runny nose with this illness, his mother said. Pawan has a rash covering his whole body. Pawan's eyes were red. The doctor checked the child for complications of measles. There were no mouth ulcers. There was no pus draining from the eye and no clouding of the cornea.

1. Here is how the doctor recorded Pawan's case information and signs of illness.

MANAGEMENT OF THE SICK YOUNG INFANT AGE 2 MONTHS UP TO 5 YEARS

Name: Pawan Age: 10 Sex: M F months Weight: 8.2 kg

Temperature: 37.5 °C

ASK: What are the child's problems? Rash, cough Initial visit? Follow-up Visit?

ASSESS (Circle all signs present)

CLASSIFY

CHECK FOR GENERAL DANGER SIGNS

NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS
 VOMITS EVERYTHING
 CONVULSIONS

General danger/signs present?
 Yes No
Remember to use danger sign when selecting classifications

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing? Yes----- No-----

NO PNEUMONIA :

IF YES, ASK: LOOK, LISTEN, FEEL:

- For how long ? 5 Days
- Count the breaths in one minute
 43 breaths per minute Fast breathing?
- Look for chest indrawing.
- Look and listen for stridor.

COUGH OR COLD

DOES THE CHILD HAVE DIARRHOEA ? Yes No

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

DOES THE CHILD HAVE FEVER ? Yes No

(by history feels hot or temperature 37.5°C or above)
 Decide Malaria Risk: high or low

- For how long? 2 Days
- If more than 7 days, has fever been present every day?
- Has the child had measles now or within the last 3 months:
- Look or feel for stiff neck.
- Look or feel for bulging fontanelle.
- Look for runny nose
- Look for signs of MEASLES
 - Generalized rash
 - One of these: cough, runny nose, or red eyes

MALARIA

If the child has MEASLES now or within the last 3 months

- Look for mouth ulcers
 If yes, are they deep and extensive
- Look for pus draining from the eye.
- Look for clouding of the cornea

MEASLES

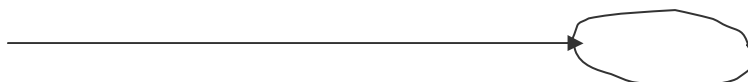
2. To classify Pawan's fever, the doctor looked at the table for classifying fever when there is a High Malaria Risk.

- a. He checked to see if Pawan had any of the signs in the pink row. He thought, "Does Pawan have any general danger signs? No, he does not. Does Pawan have a stiff neck? No, he does not. Pawan does not have any signs of **VERY SEVERE FEBRILE DISEASE**."
- b. Next, the doctor looked at the yellow row. He thought, "Pawan has a fever. His temperature measures 37.5°C. He also has a history of fever because his mother says Pawan felt hot for 2 days. He classified Pawan as having **MALARIA**."
- c. Because Pawan had a generalized rash and red eyes, Pawan has signs suggesting measles. To classify Pawan's measles, the doctor looked at the classification table for classifying measles.
- d. He checked to see if Pawan had any of the signs in the pink row. He thought, "Pawan does not have any general danger signs. The child does not have clouding of the cornea. There are no deep or extensive mouth ulcers. Pawan does not have **SEVERE COMPLICATED MEASLES**."
- e. Next the doctor looked at the yellow row. He thought, "Does Pawan have any signs in the yellow row? He does not have pus draining from the eye. There are no mouth ulcers. Pawan does not have **MEASLES WITH EYE OR MOUTH COMPLICATIONS**."
- f. Finally the doctor looked at the green row. Pawan has measles, but he has no signs in the pink or yellow row. The doctor classified Pawan as having **MEASLES**.

| | |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <ul style="list-style-type: none"> • Any general danger sign or • Stiff neck or • Bulging fontanelle. | VERY SEVERE FEBRILE DISEASE |
| Fever (by history or feels hot or temperature 37.5°C** or above). | MALARIA |



| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <ul style="list-style-type: none"> • Any general danger sign or • Clouding of cornea or • Deep or extensive mouth ulcer | SEVERE COMPLICATED MEASLES |
| <ul style="list-style-type: none"> • Pus draining from the eye or • Mouth ulcers. | MEASLES WITH EYE OR MOUTH COMPLICATIONS |
| • Measles now or within the last 3 months | MEASLES |



Now read the following case study. Record each sign and their classifications on the Recording Form. Remember to look at the chart to classify the signs.

Case : Kareem

Kareem is 5 months old. He weighs 5.2 kg. His axillary temperature is 37.5°C. His mother said he is not eating well. She said he feels hot, and she wants a doctor to help him.

Kareem is able to drink, has not vomited, does not have convulsions, and is not lethargic or unconscious.

Kareem does not have a cough, said his mother. He does not have diarrhoea.

Because Kareem's temperature is 37.5°C and he feels hot, the doctor assessed Kareem further for signs related to fever. It is the rainy season, and the risk of malaria is high. The mother said Kareem's fever began 2 days ago. He has not had measles within the last 3 months. He does not have stiff neck, his fontanelle is not bulging, his nose is not runny, and there are no signs suggesting measles.

Record Kareem's signs and classify them on the Recording Form.

MANAGEMENT OF THE SICK YOUNG INFANT AGE 2 MONTHS UP TO 5 YEARS

Name: _____ Age: _____ Sex: M ___ F ___ Weight: _____ kg

Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

CHECK FOR GENERAL DANGER SIGNS

NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS
 VOMITS EVERYTHING
 CONVULSIONS

General danger signs present?
 Yes ___ No ___
**Remember to use danger sign
 when selecting classifications**

THEN ASK ABOUT MAIN SYMPTOMS:

Does the child have cough or difficult breathing? Yes----- No-----
IF YES, ASK: LOOK, LISTEN, FEEL:

- For how long? ___ Days
- Count the breaths in one minute
 ___ breaths per minute Fast breathing?
- Look for chest indrawing.
- Look and listen for stridor.

DOES THE CHILD HAVE DIARRHOEA ? Yes ___ No ___

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

DOES THE CHILD HAVE FEVER ? Yes ___ No ___

(by history feels hot or temperature 37.5°C or above)
 Decide Malaria Risk: high or low

- For how long? ___ Days
- If more than 7 days, has fever been present every day?
- Look or feel for stiff neck.
- Look or feel for bulging fontanelle.
- Look for runny nose
- Has the child had measles now or within the last 3 months:
- Look for signs of MEASLES
 - Generalized rash
 - One of these: cough, runny nose, or red eyes

**If the child has MEASLES
 now or within the last
 3 months**

- Look for mouth ulcers
 If yes, are they deep and extensive
- Look for pus draining from the eye.
- Look for clouding of the cornea

Tell your facilitator when you are ready to discuss your answers.



EXERCISE J

In this exercise, you will watch a demonstration of how to assess and classify a child with fever. You will see examples of signs related to fever and measles. You will practice identifying stiff neck. Then you will watch a case study.

