INTEGRATED MANAGEMENT OF NEONATAL & CHILDHOOD ILLNESSES (IMNCI)

MODULE 1:

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

World Health Organization

Ministry of National Health Services, Regulation And Coordination, Government of Pakistan

unicef

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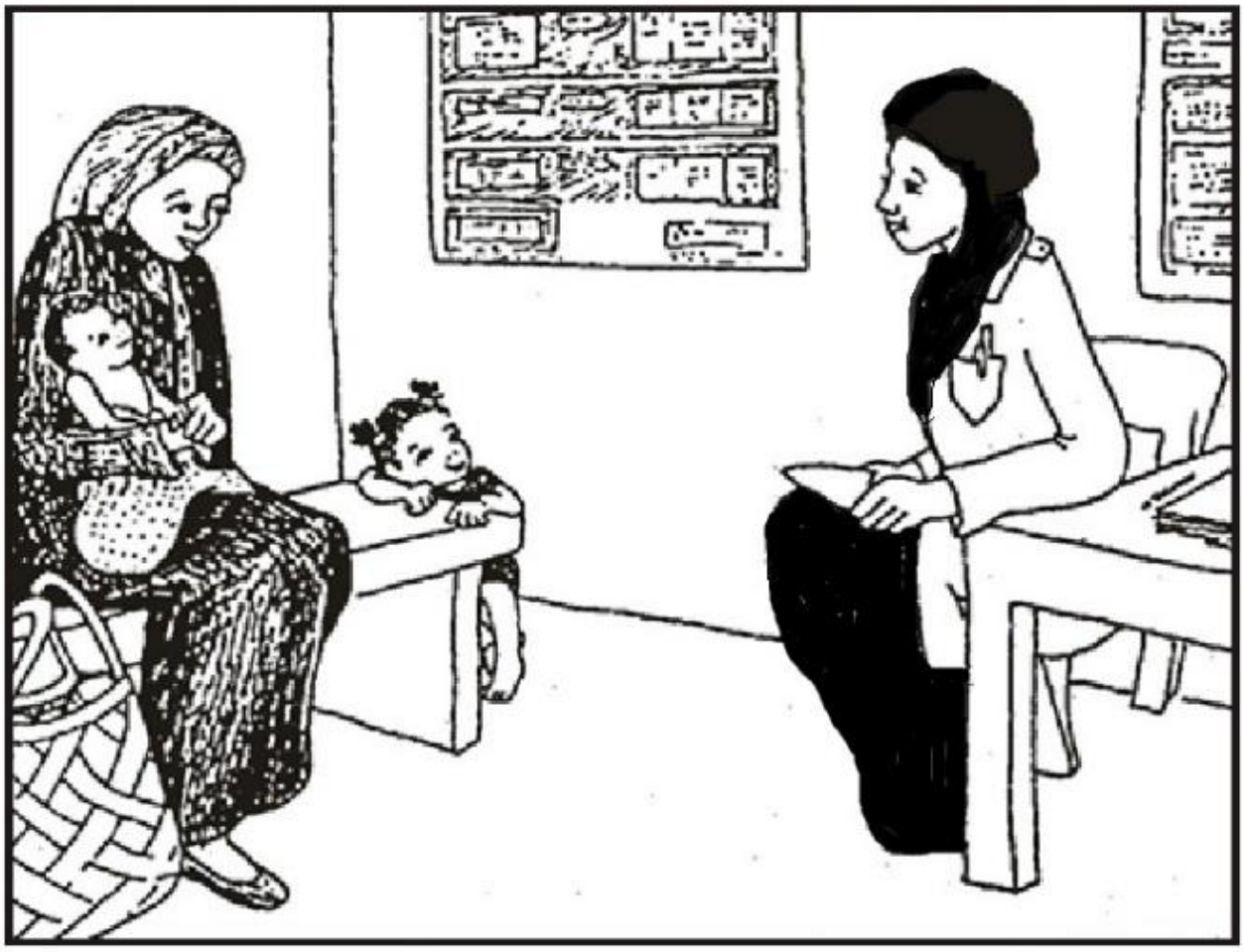
ASSESS AND CLASSIFY THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

INTRODUCTION

A mother brings her sick child to the clinic for a particular problem or symptom. If you only assess the child for that particular problem or symptom, you might overlook other signs of disease. The child might have pneumonia, diarrhoea, malaria, measles, or malnutrition. These diseases can cause death or disability in young children if they are not treated.

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, ear problem and fever. 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, vitamin A supplementation and deworming status and assess other problems the mother has mentioned.



LEARNING OBJECTIVES

This 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
  - Ear problem
  - Fever
- 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, vitamin A supplementation and deworming status and deciding if the child needs any immunizations or vitamin A supplementation or deworming today.
- Assessing any other problems.
- Check for Mother's own health.

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

1.0 ASK THE MOTHER WHAT THE CHILD'S PROBLEMS ARE

A mother (or other family member such as the father, grandmother, sister or brother) usually brings a child to the clinic because the child is sick. But mothers also bring children for well-child visits, immunization sessions and for treatment of injuries. The steps on the ASSESS & CLASSIFY chart describe what you should do when a mother brings her child to the clinic because he is sick. The chart should not be used for a well child brought for immunization or for a child with an injury or burn.

When patients arrive at most clinics, clinic staff identify the reason for the child's visit. Clinic staff obtain the child's weight and temperature and record them on a patient chart, another written record, or on a small piece of paper. Then the mother and child see a health worker.

When you see the mother and her sick child:

- **Greet the mother appropriately** and ask her to sit with her child.

  You need to know the child's age so you can choose the right case management chart. Look at the child's record to find the child's age.

  - If the child is age 2 months up to 5 years, assess and classify the child according to the steps on the ASSESS & CLASSIFY chart.
  - If the child is less than 2 months, assess and classify the young infant according to the steps on the YOUNG INFANT chart. (You will learn more about managing sick young infants later in the course.)

  Look to see if the child's weight and temperature have been measured and recorded. If not, weigh the child and measure his temperature later when you assess and classify the child's main symptoms. Do not undress or disturb the child now.

- **Ask the mother what the child's problems are**.

  Record what the mother tells you about the child's problems. An important reason for asking this question is to open good communication with the mother. Using good communication helps to reassure the mother that her child will receive good care. When you treat the child's illness later in the visit, you will need to teach and advise the mother about caring for her sick child at home.So it is important to have good communication with the mother from the beginning of the visit.

To use good communication skills:

- **Listen carefully to what the mother tells you**. This will show her that you are taking her concerns seriously.
- **Use words the mother understands** . If she does not understand the questions you ask her, she cannot give the information you need to assess and classify the child correctly.
- **Give the mother time to answer the questions**. For example, she may need time to decide if the sign you asked about is present.
- **Ask additional questions when the mother is not sure about her answer**. When you ask about a main symptom or related sign, the mother may not be sure if it is present. Ask her additional questions to help her give clearer answers.

- **Determine if this is an initial or follow-up visit for this problem**.

If this is the child's first visit for this episode of an illness or problem, then this is an initial visit.

If the child was seen a few days ago for the same illness, this is a follow-up visit.

A follow-up visit has a different purpose than an initial visit. During a follow-up visit, the health worker finds out if the treatment he gave during the initial visit has helped the child. If the child is not improving or is getting worse after a few days, the health worker refers the child to a hospital or changes the child's treatment.

How you find out if this is an initial or follow-up visit depends on how your clinic registers patients and identifies the reason for their visit. Some clinics give mothers follow-up slips that tell them when to return. In other clinics the health worker writes a follow-up note on the multi-visit card or chart. Or, when the patient registers, clinic staff ask the mother questions to find out why she has come.

You will learn how to carry out a follow-up visit later in the course. The examples and exercises in this module describe children who have come for an initial visit.

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 during current illness.
- The child is lethargic or unconscious.
- The child is convulsing now

A child with a general danger sign has a serious problem. All 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 and Treat the Child.*

If during assessment you found presence of a general danger sign you should **complete the rest of assessment** immediately. If the child is to be referred, you should give **urgent** pre-referral treatment.

2.1 ASSESS FOR GENERAL DANGER SIGNS

Look at the first box in the "Assess" column (page 4) of your chart booklet. It tells you how to check for general danger signs.

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 breast milk.