For each of the children shown, answer the question:

| | Does the child have a stiff neck? | |
|---------|-----------------------------------|----|
| | YES | NO |
| Child 1 | | |
| Child 2 | | |
| Child 3 | | |
| Child 4 | | |

6.0 ASSESS AND CLASSIFY EAR PROBLEM

A child with an ear problem may have an ear infection.

When a child has an ear infection, pus collects behind the ear drum and causes pain and often fever. If the infection is not treated, the ear drum may burst. The pus discharges, and the child feels less pain. The fever and other symptoms may stop, but the child suffers from poor hearing because the ear drum has a hole in it. Usually the ear drum heals by itself. At other times the discharge continues, the ear drum does not heal, and the child becomes deaf in that ear.

Sometimes the infection can spread from the ear to the bone behind the ear (the mastoid) causing mastoiditis. Infection can also spread from the ear to the brain causing meningitis. These are severe diseases. They need urgent attention and referral.

Ear infections rarely cause death. However, they cause many days of illness in children. Ear infections are the main cause of deafness in developing countries, and deafness causes learning problems in school. The *ASSESS & CLASSIFY* chart helps you identify ear problems due to ear infection.

6.1 ASSESS EAR PROBLEM

A child with ear problem is assessed for:

- ear pain
- ear discharge and
- if discharge is present, how long the child has had discharge, and
- tender swelling behind the ear, a sign of mastoiditis.

Here is the box from the "Assess" column that tells you how to assess a child for ear problem

| Does the child have an ear problem? | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF YES ASK: <ul style="list-style-type: none">• Is there ear pain?• Is there ear discharge? If yes, for how long? | LOOK AND FEEL: <ul style="list-style-type: none">• Look for pus draining from the ear.• Feel for tender swelling behind the ear |

Ask about ear problem in ALL sick children.

ASK: Does the child have an ear problem?

If the mother answers NO, record her answer. Do not assess the child for ear problem. Then check for malnutrition and anaemia.

If the mother answers YES, ask the next question:

ASK: Does the child have ear pain?

Ear pain can mean that the child has an ear infection. If the mother is not sure that the child has ear pain, ask if the child has been irritable and rubbing his ear.

ASK: Is there ear discharge? If yes, for how long?

Ear discharge is also a sign of infection.

When asking about ear discharge, use words the mother understands.

If the child has had ear discharge, ask for how long. Give her time to answer the question. She may need to remember when the discharge started.

You will classify and treat the ear problem depending on how long the ear discharge has been present.

- An ear discharge that has been present for 2 weeks or more is treated as a chronic ear infection.

- An ear discharge that has been present for less than 2 weeks is treated as an acute ear infection.

You do not need more accurate information about how long the discharge has been present.

LOOK for pus draining from the ear.

Pus draining from the ear is a sign of infection, even if the child no longer has any pain. Look inside the child's ear to see if pus is draining from the ear.

FEEL for tender swelling behind the ear.

Feel behind both ears. Compare them and decide if there is tender swelling of the mastoid bone. In infants, the swelling may be above the ear.

Both tenderness and swelling must be present to classify mastoiditis, a deep infection in the mastoid bone. Do not confuse this swelling of the bone with swollen lymph nodes.

6.2 CLASSIFY EAR PROBLEM

There are four classifications for ear problem:

- MASTOIDITIS
- ACUTE EAR INFECTION
- CHRONIC EAR INFECTION
- NO EAR INFECTION

Here is the classification table for ear problem from the *ASSESS & CLASSIFY* chart.

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Tender swelling behind the ear | MASTOIDITIS | <ul style="list-style-type: none"> ➤ Give first dose of injectable chloramphenicol (If not possible give oral amoxycillin). ➤ Give first dose of paracetamol for pain. ➤ Refer URGENTLY to hospital^f |
| <ul style="list-style-type: none"> • Pus is seen draining from the ear and discharge is reported for less than 14 days, or • Ear pain | ACUTE EAR INFECTION | <ul style="list-style-type: none"> ➤ Give Amoxycillin for 5 days. ➤ Give paracetamol for pain. ➤ Dry the ear by wicking. ➤ Follow-up in 5 day |
| <ul style="list-style-type: none"> • Pus is seen draining from the ear and discharge is reported for 14 days or more. | CHRONIC EAR INFECTION | <ul style="list-style-type: none"> ➤ Dry the ear by wicking. ➤ Topical ciprofloxacin ear drops for two weeks. ➤ Follow-up in 5 days |
| <ul style="list-style-type: none"> • No ear pain and • No pus seen draining from the ear | NO EAR INFECTION | No additional treatment. |

MASTOIDITIS

If a child has tender swelling behind the ear, classify the child as having MASTOIDITIS.

Treatment

Refer urgently to hospital. This child needs treatment with injectable antibiotics. He may also need surgery. Before the child leaves for hospital, give the first dose of injectable chloramphenicol (if not possible, give oral amoxicillin). Also give one dose of paracetamol if the child is in pain.

ACUTE EAR INFECTION

If you see pus draining from the ear and discharge has been present for less than two weeks, or if there is ear pain, classify the child's illness as ACUTE EAR INFECTION.

Treatment

A child with an ACUTE EAR INFECTION should be given oral amoxicillin for 5 days. If amoxicillin is not available give cotrimoxazole for 5 days. Antibiotics for treating pneumonia are effective against the bacteria that cause most ear infections. Give paracetamol to relieve the ear pain (or high fever). If pus is draining from the ear, dry the ear by wicking.

CHRONIC EAR INFECTION

If you see pus draining from the ear and discharge has been present for two weeks or more, classify the child's illness as CHRONIC EAR INFECTION.

Treatment

Most bacteria that cause CHRONIC EAR INFECTION are different from those which cause acute ear infections. For this reason, oral antibiotics are not usually effective against chronic infections. Do not give repeated courses of antibiotics for a draining ear.

The most important and effective treatment for CHRONIC EAR INFECTION is to keep the ear dry by wicking. Teach the mother how to dry the ear by wicking. Also give topical quinolone ear drops for two weeks.

NO EAR INFECTION

If there is no ear pain and no pus is seen draining from the ear, the child's illness is classified as NO EAR INFECTION. The child needs no additional treatment.

7.0 CHECK FOR MALNUTRITION

Check all sick children for signs suggesting malnutrition.

A mother may bring her child to clinic because the child has an acute illness. The child may not have specific complaints that point to malnutrition. A sick child can be malnourished, but the doctor or the child's family may not notice the problem.

A child with malnutrition has a higher risk of many types of disease and death. Even children with mild and moderate malnutrition have an increased risk of death. Identifying children with malnutrition and treating them can help prevent many severe diseases and death. Some malnutrition cases can be treated at home. Severe cases need referral to hospital for special feeding or specific treatment of a disease contributing to malnutrition (such as tuberculosis).

Causes of Malnutrition: There are several causes of malnutrition. They may vary from country to country. One type of malnutrition is **protein-energy malnutrition**. Protein-energy malnutrition develops when the child is not getting enough energy or protein from his food to meet his nutritional needs. A child who has had frequent illnesses can also develop protein-energy malnutrition. The child's appetite decreases, and the food that the child eats is not used efficiently. When the child has protein-energy malnutrition:

- * The child may become severely wasted, a sign of marasmus.
- * The child may develop oedema, a sign of kwashiorkor.
- * The child may not grow well and become stunted (too short).

A child whose **diet lacks recommended amounts of essential vitamins and minerals** can develop malnutrition. The child may not be eating enough of the recommended amounts of specific vitamins (such as vitamin A) or minerals (such as iron). Not eating foods that contain vitamin A can result in vitamin A deficiency. A child with vitamin A deficiency is at risk of death from measles and diarrhoea. The child is also at risk of blindness.

7.1 ASSESS FOR MALNUTRITION

Here is the box from the "Assess" column on the *ASSESS & CLASSIFY* chart. It describes how to assess a child for malnutrition.

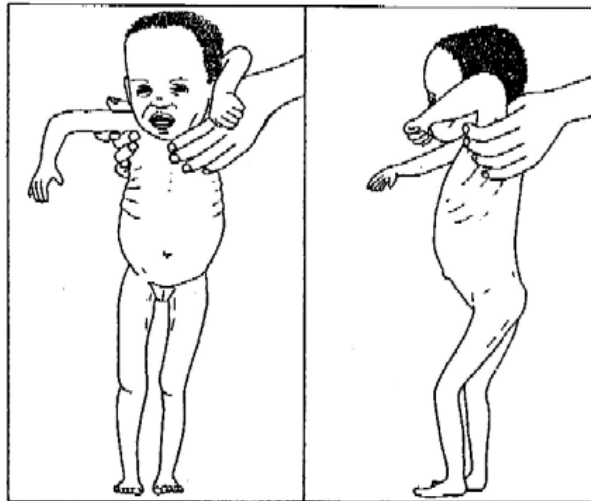
| THEN CHECK FOR MALNUTRITION |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>LOOK AND FEEL:</p> <ul style="list-style-type: none">• Look for visible severe wasting.• Look for oedema of both feet.• Determine weight for age. |

Assess ALL sick children for malnutrition:

LOOK for visible severe wasting.

A child with visible severe wasting has marasmus, a form of severe malnutrition. A child has this sign if he is very thin, has no fat, and looks like skin and bones. Some children are thin but do not have visible severe wasting.

To look for visible severe wasting, remove the child's clothes. Look for severe wasting of the muscles of the shoulders, arms, buttocks and legs. Look to see if the outline of the child's ribs is easily seen. Look at the child's hips. They may look small when you compare them with the chest and abdomen. Look at the child from the side to see if the fat of the buttocks is missing. When wasting is extreme, there are many folds of skin on the buttocks and thigh. It looks as if the child is wearing baggy pants.



The face of a child with visible severe wasting may still look normal. The child's abdomen may be large or distended.

LOOK and FEEL for oedema of both feet

A child with oedema of both feet may have kwashiorkor, another form of severe malnutrition. Oedema is when an unusually large amount of fluid gathers in the child's tissues. The tissues become filled with the fluid and look swollen or puffed up.

Look and feel to determine if the child has oedema of both feet. Use your thumb to press gently for a few seconds on the top side of each foot. The child has oedema if a dent remains in the child's foot when you lift your thumb.

EXERCISE K

In this exercise, you will look at photographs in the booklet of still photographs and practice identifying signs of severe wasting and oedema in children with malnutrition.

Part 1: Now study photographs 67 through 70.

- Photograph 67: This is an example of visible severe wasting. The child has small hips and thin legs relative to the abdomen. Notice that there is still cheek fat on the child's face.
- Photograph 68: This is the same child as in photograph 67 showing loss of buttock fat.
- Photograph 69: This is the same child as in photograph 67 showing folds of skin ("baggy pants") due to loss of buttock fat. Not all children with visible severe wasting have this sign. It is an extreme sign.
- Photograph 70: This child has oedema of both feet.

Part 2: Now look at photographs numbered 71 through 78. For each photograph, tick (✓) whether the child has visible severe wasting. Also look at photograph 79 and tick whether the child has oedema of both feet.

| | Does the child have visible severe wasting? | |
|---------------|----------------------------------------------------|-----------|
| | YES | NO |
| Photograph 71 | | |
| Photograph 72 | | |
| Photograph 73 | | |
| Photograph 74 | | |
| Photograph 75 | | |
| Photograph 76 | | |
| Photograph 77 | | |
| Photograph 78 | | |
| | Does the child have oedema of both feet? | |
| | YES | NO |
| Photograph 79 | | |

Tell your facilitator when you are ready to discuss
your answers to this exercise.

Determine weight for age.

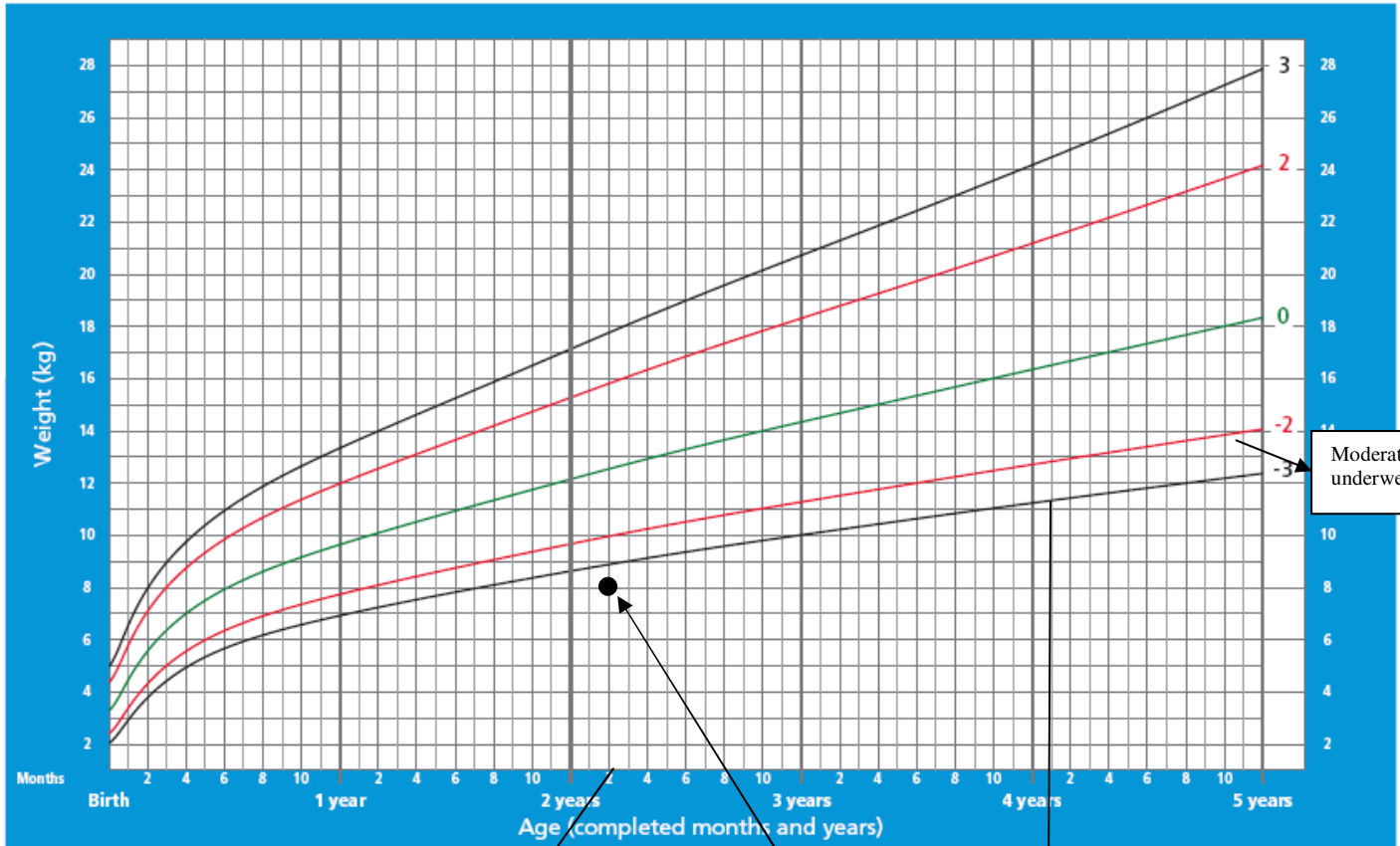
Determine the weight for age as you did for the young infant. See separate WHO growth charts for boys and girls. Decide if the point is above, on, or below the bottom curve.