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, then 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. Use local words the mother understands. For example, the mother may know convulsions as "fits" or "spasms." If YES, ask if more than one convulsion or if prolonged more than 15 minutes, if YES to either then classify accordingly.

LOOK: See if the child is lethargic or unconscious.

A lethargic child is not 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 wakens 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.

LOOK: See if the child is convulsing now

During a convulsion the child's arms and legs stiffen because the muscles are contracting. The child loses consciousness and may not able to respond to spoken directions.

If the child is convulsing now, treat the child by managing the airway and giving diazepam rectally. How to give diazepam is described in the TREAT THE CHILD module.

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.

2.2. CLASSIFY CHILD'S ILLNESS

CLASSIFICATION TABLES: Signs of illness and their classifications are listed on the *ASSESS & CLASSIFY* chart in classification tables. Most classification tables have three rows.

If the chart is in colour, each row is coloured in pink, yellow, or green. The colour of the rows tells you quickly if the child has a serious illness. You can also quickly choose the appropriate treatment.

- A classification in a *pink* row is a classification of very severe disease and needs urgent attention and referral or admission for inpatient care. ANY DANGER SIGN = VERY SEVERE DISEASE.
- A classification in a *yellow* row means that the child needs an appropriate antibiotic, an oral antimalarial or other treatment. The treatment includes teaching the mother how to give the oral drugs or to treat local infections at home. The health worker advises her about caring for the child at home and when she should return.
- A classification in a *green* row means the child does not need specific medical treatment such as antibiotics. The health worker teaches the mother how to care for her child at home. For example, you might advise her on feeding her sick child or giving fluid for diarrhoea

Depending on the combination of the child's signs and symptoms, the child is classified in either the pink, yellow, or green row. That is, the child is classified only once in each classification table.

To classify a child's illness, you must follow the steps as they are presented in this section of the module.

2.3. CLASSIFY CHILD WITH A GENERAL DANGER SIGN

There is only one classification for child with any general danger sign i.e. **VERY SEVERE DISEASE.**

You will learn how to record information about the sick child on a special form. This form is called a **Recording Form.** The front of the Recording Form is similar to the *ASSESS & CLASSIFY* chart. It lists the questions to ask the mother and the signs for which you should look, listen and feel.

In most of the exercises in this module, you will only use part of the Recording Form. As you learn each step in the chart, you will use more of it.

Your facilitator will show you a Recording Form and tell you how to use it.

EXERCISE A

Note: This picture means you will do a written exercise. You will read case studies describing signs and symptoms in sick children. You will use the Recording Form to record the child's signs and how you classified the illness. When you finish the exercise, a facilitator will discuss your work with you. The facilitator can also answer your questions about information in the module or on the chart.

Read the following case studies and answer the questions about each one.

Case 1: Salma

Salma is 15 months old, height/ length:70 cm. She weighs 8.5 kg. Her temperature is 38.5°C

The health worker asked, "What are the child's problems?" The mother said, "Salma has been coughing for 4 days, and she is not eating well." This is Salma's initial visit for this problem.

The health worker checked Salma for general danger signs. He asked, "Is Salma able to drink or breastfeed?" The mother said, "No. Salma does not want to breastfeed." The health worker gave Salma some water. She was too weak to lift her head. She was not able to drink.

Next, he asked the mother, "Is she vomiting?" The mother said, "No." Then he asked, "Has she had convulsions?" The mother said, "No."

The health worker looked to see if Salma was lethargic or unconscious. When the health worker and the mother were talking, Salma watched them and looked around the room. She was not lethargic or unconscious. She is not convulsing now.

Here is the top part of a Recording Form:

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature: ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS		
LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	

a Write Salma's name, age, weight, height and temperature in the spaces provided on the top line of the form.

b Write Salma's problem on the line after the question "Ask -- What are the child's problems?"

c Tick (✓) whether this is the initial or follow-up visit for this problem.

d Does Salma have a general danger sign? Circle her general danger sign. Circle the sign on the recording form. Tick (✓) either "Yes" or "No" for the question of general danger sign present.

e How would you classify Salma's illness? Write your classification on the Recording Form.

Case 2: Jamal

Jamal is 4 months old. He weighs 6kg, MUAC: 125 mm, height 85 cm. His temperature is 38ºC.

The health worker asked about the child's problems. Jamal's parents said, "He is coughing and has ear pain." This is his initial visit for this problem.

The health worker asked, "Is your child able to drink or breastfeed?" The parents answered, "Yes." "Does Jamal vomit everything?" he asked. The parents said, "No." The health worker asked, "Has he had convulsions?" They said, "No." The health worker looked at Jamal. The child was not lethargic or unconscious. He was not convulsing in the clinic.

Here is the top part of a Recording Form:

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature: ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	

a Write Jamal's name, age, weight, height and temperature in the spaces provided on the top line of the form.

b Write Jamal's problem on the line after the question, "Ask -- What are the child's problems?"

c Tick (✓) whether this is the initial or follow-up visit.

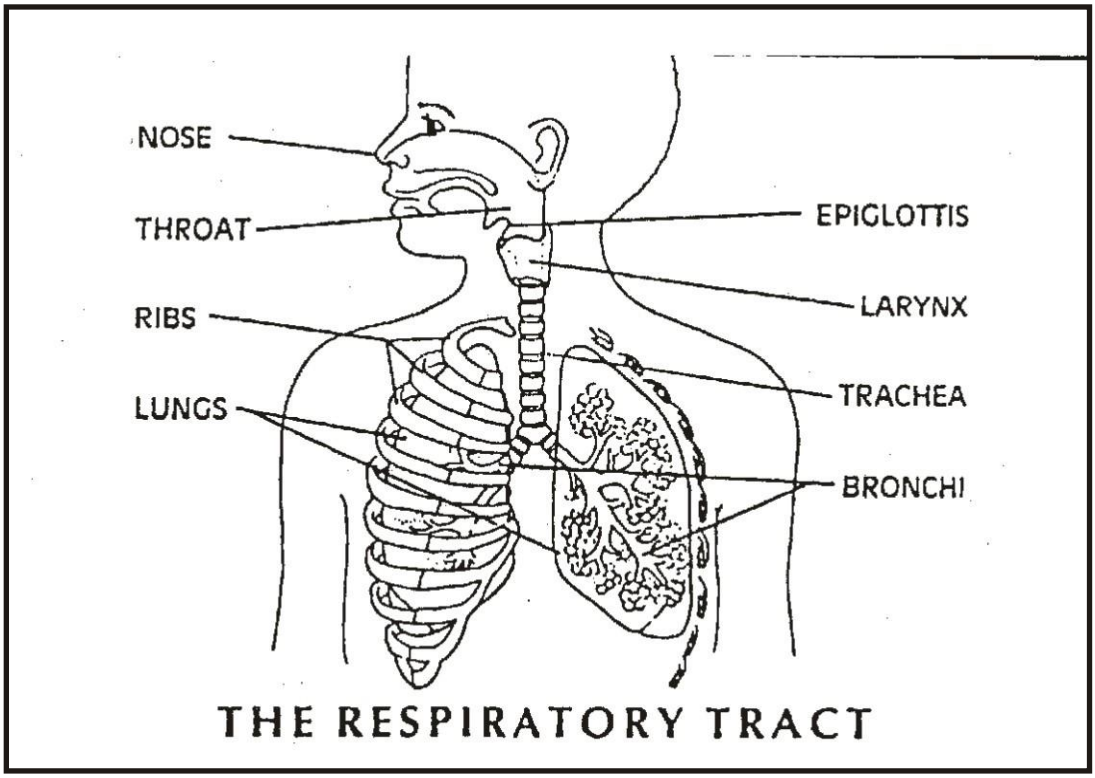
d Does Jamal have a general danger sign? If yes, circle the sign on the recording form. Tick (✓) "Yes" or "No" for the question of general danger sign present.

e Write the classification.

Tell the facilitator when you have completed this exercise

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 pneumonia* and *Hemophilus influenza*. 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.

Health workers need to identify the few, very sick children with cough or difficult breathing who need treatment with antibiotics. Fortunately, health workers 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 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 in-drawing
- Stridor in a calm
- Child Wheezing

Look at your chart booklet column in the box “Assess” column that lists the steps for assessing the child for cough or difficult breathing on Page No.5

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 14 days has a chronic cough. This may be a sign of tuberculosis, asthma, whooping cough or another problem.