- If the point is below the bottom curve, the child is severely underweight for age.
- If the point is *above or on the -3 SD line (bottom line)*, the child is not severely underweight.
- If the point is above or on the bottom curve, but below -2 SD line, the child is moderately underweight for age.
- If the point is above or on the -2 SD line, the child is not moderately underweight.

EXAMPLE: A male child is 26 months old and weighs 8.0 kilograms. Determine the child's weight for age and plot on the growth chart.

Weight-for-age BOYS

Birth to 5 years (z-scores)



This line shows the child's age 26 months.

This is the point where the lines for age and weight meet. Because the point is below the bottom curve, the child is severely underweight for age.

Severely underweight

WHO Child Growth Standards

7.2 CLASSIFY NUTRITIONAL STATUS

There are three classifications for a child's nutritional status. They are:

- SEVERE MALNUTRITION
- VERY LOW WEIGHT
- NOT VERY LOW WEIGHT

| | | |
|---------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Visible severe wasting or • Oedema of both feet. | SEVERE MALNUTRITION | <ul style="list-style-type: none"> ➤ Give single dose of Vitamin A. ➤ Prevent low blood sugar. ➤ Refer URGENTLY to hospital ➤ While referral is being organized, warm the child. ➤ Keep the child warm on the way to hospital. |
| <ul style="list-style-type: none"> • Severely Underweight(<-3 S.D). | VERY LOW WEIGHT | <ul style="list-style-type: none"> ➤ Assess and counsel for feeding <ul style="list-style-type: none"> -If feeding problem follow-up in 5 days ➤ Advise mother when to return immediately ➤ Follow-up in 30 days. |
| <ul style="list-style-type: none"> • Not Severely Underweight (≥-3 S.D). | NOT VERY LOW WEIGHT | <ul style="list-style-type: none"> ➤ If child is less than 2 years old, assess the child's feeding and counsel the mother on feeding according to the FOOD box on the <i>COUNSEL THE MOTHER</i> chart. - If feeding problem, follow-up in 5 days. ➤ Advise mother when to return immediately. |

SEVERE MALNUTRITION

If the child has visible severe wasting or oedema of both feet, classify the child as having SEVERE MALNUTRITION

Treatment

Children classified as having SEVERE MALNUTRITION are at risk of death from pneumonia, diarrhoea, measles, and other severe diseases. These children need urgent referral to hospital where their treatment can be carefully monitored. They may need special feeding and antibiotics. Before the child leaves for hospital, give the child a single dose of vitamin A. Prevent low blood sugar, while referral is being organized initiate active treatment for hypothermia and keep the child warm on the way to hospital.

VERY LOW WEIGHT

If the child is severely underweight for age, classify the child as having VERY LOW WEIGHT

Treatment

A child classified as having VERY LOW WEIGHT has a higher risk of severe disease. Assess the child's feeding and counsel the mother about feeding her child according to the recommendations in the FOOD box on the *COUNSEL THE MOTHER* chart.

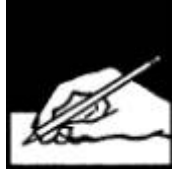
Advise the mother to return for follow-up in 1 month.

NOT VERY LOW WEIGHT

If the child is Not Severely Underweight, classify the child as having NOT VERY LOW WEIGHT.

Treatment

If the child is less than 2 years of age, assess the child's feeding. Counsel the mother about feeding her child according to the recommendations in the FOOD box on the COUNSEL THE MOTHER chart. Children less than 2 years of age have a higher risk of feeding problems and malnutrition than older children.



EXERCISE L

Read the following case study. Record the child's signs and their classifications on the Recording Form. Refer to the classification tables on the chart.

Case: Nadia

Nadia is 18 months old. She weighs 7 kg. Her temperature is 38.5°C. Her mother brought her today because the child has felt hot and has a rash. The doctor saw that Nadia looks like skin and bones.

The doctor checked for general danger signs. Nadia is able to drink, has not vomited, has not had convulsions, and is not lethargic or unconscious.

She does not have cough or difficult breathing. She does not have diarrhoea.

Because Nadia's mother said the child felt hot, and because her temperature is 38.5°C, the doctor assessed her for fever. Nadia lives where there is a high malaria risk. She has had fever for 5 days. Her rash is generalized rash, and she has red eyes. She has measles. She does not have a stiff neck. She does not have a runny nose.

The doctor assessed her for signs of measles complications. Nadia does not have mouth ulcers. There is no pus draining from the eye and no clouding of the cornea.

Nadia does not have an ear problem.

The doctor next checked her for malnutrition. Nadia has visible severe wasting. She does not have oedema of both feet. The doctor determined her weight for age. (Look at the weight for age chart in your chart booklet. Determine if this child's weight for age is very low and record this on the Recording Form.)

Record Nadia's signs and classify them on the Recording Form.