COUNT the breaths in one minute

You must count the breaths the child takes in one minute to decide if the child has fast breathing. The child must be quiet and calm when you look and listen to his breathing. If the child is frightened, crying or angry, you will not be able to obtain an accurate count of the child's breaths.

Tell the mother you are going to count her child's breathing. Remind her to keep her child calm. If the child is sleeping, do not wake the child.

To count the number of breaths in one minute:

Use a watch with a second hand or a digital watch, preferably a respiratory rate counting timer, put the watch where you can see the second hand. Glance at the second hand as you count the breaths the child takes in one minute.

Look for breathing movement anywhere on the child's chest or abdomen. Usually you can see breathing movements even on a child who is dressed. If you cannot see this movement easily, ask the mother to lift the child's shirt.

If the child starts to cry, ask the mother to calm the child before you start counting.

If you are not sure about the number of breaths you counted (for example, if the child was actively moving and it was difficult to watch the chest, or if the child was upset or crying), repeat the count.

The cut-off for fast breathing depends on the child's age. 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.

* * *

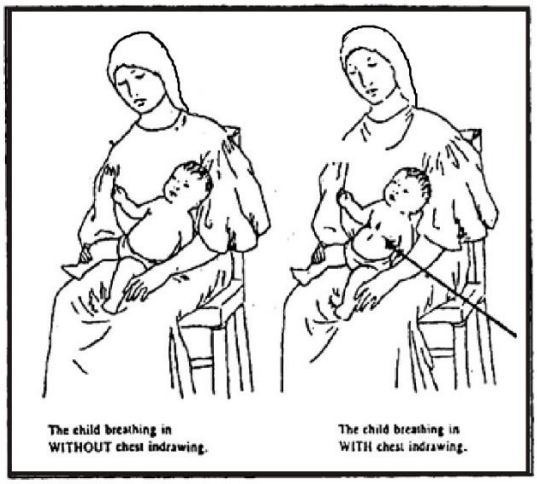
Before you look for the next two signs -- chest in-drawing and stridor -- watch the child to determine when the child is breathing IN and when the child is breathing OUT.

LOOK for chest in-drawing.

If you did not lift the child's shirt when you counted the child's breaths, ask the mother to lift it now.

Look for chest in-drawing when the child breathes IN. Look at the lower chest wall (lower ribs). The child has chest in-drawing if ***the lower chest wall goes IN when the child breathes IN***. Chest in-drawing occurs when the effort the child needs to breathe in is much greater than normal. In normal breathing, the whole chest wall (upper and lower) and the abdomen move OUT when the child breathes IN. When chest in-drawing is present, the lower chest wall goes IN when the child breathes IN.

If you are not sure that chest in-drawing is present, look again. If the child's body is bent at the waist, it is hard to see the lower chest wall move. Ask the mother to change the child's position so he is lying flat in her lap. If you still do not see the lower chest wall go IN when the child breathes IN, the child does not have chest in-drawing. For chest in-drawing 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.



If only the soft tissue between the ribs goes in when the child breathes in (also called intercostal indrawing or intercostal retractions), the child does not have chest indrawing. In this assessment, chest indrawing is lower chest wall indrawing[1]. It does not include "intercostal indrawing."

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

[1] This is the same as "subcostal indrawing" or "subcostal retractions"

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.

LOOK and LISTEN for wheeze

Wheeze is a soft, musical noise when the child breaths OUT. It may be caused by swelling and narrowing of the small airways of the lungs or by a contraction of the smooth muscles surrounding the airways in the lung.

Look to see when the child is breathing OUT. Listen for the wheeze noise by holding your ear near the child's mouth, since the noise may be difficult to hear. Wheezing is caused by a narrowing of the air passages in the lungs. The breathing out takes longer than normal and requires effort.

Sometimes so little air moves that there is no noise. Look to see if the breathing out phase requires great effort and is longer than normal.

If the child is wheezing, ask the mother if her child has had a previous episode of wheezing within the last year. A child with "recurrent wheeze" has had more than one episode of wheeze in a 12-month period. The main causes of wheezing are asthma and respiratory infections including bronchiolitis and pneumonia.

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
- PNEUMONIA
- COUGH OR COLD

Look at your chart booklet classification table for cough or difficult breathing page 5.

***How to use the classification table*:** After you assess for the main symptom and related signs, classify the child's illness. For example, to classify cough or difficult breathing:

1. Look at the pink (or top) row.

Does the child have a general danger sign? OR Does the child have stridor in a calm child?

If pulse oximeter is available, check whether the saturation of oxygen is less than 90 percent.

If the child has a general danger sign or any of the other signs listed in the pink row, or stridor when calm, or saturation of oxygen of less than 90 percent, then select the severe classification, SEVERE PNEUMONIA OR VERY SEVERE DISEASE. If the child has wheeze, go directly to "treat wheezing" before selecting the classification.

Children presenting with chest indrawing and fast breathing if accompanied with wheezing, should be managed differently since both pneumonia and wheezing can cause chest indrawing and fast breathing. Reassess and classify the child after giving rapid acting bronchodilator.

2. If the child does not have the severe classification, look at the yellow (or second) row.
This child does not have a severe classification. Does the child have fast breathing? OR is there lower chest indrawing in a calm child?

If the child has fast breathing and/or lower chest indrawing in a calm child, signs in the yellow row, and the child does not have a severe classification, select the classification in the yellow row, PNEUMONIA.

If the child has fast breathing and wheeze, treat wheezing immediately before selecting the classification.

If the child has wheezing, give a dose of rapid acting bronchodilator. Bronchodilators act rapidly when given by inhalation as a vapor. This is why they are called "rapid acting bronchodilator" they can be used in a health centre to treat a child who is wheezing.

Further instructions are described in "identify treatment" and "treat the child" modules and are summarized in the "treat wheezing" box on the chart.

Any general danger sign or stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**
• Fast breathing AND / OR • Lower chest indrawing	**PNEUMONIA**
No signs of pneumonia or very severe disease (If wheeze go directly to treat)	**COUGH OR COLD**

If the child does not have the severe classification or the classification in the yellow row, look at the green (or bottom) row.

This child does not have any of the signs in the pink or yellow row. If the child does not have any of the signs in the pink or yellow row, select the classification in the green row, COUGH OR COLD.
If the child has wheezing, the instructions for further assessment are described in "Treat Wheezing" box.

3. Whenever you use a classification table, start with the top row. In each classification table, a child receives only one classification. If the child has signs from more than one row, always select the more serious classification.

Any general danger sign or stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**
• Fast breathing AND / OR • Lower chest indrawing	**PNEUMONIA**
No signs of pneumonia or very severe disease (If wheeze go directly to treat)	**COUGH OR COLD**

EXAMPLE: This child has a general danger sign and fast breathing.
Classify the child with the more serious classification SEVERE PNEUMONIA OR VERY SEVERE DISEASE

Your facilitator will answer any questions you have about classifying illness according to the ASSESS & CLASSIFY chart.

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, saturation of oxygen less than 90 percent with pulse oximeter (if available) or stridor in a calm child -- is classified as having SEVERE PNEUMONIA OR VERY SEVERE DISEASE.

PNEUMONIA

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

A child with chest indrawing usually has 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 pneumonia.

NO PNEUMONIA: COUGH OR COLD

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

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 2 weeks) may have tuberculosis, asthma, whooping cough or another problem. Refer the child with a chronic cough to hospital for further assessment.

EXAMPLE: Read this case study. Also study how the health worker classified this child's illness.

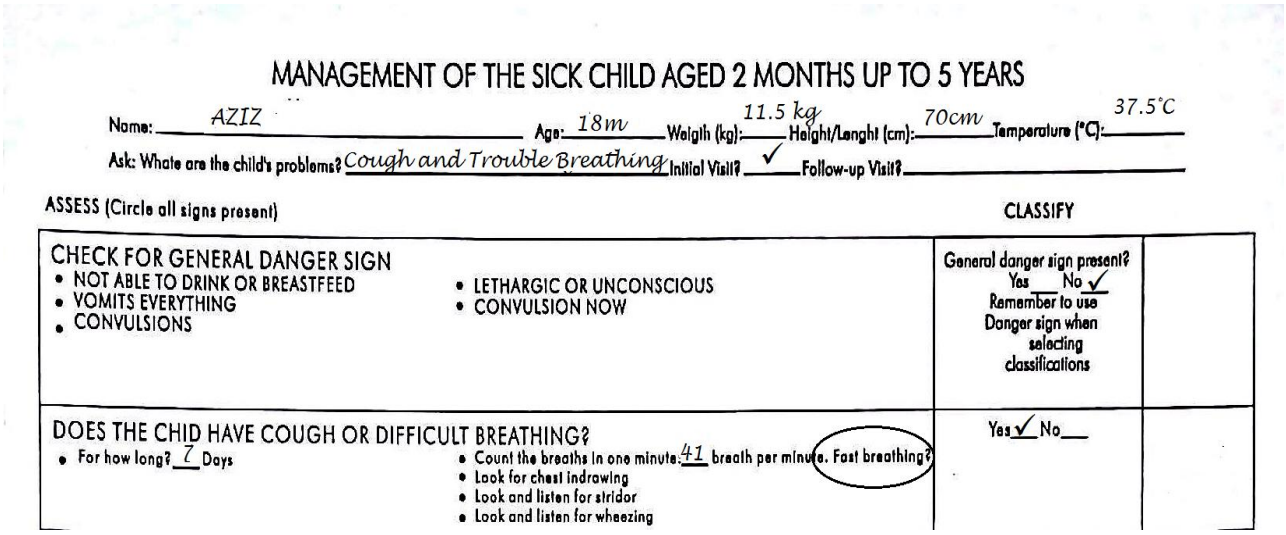
Aziz is 18 months old. He weighs 11.5 kg, height83 cm. His temperature is 37.5°C. His mother brought him to the clinic because he has a cough. She says he is having trouble breathing. This is his initial visit for this illness.

The health worker checked Aziz for general danger signs. Aziz is able to drink. He has not been vomiting. He has not had convulsions and is not convulsing now. He is not lethargic or unconscious.

"How long has Aziz had this cough?" asked the health worker. His mother said he had been coughing for 6 or 7 days. Aziz sat quietly on his mother's lap. The health worker counted the number of breaths the child took in a minute. He counted 41 breaths per minute. He thought, "Since Aziz is over 12 months of age, the cut-off for determining fast breathing is 40. He has fast breathing."

The health worker did not see any chest indrawing. He did not hear stridor or wheeze.

1. Here is how the health worker recorded Aziz's case information and signs of illness:



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

Name: AZIZ Age: 18m Weigth (kg): 11.5 kg Height/Lenght (cm): 70cm Temperature (°C): 37.5°C

Ask: Whats are the child's problems? Cough and Trouble Breathing Initial Visit? ✓ Follow-up Visit? ____

ASSESS (Circle all signs present)		CLASSIFY	
CHECK FOR GENERAL DANGER SIGN • NOT ABLE TO DRINK OR BREASTFEED • VOMITS EVERYTHING • CONVULSIONS	• LETHARGIC OR UNCONSCIOUS • CONVULSION NOW	General danger sign present? Yes ___ No ✓ Remember to use Danger sign when selecting classifications	
DOES THE CHID HAVE COUGH OR DIFFICULT BREATHING? • For how long? 7 Days	• Count the breaths in one minute: 41 breath per minute. Fast breathing? • Look for chest indrawing • Look and listen for stridor • Look and listen for wheezing	Yes ✓ No ___	

2. To classify Aziz's illness, the health worker looked at the classification table for cough or difficult breathing.
   a. First, he checked to see if Aziz had any of the signs in the pink row. He thought, "Does Aziz have any general danger signs? No, he does not. Does Aziz have any of the other signs in this row? No, he does not." Aziz does not have any of the signs for a severe classification.

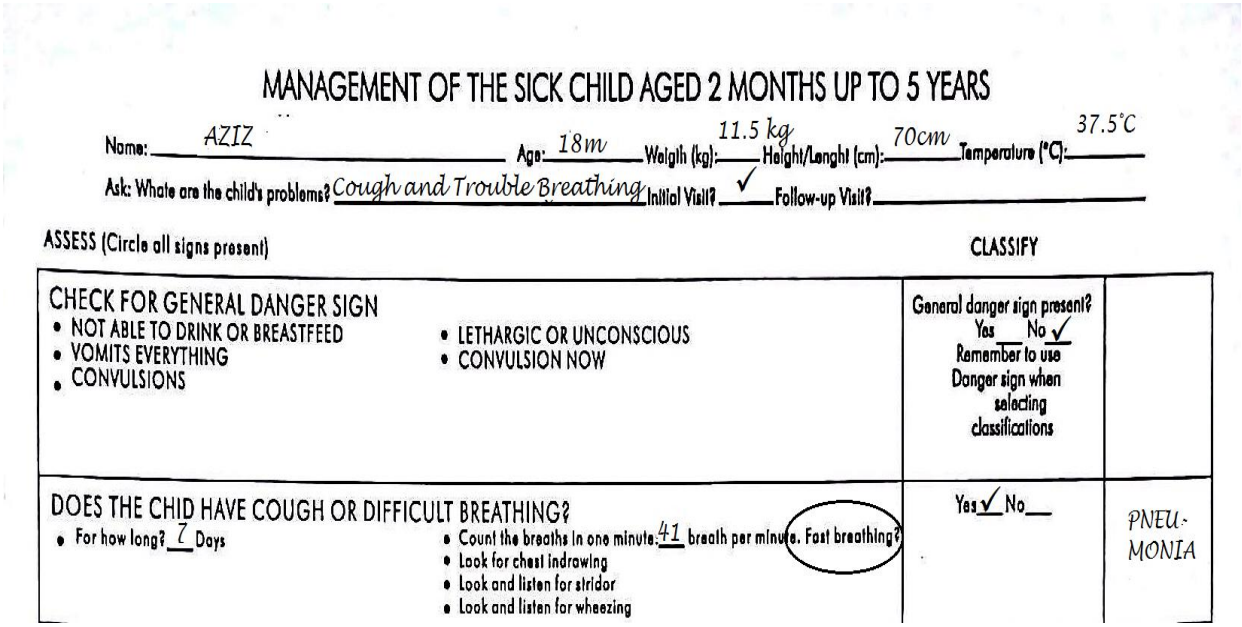
   b. Next, the health worker looked at the yellow row. He thought, "Does Aziz have signs in the yellow row? He has fast breathing."

c. The health worker classified Aziz as having PNEUMONIA.

Any general danger sign or stridor in calm child	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**
• Fast breathing AND / OR • Lower chest indrawing	**PNEUMONIA**
No signs of pneumonia or very severe disease (If wheeze go directly to treat)	**COUGH OR COLD**

3. He wrote PNEUMONIA on the Recording form.

I.D-No_____

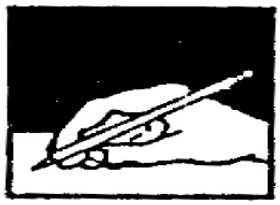


MANAGEMENT OF THE SICK CHILD AGED 2 MONTHS UP TO 5 YEARS

Name: AZIZ Age: 18m Weigth (kg): 11.5 kg Height/Lenght (cm): 70cm Temperature (°C): 37.5°C

Ask: Whats are the child's problems? Cough and Trouble Breathing Initial Visit? ✓ Follow-up Visit?

ASSESS (Circle all signs present)		CLASSIFY	
CHECK FOR GENERAL DANGER SIGN • NOT ABLE TO DRINK OR BREASTFEED • VOMITS EVERYTHING • CONVULSIONS	• LETHARGIC OR UNCONSCIOUS • CONVULSION NOW	General danger sign present? Yes ___ No ✓ Remember to use Danger sign when selecting classifications	
DOES THE CHID HAVE COUGH OR DIFFICULT BREATHING? • For how long? 7 Days	• Count the breaths in one minute: 41 breath per minute. Fast breathing? • Look for chest indrawing • Look and listen for stridor • Look and listen for wheezing	Yes ✓ No ___	PNEU-MONIA



EXERCISE B

In this exercise, you will practice recording signs related to cough or difficult breathing. You will also classify the child's illness. Read the following case studies. Record the child's signs on the Recording Form and classify the illness. To do this exercise, look at a classification table for cough or difficult breathing. Use the one in your chart booklet or look at the wall chart.