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

Name: _____ Age: _____ Sex: M _____ F _____ Weight: _____ kg

Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <p>CHECK FOR GENERAL DANGER SIGNS</p> <p>NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS</p> <p>VOMITS EVERYTHING</p> <p>CONVULSIONS</p> | <p>General danger sign present? Yes___ No___</p> <p>Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes___ No___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor. | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes___ No___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | |
| <p>DOES THE CHILD HAVE FEVER? (by history/feels hot/ temperature 37.5°C or above) Yes___ No___</p> <p>Decide Malaria Risk: High / Low</p> <ul style="list-style-type: none"> • Fever for how long? ___Days • If more than 7 days, has fever been present every day? • Has the child had measles within the last 3 months? • Look or feel for stiff neck. • Look and feel for bulging fontanelle. • Look for runny nose Look for signs of MEASLES: <ul style="list-style-type: none"> • Generalized rash • One of these: cough, runny nose, or red eyes If the child has measles now or within the last 3 months: <ul style="list-style-type: none"> • Look for mouth ulcers If Yes, are they deep and extensive • Look for pus draining from the eye. | |
| <p>DOES THE CHILD HAVE AN EAR PROBLEM Yes___ No___</p> <ul style="list-style-type: none"> • Is there ear pain? • Is there ear discharge? If Yes, for how long? _____ Days • Look for pus draining from the ear. • Feel for tender swelling behind the ear. | |
| <p>THEN CHECK FOR MALNUTRITION</p> <ul style="list-style-type: none"> • Look for visible severe wasting. • Look for oedema of both feet. • Determine weight for age. <p style="text-align: center;">Severely underweight _____ Not Severely underweight _____</p> | |
| | |

8.0 CHECK FOR ANAEMIA

Check all sick children for signs suggesting anaemia.

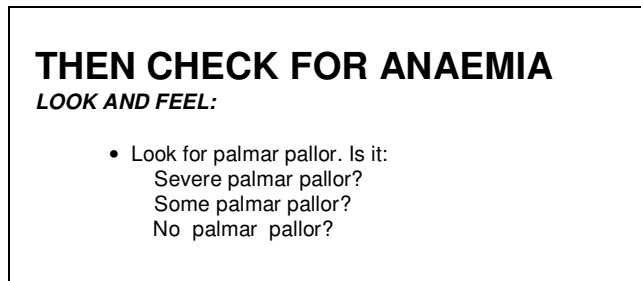
A mother may bring her child to clinic because the child has an acute illness. The child may not have specific complaints that point to anaemia. Most children with anaemia can be treated at home. Severe cases need referral to hospital for blood transfusion.

Causes of Anaemia: Not eating foods rich in iron can lead to iron deficiency and anaemia. **Anaemia** is a reduced number of red cells or a reduced amount of haemoglobin in each red cell. A child can also develop anaemia as a result of:

- Infections
- Parasites such as hookworm or whipworm. They can cause blood loss from the gut and lead to anaemia.
- Malaria which can destroy red cells rapidly. Children can develop anaemia if they have had repeated episodes of malaria or if the malaria was inadequately treated. The anaemia may develop slowly. Often, anaemia in these children is due to both malnutrition and malaria.

8.1 ASSESS FOR ANAEMIA

Here is the box from the "Assess" column on the *ASSESS & CLASSIFY* chart. It describes how to assess a child for malnutrition and anaemia.

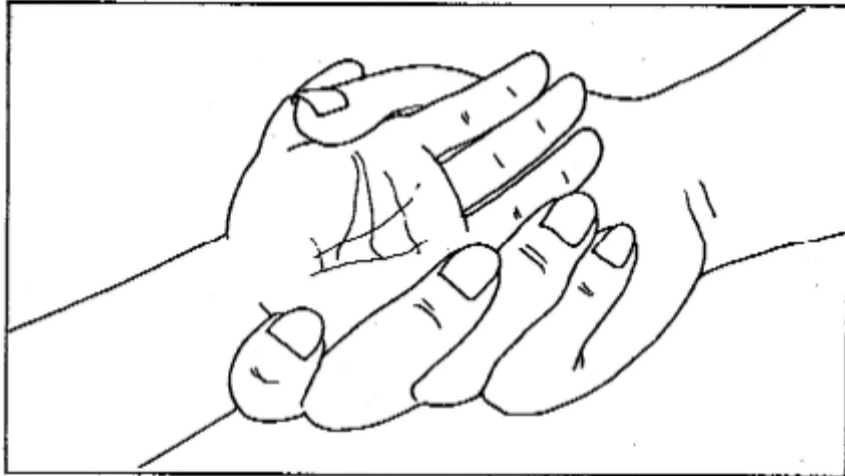


Assess ALL sick children for anaemia.

LOOK for palmar pallor.

Pallor is unusual paleness of the skin. It is a sign of anaemia.

To see if the child has palmar pallor, look at the skin of the child's palm. Hold the child's palm open by grasping it gently from the side. Do not stretch the fingers backwards. This may cause pallor by blocking the blood supply.



Compare the colour of the child's palm with your own palm and with the palms of other children. If the skin of the child's palm is pale, the child has some palmar pallor. If the skin of the palm is very pale or so pale that it looks white, the child has severe palmar pallor.

EXERCISE M

In this exercise, you will look at photographs in the photograph booklet and practice identifying children with palmar pallor.

Part 1: Study the photographs numbered 80 through 82b. Read the explanation below for each photograph.

- | | |
|-----------------|-------------------------------------------------------------------------------------------------------------|
| Photograph 80: | This child's skin is normal. There is no palmar pallor. |
| Photograph 81a: | The hands in this photograph are from two different children. The child on the left has some palmar pallor. |
| Photograph 81b: | The child on the right has no palmar pallor. |
| Photograph 82a: | The hands in this photograph are from two different children. The child on the left has no palmar pallor. |
| Photograph 82b: | The child on the right has severe palmar pallor. |

Part 2: Now look at photographs numbered 83 through 88. For each photograph, tick (✓) whether the child has severe, some or no palmar pallor.

| | Does the child have: | | |
|----------------|----------------------|-------------|-----------|
| | Severe pallor | Some pallor | No pallor |
| Photograph 83 | | | |
| Photograph 84 | | | |
| Photograph 85a | | | |
| Photograph 85b | | | |
| Photograph 86 | | | |
| Photograph 87 | | | |
| Photograph 88 | | | |

Tell your facilitator when you are ready to discuss
your answers to this exercise.

8.2 CLASSIFY ANAEMIA

There are three classifications for a child's anaemia. They are:

- SEVERE ANAEMIA
- ANAEMIA
- NO ANAEMIA

| | | |
|------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Severe palmar pallor | SEVERE ANAEMIA | ➤ <i>Refer URGENTLY to hospital</i> |
| • Some palmar pallor | ANAEMIA | <ul style="list-style-type: none"> ➤ Assess and counsel for feeding ➤ Advise mother when to return immediately ➤ Follow-up in 14 days. |
| • No palmar pallor | NO ANAEMIA | ➤ <i>Give prophylactic iron folic acid if child 6 months or older.</i> |

SEVERE ANAEMIA

If the child has severe palmar pallor, classify the child as having SEVERE ANAEMIA

Treatment

Children classified as having SEVERE ANAEMIA are at risk of death due to chronic hypoxaemia or congestive cardiac failure. These children need urgent referral to hospital because they may need blood transfusions and their treatment can be carefully monitored.