> ***Note:*** **Be sure to tick (✓) "initial visit" on the top part of the Recording Form each time you do a case study in this module.**

Case 1: Gul

Gul is 6 months old. He weighs 5.5 kg and has length 52 cm. His temperature is 38°C. His mother said he has had cough for 2 days. The health worker checked for general danger signs. The mother said that Gul is able to breastfeed. He has not vomited during this illness. He has not had convulsions and is not convulsing now. Gul is not lethargic or unconscious.

The health worker said to the mother, "I want to check Gul's cough. You said he has had cough for 2 days now. I am going to count his breaths. He will need to remain calm while I do this."

The health worker counted 58 breaths per minute. He did not see chest indrawing. He did not hear stridor. He did not hear wheeze.

a. Record Gul's signs on the Recording Form below.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature_____^{o}C____^{o}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)	**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____	
For how long? ____ Days Look and listen for stridor Look and listen for wheeze Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	

b. To classify Gul's illness, look at the classification table for cough or difficult breathing in your chart booklet. Look at the pink (or top) row and decid

- Does Gul have a general danger sign? Yes_____No ____
- Does he have chest indrawing or stridor or wheeze when calm? Yes____No ____

- Does he have the severe classification SEVERE PNEUMONIA OR VERY SEVERE DISEASE? Yes _____No____

c. If he does not have the severe classification, look at the yellow (or middle) row.

- Does Gul have fast breathing? Yes____No____

d. How would you classify Gul's illness? Write the classification on the Recording Form.

Case 2: Basima

Basima is 8 months old. She weighs 6 kg and her length is 55cm. Her temperature is 39C.

Her father told the health worker, "Basima has had cough for 3 days. She is having trouble breathing. She is very weak." The health worker said, "You have done the right thing to bring your child today. I will examine her now."

The health worker checked for general danger signs. The mother said, " Basima will not breastfeed. She will not take any other drinks I offer her." Basima does not vomit everything and has not had convulsions. She is not convulsing now. Basima is lethargic. She did not look at the health worker or her parents when they talked.

The health worker counted 55 breaths per minute. He saw chest indrawing. He decided Basima had stridor because he heard a harsh noise when she breathed in. He decided Basima did not have wheeze.

Record Basima's signs on the Recording Form below.
Now look at the classification table for cough or difficult breathing on the chart. Classify this child's illness and write your answer in the Classify column. Be prepared to explain to your facilitator how you selected the child's classification.

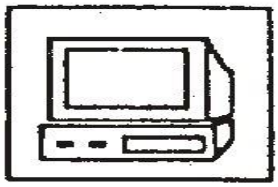
IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C___ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	

Tell the facilitator when you are ready to discuss this exercise.



EXERCISE C

Note: A picture like this one means you will do a video exercise. In a video exercise, you see examples of signs and practice identifying them. You also see demonstrations showing how to assess children for particular main symptoms. Sometimes you will see an actual case study. You will practice assessing and classifying the child's illness.

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

1. 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		

2. For each of the children shown, answer the question:

	Breathing rate		**Does the child have fast breathing?**	
	AGE	**Breaths per minute**	**YES**	**NO**
Mano				
Waleed				

3. For each of the children shown, answer the question:

	Does the child have chest indrawing?	
	YES	**NO**
Maryum		
Jennat		
Hooria		
Annam		
Laila		

4. For each of the children shown, answer the question:

	Does the child have stridor?		Does the child have wheeze?	
	YES	**NO**	**YES**	**NO**
Paro				
Haleema				
Sumbal				
Hassan				

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.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)	**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____	
For how long? ____ Days Look and listen for stridor Look and listen for wheeze Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	

4.0 ASSESS AND CLASSIFY DIARRHOEA

Diarrhoea occurs when stools contain more water than normal. Diarrhoea is also called loose or watery stools. It is common in children, especially those between 6 months and 2 years of age. It is more common in babies under 6 months who are drinking cow's milk or infant feeding formulas. Frequent passing of normal stools is not diarrhoea. The number of stools normally passed in a day varies with the diet and age of the child. In many regions diarrhoea is defined as three or more loose or watery stools in a 24-hour period.

Mothers usually know when their children have diarrhoea. They may say that the child's stools are loose or watery. Mothers may use a local word for diarrhoea.

Babies who are exclusively breastfed often have stools that are soft; this is not diarrhoea. The mother of a breastfed baby can recognize diarrhoea because the consistency or frequency of the stools is different than normal.

What are the types of diarrhoea?

Most diarrhoea which cause dehydration are loose or watery. Cholera is one example of loose or watery diarrhoea. Only a small proportion of all loose or watery diarrhoea are due to cholera.

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 child with acute diarrhoea is usually due to dehydration.

If the diarrhoea lasts 14 days or 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. A child may have both watery diarrhoea and dysentery.

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 your chart booklet page 6 for steps in assessing a child with diarrhoea: Ask about diarrhoea in ALL children:

ASK: Does the child have diarrhoea?

Use words for diarrhoea the mother understands.

If the mother answers NO, ask about the next main symptom. 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.

When a child becomes dehydrated, he is at first restless and irritable. If dehydration continues, the child becomes lethargic or unconscious.

As the child's body loses fluids, the eyes may look sunken. When pinched, the skin will go back slowly or very slowly.

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.

A child has the sign ***restless and irritable*** if the child is restless and irritable all the time or every time he is touched and handled. If an infant or child is calm when breastfeeding but again restless and irritable when he stops breastfeeding, he has the sign "restless and irritable". Many children are upset just because they are in the clinic. Usually these children can be consoled and calmed. They do not have the sign "restless and irritable".

LOOK for sunken eyes

The eyes of a child who is dehydrated may look sunken. Decide if you think the eyes are sunken. Then ask the mother if she thinks her child's eyes look unusual. Her opinion helps you confirm that the child's eyes are sunken.

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.

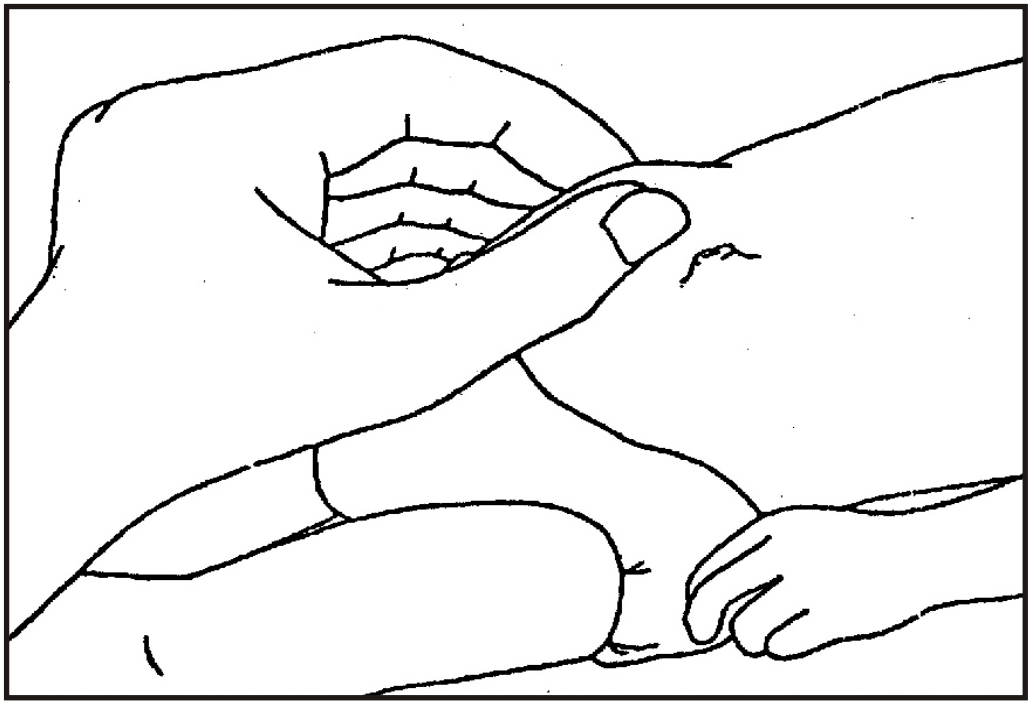
Does it go back:

- **Very slowly (longer than 2 seconds)?**
- **Slowly?**

Ask the mother to place the child on the examining table so that the child is flat on his back with his arms at his sides (not over his head) and his legs straight. Or, ask the mother to hold the child so he is lying flat in her lap.

Locate the area on the child's abdomen halfway between the umbilicus and the side of the abdomen. To do the skin pinch, use your thumb and first finger. Do not use your fingertips because this will cause pain. Place your hand so that when you pinch the skin, the fold of skin will be in a line up and down the child's body and not across the child's body. Firmly pick up all of the layers of skin and the tissue under them. Pinch the skin for one second and then release it. When you release the skin, look to see if the skin pinch goes back:

- very slowly (longer than 2 seconds)
- slowly
- immediately
- If the skin stays up for even a brief time after you release it, decide that the skin pinch goes back 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 D

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

Part 1: Look at photographs 1 and 2 in the photograph booklet. Read the explanation for each photograph:

Photograph 1: This child's eyes are sunken.

Photograph 2: The skin pinch for this child goes back very slowly.

Part 2: Study photographs 3 through 7. Then write your answers to these questions:

Photograph 3: Look at the child's eyes. Are they sunken?

Photograph 4: Look at the child's eyes. Are they sunken?

Photograph 5: Look at the child's eyes. Are they sunken?

Photograph 6: Look at the child's eyes. Are they sunken?

Photograph 7: 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

Look at your chart booklet for column of classification of diarrhoea

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

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

A child may have one sign in pink box and other sign in the yellow box (e.g. a child is lethargic or unconscious, but also has diarrhoea and slow skin pinch). Even though this child has one sign in the pink box, he will receive yellow classification for dehydration, because two signs in the pink box are necessary for pink classification.

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

EXAMPLE: A 4-month-old child named Sadaf was brought to the clinic because she had diarrhoea for 5 days. She did not have danger signs and she was not coughing. The health worker assessed the child's diarrhoea. He recorded the following signs:

DOES THE CHILD HAVE DIARRHOEA?	YES ✓ NO
• For how long __5___ Days • Is there blood in the stools?	• Look at the child's general condition. Is the child: o Lethargic or unconscious o Restless or irritable • Look for sunken eyes • Offer the child fluid. Is the child: o Not able to drink or drinking poorly o Drinking eagerly, thirsty • Pinch the skin of the abdomen. Does it go back: o Very slowly (longer than 2 seconds) o Slowly

The child does not have two signs in the pink row. The child does not have SEVERE DEHYDRATION.

The child had two signs from the yellow row. The health worker classified the child's dehydration as SOME

DEHYDRATION.

Two of the following signs • Sunken eyes • Not able to drink or drinking poorly • Lethargic or unconscious	**SEVERE DEHYDRATION**
Two of the following signs • Restless, irritable • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	**SOME DEHYDRATION**
Not enough signs to classify as severe or some dehydration	**NO DEHYDRATION**

The health worker recorded Sadaf's classification on the Recording Form.
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.

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.

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

No Dehydration

A child who does not have two or more signs in either the pink or yellow row is classified as having NO DEHYDRATION.
Advice the mother when to return to the clinic. Feeding recommendations and information about when to return are on the chart *COUNSEL THE MOTHER.*

Your facilitator will lead a drill to help you review the steps for checking a child for general danger signs. You will also review the steps for assessing a child with cough or difficult breathing.

4.2.2 Classify Persistent Diarrhoea

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

- SEVERE PERSISTENT DIARRHEA
- PERSISTENT DIARRHEA

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.

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.

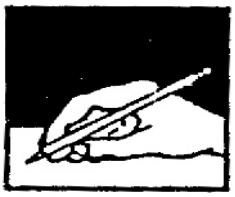
4.2.3 Classify Dysentery

Dysentery

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

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 health worker recorded his classifications:

DOES THE CHILD HAVE DIARHOEA? Yes ✓ No____ * For how long? 5 Days * Is there blood in the stools? * Look at the child's general condition is the child Lethargic or unconscious? Restless or irritable? * Look for sunken eyes * Offer the child fluid is the child Not able to drink or drinking poorly? Drinking eagerly. Thirsty? * Pinch the skin of the abdomen Does it go back Very slowly (longer than 2seconds)? Slowly?	*No* *DEHYDRATION* *DYSENTRY*



EXERCISE E

Case 1: Rana

Rana is 14 months old. She weighs 12 kg and length is 77cm. Her temperature is 37.5°C. Rana's mother said the child has had diarrhoea for 3 weeks.

Rana does not have any general danger signs. She does not have cough or difficult breathing.

The health worker assessed her diarrhoea. He noted she has had diarrhoea for 21 days. He asked if there has been blood in the child's stool. The mother said, "No." The health worker checked Rana for signs of dehydration. The child is irritable throughout the visit. Her eyes are not sunken. She drinks eagerly. The skin pinch goes back immediately.

Record Rana's signs and classify them on the Recording Form

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	

Case 2: Adeela

Adeela is 7 months old. She weighs 5.6 kg and length 64. Her temperature is 37°C. Her mother brought her to the clinic because Adeela has diarrhoea.

Adeela does not have any general danger signs. She does not have cough or difficult breathing.

The health worker assessed Adeela for signs of diarrhoea. The mother said the diarrhoea began 2 days ago. There is no blood in the stool. Adeela is not lethargic or unconscious, and she is not restless or irritable. Her eyes are sunken. When offered fluids, Adeela drinks eagerly as if she is thirsty. skin pinch goes back immediately.

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

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	

Case 3: Heera

Heera is 3 years old. She weighs 10 kg and height 85 cm. Her temperature is 37°C. Her mother came today because Heera has a cough and diarrhoea.

She does not have any general danger signs. The health worker assessed her for cough or difficult breathing. She has had cough for 3 days. He counted 36 breaths per minute. She does not have chest indrawing or stridor or wheeze.

When the health worker asked how long Heera has had diarrhoea, the mother said, "For more than 2 weeks." There is no blood in the stool. Heera is irritable during the visit, but her eyes are not sunken. She is able to drink, but she is not thirsty. A skin pinch goes back immediately.

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

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature:^{O}_C____^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	

Case 4: Zahid

Zahid is 10 months old. He weighs 8 kg, length is 72 cm. His temperature is 38.5°C. He is here today because he has had diarrhoea for 3 days. His mother noticed blood in the child's stool.

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

The health worker assesses the child for diarrhoea. "You said Zahid has had blood in his stool. I will check now for signs of dehydration." The child is not lethargic or unconscious. He is not restless or irritable. He does not have sunken eyes. The child drank normally when offered some water and does not seem thirsty. The skin pinch goes back immediately.

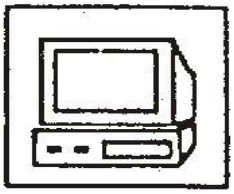
Record Zahid's signs and classify them on the Recording Form below.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	



EXERCISE F

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.

1. 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		

2. For each of the children shown, answer the question:

	Does the skin pinch go back slowly?	
	YES	**NO**
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.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	

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

5.0 ASSESS AND CLASSIFY FEVER

A child with fever may have **malaria**, **measles, dengue** or another **severe disease**. A child with fever may have a **bacterial infection** such as pneumonia, acute ear infection, dysentery, local bacterial infection, typhoid, or urinary tract infection. Or, a child with fever may have a simple cough or cold or other **viral infection**.

For a health worker it is **very important to identify key symptoms and signs of the diseases that may cause the child's death very quickly**. Signs of some very severe diseases may be general and non-specific, therefore all sick children with those signs should be referred to the hospital for further assessment and treatment.

All health workers should know how to assess a child for the common childhood causes of fever, malaria or measles - two major killers of children under five in the world. Although measles has been on the decline due to successful measles immunization, however malaria is still a major cause of fever and death in children in malaria risk areas.

A child has the main symptom fever if any of the following is true:

- The child has a history of fever
- The child feels hot
- The child has an axillary (underarm) temperature of 37.5°C (38°C rectal) or above
- If you do not have a thermometer, feel the child's stomach or axilla (underarm) and determine whether the child feels hot. Ask the mother: "Does the child have fever?" The child has a history of fever if the child has had any fever with this illness.
- If the child has fever, assess the child using the IMNCI chart. 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.

MALARIA:

Malaria is caused by parasites in the blood called "plasmodia." They are transmitted through the bite of female anopheles' mosquitoes. Four species of plasmodia can cause malaria, but the only dangerous one is Plasmodium falciparum.