ANAEMIA

If the child has some palmar pallor, classify the child as having ANAEMIA.

Treatment

A child with some palmar pallor may have anaemia. Treat the child with iron folic acid.

Advise the mother to return for follow-up in 14 days.

NO ANAEMIA

If the child has no palmar pallor, classify the child as having NO ANAEMIA.

Treatment

Give prophylactic iron folic acid for a total of 100 days in a year after a child has recovered from acute illness, if child is 6 months of age or older and has not received prophylactic iron folic acid for 100 days in last one year.

9.0 CHECK THE CHILD'S IMMUNIZATION, PROPHYLACTIC VITAMIN A & IRON-FOLIC ACID SUPPLEMENTATION STATUS

Immunization, prophylactic vitamin A and iron-folic acid supplementation status should be assessed in ALL sick children.

9.1 CHECK THE CHILD'S IMMUNIZATION STATUS

Check the immunization status for ALL sick children. Have they received all the immunizations recommended for their age? Do they need any immunizations today?

Use the National Recommended Immunization Schedule when you check the child's immunization status. Look at the *ASSESS & CLASSIFY* chart and locate the recommended immunization schedule. Refer to it as you read how to check a child's immunization status.

| THEN CHECK THE CHILD'S IMMUNIZATION STATUS | |
|---------------------------------------------------|-------------------------|
| IMMUNIZATION SCHEDULE: | |
| <u>AGE</u> | <u>VACCINE</u> |
| Birth | BCGG + OPV-0 |
| 6 weeks | DPT-1+ OPV-1(+ HepB-1*) |
| 10 weeks | DPT-2+ OPV-2(+ HepB-2*) |
| 14 weeks | DPT-3+ OPV-3(+ HepB-3*) |
| 9 months | Measles |
| 16-18 months | DPT Booster + OPV |
| 60 months | DT |

* Hepatitis B to be given wherever included in the immunization schedule

Give the recommended vaccine when the child is the appropriate age for each dose. All children should receive all the recommended immunizations before their first birthday. If the child does not come for an immunization at the recommended age, give the necessary immunizations any time after the child reaches that age. Give the remaining doses at least 4 weeks apart. You do not need to repeat the whole schedule.

9.2 CHECK THE CHILD'S PROPHYLACTIC VITAMIN A SUPPLEMENTATION STATUS

Vitamin A is an essential micronutrient and is necessary for vision, integrity of membrane structures, the normal functioning of body cells, growth and development. A child with vitamin A deficiency is at a risk of death from measles and diarrhoea. The child is also at risk of blindness. The National Vitamin A Prophylaxis Programme recommends 9 doses of vitamin A at 9, 18, 24, 30, 36, 42, 48, 54 and 60 months of age.

Look at the ASSESS & CLASSIFY chart and locate the recommended schedule for vitamin A supplementation.

| | |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROPHYLACTIC VITAMIN A | <i>Give a single dose of vitamin A : 100,000 IU at 9 months with measles immunization 200,000 IU at 16-18 months with DPT Booster 200,000 IU at 24 months, 30 months, 36 months, 42 months, 48 months, 54 months and 60 months.</i> |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Give the recommended dose of vitamin A when the child is the appropriate age for each dose. In case a child more than 9 months of age has not received a dose of vitamin A in last 6 months, give a dose as per the dosage schedule according to age of the child.

9.3 CHECK THE CHILD'S PROPHYLACTIC IRON-FOLIC ACID SUPPLEMENTATION STATUS

Anaemia is a reduced number of red cells or a reduced amount of haemoglobin in each red cell. Not eating foods rich in iron can lead to iron deficiency and anaemia. A child can also develop anaemia as a result of various systemic infections, malaria, or infestation with hookworm or whipworm. Prophylactic supplementation of iron folic acid for 100 days in a year is recommended under the National Anaemia Prophylaxis Programme.

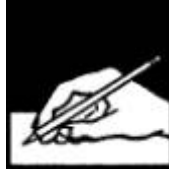
Look at the *ASSESS & CLASSIFY* chart and locate the recommended schedule for iron and folic acid supplementation.

THEN CHECK THE CHILD'S PROPHYLACTIC IRON-FOLIC ACID SUPPLEMENTATION STATUS:

PROPHYLACTIC IFA

Give 20 mg elemental iron + 100 mcg folic acid (one tablet of Pediatric IFA or f IFA syrup or IFA drops) for a total of 100 days in a year after the child has recovered from acute illness **if** :

- The child 6 months of age or older, and
- Has not received Pediatric IFA Tablet/syrup/drops for 100 days in last one year.



EXERCISE N

Read about the following children. For each one, decide if the child needs any immunizations today.

1. **Salim, 6 months old.** No general danger signs. Classified as NO PNEUMONIA: COUGH OR COLD and NO ANAEMIA AND NOT VERY LOW WEIGHT FOR AGE.

Immunization history: BCG, OPV 0, OPV 1, OPV 2, DPT 1 and DPT 2. OPV2 and DPT 2 given 6 weeks ago

- a. Is Salim up-to-date with his immunizations?
- b. What immunizations, if any, does Salim need today?
- c. When should he return for his next immunization?

2. **Chilunji, 3 months old.** No general danger signs. Classified as diarrhoea with NO DEHYDRATION and also ANAEMIA.

Immunization history: BCG, OPV 0, OPV 1, and DPT 1. OPV 1 and DPT 1 given 5 weeks ago.

- a. Is Chilunji up-to-date with her immunizations?
- b. What immunizations, if any, does Chilunji need today?
- c. What immunizations will she receive at her next visit?
- d. When should she return for her subsequent immunization?

3. **Marco, 9 months old.** No general danger signs. Classified as PNEUMONIA, MALARIA, NO ANAEMIA AND NOT VERY LOW WEIGHT

Immunization history: BCG, OPV 0, OPV 1 and DPT 1. When Marco was 7 months old, he received OPV 2 and DPT 2.

- a. Is Marco up-to-date with his immunizations?
- b. What immunizations, if any, does Marco need today?

- c. When should he return for his next immunizations?
- d. Should he be given vitamin A today?
- e. Should he be given IFA today?

Tell your facilitator when you have completed this exercise.

10.0 ASSESS OTHER PROBLEMS

The last box on the ASSESS side of the chart reminds you to assess any other problems that the child may have.

Since the *ASSESS & CLASSIFY* chart does not address all of a sick child's problems, you will now assess other problems the mother told you about. For example, she may have said the child has a skin infection, itching or swollen neck glands. Or you may have observed another problem during the assessment. Identify and treat any other problems according to your training, experience and clinic policy. Refer the child for any other problem you cannot manage in clinic.

* * * * *

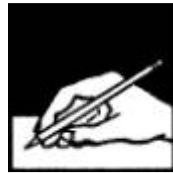
The last box on the "Classify" side of the chart has an important warning. It says:

MAKE SURE CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED after first dose of an appropriate antibiotic and other urgent treatments.