Fever, intermittent or continuous, associated with rigors and sweating, are the main symptoms of malaria. It can be present all the time or go away and return at regular intervals. In an area where malaria transmission is known to occur or there is travel history to a malaria endemic area, a child with this pattern of fever having one or more of the following is suspected case of uncomplicated malaria; headache, nausea, vomiting and joint pains. A child with malaria may have chronic anaemia (with no fever) as the only sign of illness. (You will read more about anaemia in section 8.0.)

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 highly endemic areas where falciparum transmission occurs, malaria is a major cause of child mortality. A case of uncomplicated falciparum malaria can progress to severe form of disease within 24 hours of the onset of fever. In falciparum malaria, a child may develop complications due to organ involvement (brain, lungs, kidneys and blood) if diagnoses and treatment is delayed. Even today, globally

every 30 seconds, a child is dying due to severe form of malaria.

Deciding Malaria Endemicity[2]: In Pakistan the classification of malaria risk has been based on the distribution of malaria endemicity in terms of annual parasite incidence (cases/1000 population/year). To classify and treat children with fever, you must know the malaria endemicity in your area/district using information from the National Malaria Control Program. The area could be Hyper-endemic, Meso-endemic or Hypo-endemic malaria area based on the information.

Hyper-endemic Malaria area: where there are more than 5 confirmed malaria cases occurring per 1000 general population in one year. This is referred as **HIGH MALARIA RISK AREA**

Meso-endemic Malaria area: where: there are 1-5 confirmed malaria cases occurring per 1000 general population in one year. This is referred as the **LOW MALARIA RISK AREA**

Hypo-endemic Malaria area: where there are less than 1 confirmed malaria cases occurring per 1000 general population in one year. This is referred to as **NO MALARIA RISK AREA**

The majority of the malaria hyper-endemic districts fall in the provinces of Sindh, Baluchistan and Khyber Pakhtunkhwa (KPK). All the districts of Punjab province fall in lowest endemicity stratum of the country (API < 0.1 cases/1000 population/year). The distribution of the dangerous species of malaria parasite (falciparum) in mainly confined to Sindh province, Baluchistan and few agencies of FATA.

Malaria transmission in Pakistan is of unstable pattern i.e. it is mainly seasonal (after the monsoon rains from July to December). As per national policy, every suspected case of malaria must be confirmed on blood microscopy or rapid diagnostic tests (RDTs) as early as possible, to ensure prompt and effective antimalarial treatment. Where there is no facility available for blood microscopy or RDTs, children under 5 years of age with both suspected and uncomplicated and complicated malaria (severe febrile disease) can be started immediate antimalarial treatment on clinical ground without waiting for the results of diagnostic test.

In a no malaria risk area, if a child has no history of travel to a malaria risk area, there is no chance of a child's fever being due to malaria, a malaria test should not be done.

After deciding to do a malaria test, take a blood smear if you have a microscope or check the blood by using RDTs, depending on what is available in the clinic.

Record the malaria test result to indicate:

POSITIVE - if there are malaria parasites or if the RDT is positive. You should also note if it is P. falciparum or P. vivax if you are able to do so. If the test is positive for P. vivax, treat as indicated in the national treatment guidelines.

NEGATIVE - if you do not see parasites by microscopy or if the RDT is negative.

The malaria test result will determine whether a child has malaria infection requiring an antimalarial treatment or not. In a situation, where you are unable to do a malaria test in the clinic, classify as MALARIA:

- all children with fever in a high malaria risk area,

[2] The definition of malaria endemicity should be based on results of investigations of the cause of illness in children with fever. Some areas usually have a low risk of malaria but also have periodic epidemics with high malaria morbidity and mortality. The health workers and the population in these areas might consider the risk of malaria to be high, even though the risk is usually very low. In this course, malaria risk in these areas is usually considered low; when an epidemic is occurring, the malaria risk is high.

- children with no other apparent cause of fever in a low malaria risk area.

Always check the quality of your blood slides if using microscopy or RDTs to ensure that the test results are reliable.

CLASSIFICATION

- In a high malaria risk area or season, a child with fever (or a history of fever), NO any general danger sign or stiff neck, and a positive malaria test is classified as having MALARIA.
- Where a malaria test is not available, a child with fever (or a history of fever) and NO any general danger sign or stiff neck is classified as having MALARIA.
- In a low malaria risk area or season, a malaria test is done in children with fever (or a history of fever) who do NOT have any general danger sign or stiff neck, and do NOT have other obvious cause of fever.
- A child with fever (or a history of fever), NO any general danger signs or stiff neck, and a positive malaria test is classified as having MALARIA.
- Where a malaria test is not available, a child with fever (or a history of fever), NO general danger signs or stiff neck, and NO other obvious cause of fever is classified as having MALARIA.

If a child in a low malaria risk area HAS another obvious cause of fever, the chance that the child's fever is due to malaria is low.

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 (a brain infection) occurs in about one in one thousand cases. A child with encephalitis may have a general danger sign such as convulsions, lethargy or unconsciousness.

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.

Suspect malaria if there is known malaria transmission in the area or there is history of travel to a malaria endemic area in last 15 days, provided all other causes of fever have been excluded and case definition of suspected malaria has been followed.

Then assess a child with fever for:

- how long the child has had fever?
- history of measles
- stiff neck or 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.
- look for signs suggesting dengue haemorrhagic fever

Open page 7 of your chart booklet. Read steps for assessment of a child for fever.

There are two parts to the box. The top half of the box (above the broken line) describes how to assess the child for signs of malaria, meningitis and other viral and bacterial infections like dengue, typhoid, UTI and other causes of fever. The bottom half of the box describes how to assess the child for signs of measles complications if the child has measles now or within the last 3 months.

On the ASSESS & CLASSIFY chart, fever and high fever are based on axillary temperature reading. Thresholds for rectal temperature readings are approximately 0.5°C higher.

If your clinic measures an axillary temperature, fever is 37.5°C (99.5°F). High fever is 38.5°C (101.3°F). If your clinic measures a rectal temperature, fever is 38°C (100.4°F). High fever is 39°C (102°F).

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

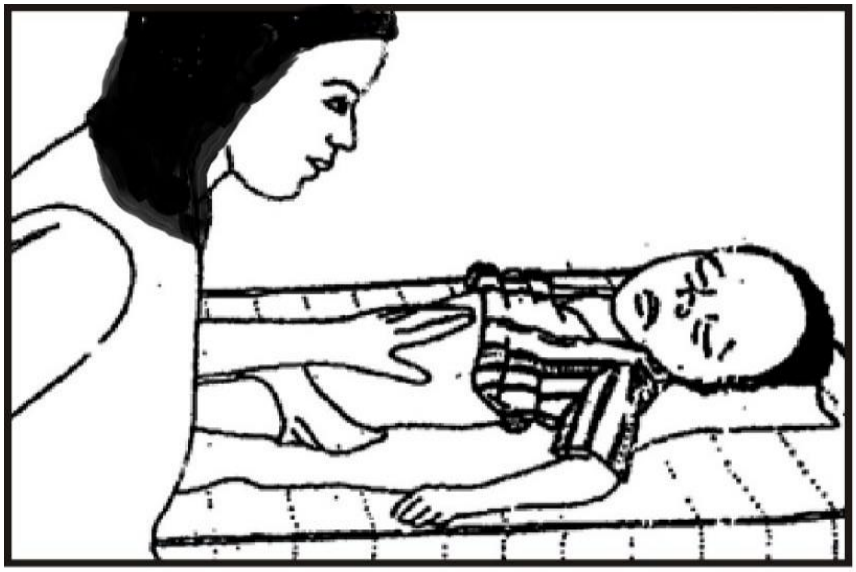
ASK: Does the child have fever?
Check to see if the child has a history of fever, feels hot or has a temperature of 37.5°C or above.

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 stomach or axilla (underarm) 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. 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 endemicity: Hyper or Meso endemic

Decide if malaria may be cause of fever.

Decide if the area is known for malaria transmission (Look at the definitions for Hyper and Meso endemic malaria area in section 7.0). In some parts of the country malaria is highly endemic while in some areas there is hardly any transmission going on (majority of Punjab districts, AJK and FATA).

Even in areas of low or no malaria endemicity, if there is history of travel to malaria endemic areas within the last 15 days, the possibility of acquired malaria is there.

Many mothers will know whether the area where they have travelled has malaria transmission. If a mother does not know or is not sure, ask about the area and see the list of districts classified as hyper, meso or hypo endemic area and use your own knowledge of whether the area has falciparum malaria.