EXCEPTION: Rehydration of the child according to Plan C may resolve danger signs so that referral is no longer needed.

This note reminds you that a child with any general danger sign needs urgent treatment and referral. It is possible, though uncommon, that a child may have a general danger sign, but may not have a severe classification for any of the main symptoms. How to decide and plan for referral of a child with a general danger sign and without any other severe classification is taught in the module *Identify Treatment*.

* * * * *



EXERCISE O

Read the case studies and practice using the entire process as described on the *ASSESS & CLASSIFY* chart. Record the child's signs and classify them on the Recording Form for each exercise. Refer to the chart as you do the exercise.

Case 1: Dan

Dan is 9 months old. He weighs 9.5 kg. His temperature is 39.5°C. His mother says he has had diarrhoea for 1 week.

Dan does not have any general danger signs. He does not have cough or difficult breathing.

The doctor assessed Dan for signs of diarrhoea. The mother said earlier that Dan has had diarrhoea for 1 week. Dan does not have blood in the stool. He is not restless or irritable; he is not lethargic or unconscious. He has sunken eyes. He is thirsty and drinks eagerly when offered a drink. His skin pinch goes back slowly.

Next, the doctor assessed for additional signs related to fever. Dan's mother says he has felt hot for about 2 days. The risk of malaria is high. He has not had measles in the last 3 months. He does not have a stiff neck, and he does not have a runny nose. He did not have signs suggesting measles.

There is no ear problem.

The doctor checked for signs of malnutrition and anaemia. Dan does not have visible severe wasting. There are no signs of palmar pallor. He does not have oedema of both feet. The doctor determined his weight for age.

Dan has had BCG, DPT 1, DPT 2, and DPT 3. He has also had OPV 0, OPV 1, OPV 2 and OPV 3.

Record Dan's signs and their classifications on the Recording Form provided to you.

Case 2: Mishu

Mishu is 4 months old. She weighs 5.5 kg. Her temperature is 38.0°C. She is in the clinic today because she has diarrhoea.

She does not have any general danger signs. She is not coughing and does not have difficult breathing.

The doctor assessed her further for signs of diarrhoea. She has had diarrhoea for 2 days and there is blood in the stool, said the mother. Mishu was not restless or irritable; she was not unconscious or lethargic. Her eyes were not sunken. She drank normally, and did not seem to be thirsty. Her skin pinch went back immediately.

The doctor next assessed her for fever. The malaria risk is high at this time of year. Mishu has had fever for 2 days, said the mother. She has not had measles in the last 3 months. She does not have a stiff neck or runny nose. There are no signs suggesting measles.

Mishu does not have an ear problem. The doctor checked for malnutrition and anaemia. She does not have visible severe wasting. There is no palmar pallor and no oedema of both feet. The doctor determined her weight for age.

At birth Mishu received BCG and OPV 0. Four weeks ago, she received DPT 1 and OPV 1.

Record Mishu's signs and their classifications on the Recording Form provided to you.

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

Name: _____ Age: _____ Sex: M _____ F _____ Weight: _____ kg

Temperature: _____ °C

ASK: What are the child's problems? _____ Initial visit? ____ Follow-up Visit? ____
ASSESS (Circle all signs present) **CLASSIFY**

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS</p> <p align="center">LETHARGIC OR UNCONSCIOUS</p> | <p>General danger sign present ? Yes__ No__ Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes__ No__ • For how long ? _____ Days • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor.</p> | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes__ No__ • For how long ? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly?</p> | |
| <p>DOES THE CHILD HAVE FEVER? (by history/feels hot/ temperature 37.5°C or above) Yes__ No__ Decide Malaria Risk: High Low • Fever for how long? ____Days • If more than 7 days, has fever been present every day? • Has the child had measles within the last 3 months? If the child has measles now or within the last 3 months: • Look or feel for stiff neck. • Look and feel for bulging fontanelle. • Look for runny nose Look for signs of MEASLES: • Generalized rash • One of these: cough, runny nose, or red eyes • Look for mouth ulcers If Yes, are they deep and extensive • Look for pus draining from the eye.</p> | |
| <p>DOES THE CHILD HAVE AN EAR PROBLEM Yes__ No__ • Is there ear pain? • Is there ear discharge? If Yes, for how long? _____ Days • Look for pus draining from the ear. • Feel for tender swelling behind the ear.</p> | |
| <p>THEN CHECK FOR MALNUTRITION • Look for visible severe wasting. • Look for oedema of both feet. • Determine weight for age. Severely underweight _____ Not Severely underweight _____</p> | |
| <p>THEN CHECK FOR ANAEMIA • Look for palmar pallor. Severe palmar pallor? Some palmar pallor? No pallor?</p> | |
| <p>CHECK THE CHILD'S IMMUNIZATION, PROPHYLACTIC VITAMIN A & IRON-FOLIC ACID STATUS Circle immunizations and Vitamin A or IFA supplements needed today.</p> <p>BCG _____ DPT 1 _____ DPT 2 _____ DPT 3 _____ DPT Booster _____ DT _____ OPV 0 _____ OPV 1 _____ OPV 2 _____ OPV 3 _____ OPV _____ IFA _____ HEP-B 1 _____ HEP-B 2 _____ HEP-B 3 _____ MEASLES _____ VITAMIN A _____</p> | <p>Return for next immunization or vitamin A or IFA supplement on: _____ (Date)</p> |
| <p>ASSESS OTHER PROBLEMS</p> | |

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

Name: _____ Age: _____ Sex: M _____ F _____ Weight: _____ kg

Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS</p> | <p>General danger sign present ? Yes ___ No ___ Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___ • For how long ? _____ Days • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor.</p> | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes ___ No ___ • For how long ? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly?</p> | |
| <p>DOES THE CHILD HAVE FEVER? (by history/feels hot/ temperature 37.5°C or above) Yes ___ No ___ Decide Malaria Risk: High Low • Fever for how long? ___Days • If more than 7 days, has fever been present every day? • Has the child had measles within the last 3 months? If the child has measles now or within the last 3 months: • Look or feel for stiff neck. • Look and feel for bulging fontanelle. • Look for runny nose Look for signs of MEASLES: • Generalized rash • One of these: cough, runny nose, or red eyes • Look for mouth ulcers If Yes, are they deep and extensive • Look for pus draining from the eye.</p> | |
| <p>DOES THE CHILD HAVE AN EAR PROBLEM Yes ___ No ___ • Is there ear pain? • Is there ear discharge? If Yes, for how long? _____ Days • Look for pus draining from the ear. • Feel for tender swelling behind the ear.</p> | |
| <p>THEN CHECK FOR MALNUTRITION • Look for visible severe wasting. • Look for oedema of both feet. • Determine weight for age. Severely underweight _____ Not Severely underweight-----</p> | |
| <p>THEN CHECK FOR ANAEMIA • Look for palmar pallor. Severe palmar pallor? Some palmar pallor? No pallor?</p> | |
| <p>CHECK THE CHILD'S IMMUNIZATION, PROPHYLACTIC VITAMIN A & IRON-FOLIC ACID STATUS Circle immunizations and Vitamin A or IFA supplements needed today.</p> <p>BCG _____ DPT 1 _____ DPT 2 _____ DPT 3 _____ DPT Booster _____ DT _____ OPV 0 _____ OPV 1 _____ OPV 2 _____ OPV 3 _____ OPV _____ IFA _____ HEP-B 1 _____ HEP-B 2 _____ HEP-B 3 _____ MEASLES _____ VITAMIN A _____</p> | <p>Return for next immunization or vitamin A or IFA supplement on: _____ (Date)</p> |
| <p>ASSESS OTHER PROBLEMS</p> | |



EXERCISE P

In this video exercise, you will see a demonstration of how to assess a child with an ear problem and how to look for signs of malnutrition and anaemia. Then you will see case studies. Record the children's signs and classifications on Recording Forms.

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

Name: _____ Age: _____ Sex: M _____ F _____ Weight: _____ kg

Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED VOMITS EVERYTHING CONVULSIONS</p> | <p>LETHARGIC OR UNCONSCIOUS</p> <p>General danger sign present ? Yes ___ No ___ Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___</p> <ul style="list-style-type: none"> For how long ? _____ Days Count the breaths in one minute _____ breaths per minute. Fast breathing? Look for chest indrawing. Look and listen for stridor. | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes ___ No ___</p> <ul style="list-style-type: none"> For how long ? _____ Days Is there blood in the stool? Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable Look for sunken eyes. Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | |
| <p>DOES THE CHILD HAVE FEVER? (by history/feels hot/ temperature 37.5°C or above) Yes ___ No ___</p> <p>Decide Malaria Risk: High Low</p> <ul style="list-style-type: none"> Fever for how long? ___ Days If more than 7 days, has fever been present every day? Has the child had measles within the last 3 months? Look or feel for stiff neck. Look and feel for bulging fontanelle. Look for runny nose Look for signs of MEASLES: Generalized rash One of these: cough, runny nose, or red eyes Look for mouth ulcers If Yes, are they deep and extensive Look for pus draining from the eye. <p>If the child has measles now or within the last 3 months:</p> | |
| <p>DOES THE CHILD HAVE AN EAR PROBLEM Yes ___ No ___</p> <ul style="list-style-type: none"> Is there ear pain? Is there ear discharge? If Yes, for how long? _____ Days Look for pus draining from the ear. Feel for tender swelling behind the ear. | |
| <p>THEN CHECK FOR MALNUTRITION</p> <ul style="list-style-type: none"> Look for visible severe wasting. Look for oedema of both feet. Determine weight for age. Severely underweight _____ Not Severely underweight _____ | |
| <p>THEN CHECK FOR ANAEMIA</p> <ul style="list-style-type: none"> Look for palmar pallor. Severe palmar pallor? Some palmar pallor? No pallor? | |
| <p>CHECK THE CHILD'S IMMUNIZATION, PROPHYLACTIC VITAMIN A & IRON-FOLIC ACID STATUS Circle immunizations and Vitamin A or IFA supplements needed today.</p> <p>BCG _____ DPT 1 _____ DPT 2 _____ DPT 3 _____ DPT Booster _____ DT _____</p> <p>OPV 0 _____ OPV 1 _____ OPV 2 _____ OPV 3 _____ OPV _____ IFA _____</p> <p>HEP-B 1 _____ HEP-B 2 _____ HEP-B 3 _____ MEASLES _____ VITAMIN A _____</p> | <p>Return for next immunization or vitamin A or IFA supplement on:</p> <p>_____ (Date)</p> |
| <p>ASSESS OTHER PROBLEMS</p> | |

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

Name: _____ Age: _____ Sex: M _____ F _____ Weight: _____ kg
 Temperature: _____ °C

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

ASSESS (Circle all signs present)

CLASSIFY

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| <p>CHECK FOR GENERAL DANGER SIGNS NOT ABLE TO DRINK OR BREASTFEED LETHARGIC OR UNCONSCIOUS VOMITS EVERYTHING CONVULSIONS</p> | <p>General danger sign present ? Yes ___ No ___ Remember to use danger sign when selecting classifications</p> |
| <p>DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Count the breaths in one minute _____ breaths per minute. Fast breathing? • Look for chest indrawing. • Look and listen for stridor. | |
| <p>DOES THE CHILD HAVE DIARRHOEA ? Yes ___ No ___</p> <ul style="list-style-type: none"> • For how long ? _____ Days • Is there blood in the stool? • Look at the child's general condition. Is the child: Lethargic or unconscious? Restless and irritable • Look for sunken eyes. • Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)? Slowly? | |
| <p>DOES THE CHILD HAVE FEVER? (by history/feels hot/ temperature 37.5°C or above) Yes ___ No ___ Decide Malaria Risk: High Low</p> <ul style="list-style-type: none"> • Fever for how long? _____ Days • If more than 7 days, has fever been present every day? • Has the child had measles within the last 3 months? • Look or feel for stiff neck. • Look and feel for bulging fontanelle. • Look for runny nose Look for signs of MEASLES: <ul style="list-style-type: none"> • Generalized rash • One of these: cough, runny nose, or red eyes • Look for mouth ulcers If Yes, are they deep and extensive • Look for pus draining from the eye. <p>If the child has measles now or within the last 3 months:</p> | |
| <p>DOES THE CHILD HAVE AN EAR PROBLEM Yes ___ No ___</p> <ul style="list-style-type: none"> • Is there ear pain? • Is there ear discharge? If Yes, for how long? _____ Days • Look for pus draining from the ear. • Feel for tender swelling behind the ear. | |
| <p>THEN CHECK FOR MALNUTRITION</p> <ul style="list-style-type: none"> • Look for visible severe wasting. • Look for oedema of both feet. • Determine weight for age. Severely underweight _____ Moderately underweight _____ Normal weight for age _____ | |
| <p>THEN CHECK FOR ANAEMIA</p> <ul style="list-style-type: none"> • Look for palmar pallor. Severe palmar pallor? Some palmar pallor? No pallor? | |
| <p>CHECK THE CHILD'S IMMUNIZATION, PROPHYLACTIC VITAMIN A & IRON-FOLIC ACID STATUS Circle immunizations and Vitamin A or IFA supplements needed today.</p> <p>BCG DPT 1 DPT 2 DPT 3 DPT Booster DT</p> <p>OPV 0 OPV 1 OPV 2 OPV 3 OPV IFA</p> <p> HEP-B 1 HEP-B 2 HEP-B 3 MEASLES VITAMIN A</p> | <p>Return for next immunization or vitamin A or IFA supplement on:</p> <p style="text-align: center;">_____ (Date)</p> |
| <p>ASSESS OTHER PROBLEMS</p> | |