ASK: For how long? If more than 7 days, has fever been present every day? If the history of last fever episode is more than 72 hours, malaria is excluded.

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: about headache, pain behind the eyes, rash and the duration of fever.

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.

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 petichiae

Look for petechiae, gum bleed or nose bleed (including tourniquet test)

These signs along with tourniquet test are suggestive of haemorrhagic dengue fever and an urgent referral is advised in presence of these signs. If Dengue is suspected do a tourniquet test.

Method for tourniquet test: Inflate blood pressure cuff between systolic and diastolic pressure for 5-minutes. The test considered positive if ten or more petechiae per 2.5 cm or one-inch area.

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.

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.

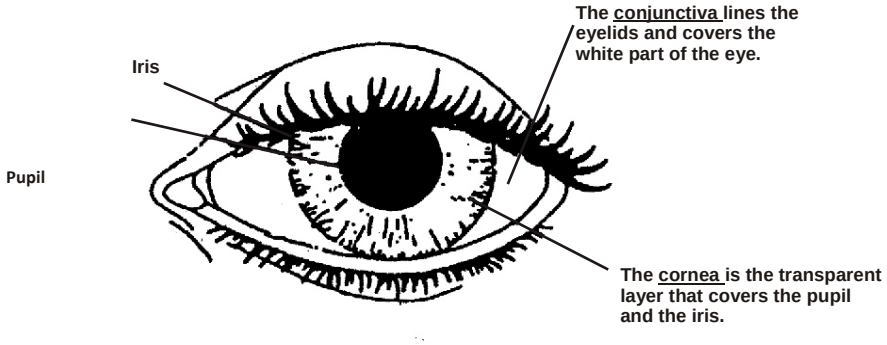
LOOK for mouth ulcers. Are they deep and extensive?

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 centre. They do not interfere with drinking or eating. They do not need treatment.

LOOK for signs in the eye.

The normal eye:



The conjunctiva lines the eyelids and covers the white part of the eye. The iris is the coloured part of the eye. The normal cornea (the clear window of the eye) is bright and transparent.

Through it, you can see the iris and the round pupil at its middle. A normal cornea is clear. You can see the colour of the iris clearly. The pupil is black.

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, such as how a glass of water looks when you add a small amount of milk. 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 G

Part 1: Study the photographs numbered 8 through 11. They show examples of common childhood rashes. Read the explanation for each of these photographs.

Photograph 8: This child has the generalized rash of measles and red eyes.

Photograph 9: This example shows a child with heat rash. It is not the generalized rash of measles.

Photograph 10: This is an example of scabies. It is not the generalized rash of measles.

Photograph 11: This is an example of a rash due to chicken pox. It is not a measles rash.

Part 2: Study photographs 12 through 21 showing children with rashes. For each photograph, tick whether the child has the generalized rash of measles. Use the answer sheet below.

	Is the generalised rash of measles present?	
	Yes	**No**
Photograph 12		
Photograph 13		
Photograph 14		
Photograph 15		
Photograph 16		
Photograph 17		
Photograph 18		
Photograph 19		
Photograph 20		
Photograph 21		

EXERCISE H

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

Part 1: Study photographs 22 through 24 and read the explanation for each one.

Photograph 22: This is an example of a normal mouth. The child does not have mouth ulcers.

Photograph 23: 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 24: This child has a mouth ulcer.

Part 2: Study photographs 25 through 27 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 25		
Photograph 26		
Photograph 27		

EXERCISE I

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

Part 1: Study photographs 28 through 30.

Photograph 28: 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 29: This child has pus draining from the eye.

Photograph 30: This child has clouding of the cornea.

Part 2: Now look at photographs 31 through 37. 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. Use the answer sheet on the next page.

	Does the child have:	
	Pus draining from the eye?	**Clouding of the cornea?**
Photograph 31		
Photograph 32		
Photograph 33		
Photograph 34		
Photograph 35		
Photograph 36		
Photograph 37		

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

Your facilitator will lead a drill for you to practice determining whether fast breathing is present based on the number of breaths the child takes in one minute

5.2 CLASSIFY FEVER

Open chart booklet page 6 and refer to 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.

Refer to page 7 of chart booklet

HYPER ENDEMIC AREAS: i.e. areas of high transmission potential; the following are the possible classifications of fever.

- VERY SEVERE FEBRILE DISEASE
- MALARIA
- FEVER: NO MALARIA

VERY SEVERE FEBRILE DISEASE

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

In areas highly endemic for falciparum malaria, children under the age of 5 years or highly vulnerable group who contract malaria can develop severe forms of the disease more quickly if diagnoses and appropriate treatment is delayed, if the child is provided inappropriate antimalarial treatment at home by the care provider or the drugs have been prescribed in substandard dosage to treat the disease.

In low endemic areas, where there is sporadic malaria transmission, local population of all age groups including children under 5 years of age have the lowest level of disease-specific acquired immunity, predisposing the patients to immediately develop the severe form of the disease, where these patients present with altered consciousness and signs of symptoms of organ involvement.

MALARIA

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 ₀or above) in a hyper or meso endemic malaria area, classify the child as having MALARIA if facility for microscopy or RDT is not available.

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

CONFIRMED FALCIPARUM AND VIVAX MALARIA

If facility for microscopy or RDT's is available, make sure that every child with fever is investigated for confirmation of diagnosis by microscopy or RDT's in malaria endemic areas. There can be two types of malaria in a child with fever in malaria endemic area.

- FALCIPARUM MALARIA
- VIVAX MALARIA

FEVER: NO MALARIA:

To classify fever in malaria non-endemic area and when other causes of fever like runny nose and measles are present, then the child is classified as FEVER: NO MALARIA.

EXAMPLE: A 2-year old child is brought to the clinic because he has felt hot for 2 days. He does not have general danger signs. He does not have cough or difficult breathing or diarrhoea or sore throat or ear problem. When the health worker assessed the child's fever, he recorded these signs:

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____		
For how long? ____ Days If more than 7 days, has fever been present every day? Has child had measles within the last 3 months Decide malaria risk High____ Low____ No____ Malaria transmission in the area = YES____ NO____ Transmission season = YES____ NO____ In non or low endemic areas travel history within the last 15-days to an area where malaria transmission occurs =YES____ NO ____	Look or feel for stiff neck. Look for runny nose Look for signs of MEASLES Generalized rash ***AND*** One of these: cough, runny nose, or red eyes Look for any other causes of fever *Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test* (if yes, use the relevant treatment instructions) Do a malaria test, if No general danger sign in all cases in High malaria risk or No obvious causes of fever in low Malaria risk: Test POSITIVE? P. falciporium P. vlvax NEGATIVE?	
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 cornea	

Because the risk of malaria is low, the health worker selected the table for classifying fever when there is a Low Malaria Endemicity.

The child does not have any of the signs in the pink row -- general danger signs or stiff neck. The health worker did not select the severe classification VERY SEVERE FEBRILE DISEASE.

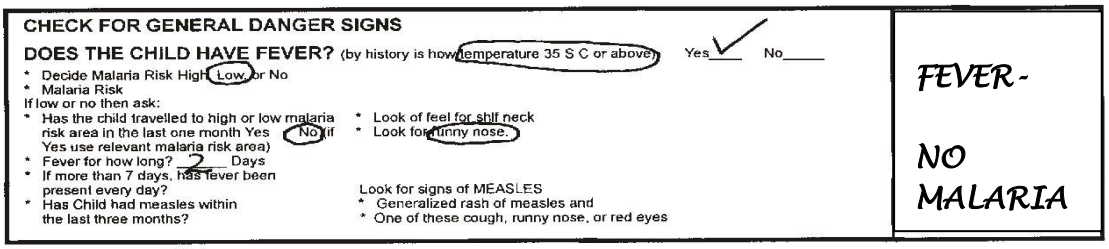
Next, he looked at the yellow row. To select the classification) MALARIA (FALCIPARUM AND VIVAX MALARIA), the child must have fever and he should be coming from high malaria endemic area or should have travelled to high malaria endemic area from low or no malaria endemic areas. In this case the child is coming from malaria non-endemic area for which he should not have signs of other causes of fever -- NO runny nose, NO measles and NO other cause of fever. This child has a runny nose. The health worker did not select the classification of MALARIA.

He looked at the green row. Because the child is coming from no malaria endemic area and has other cause of fever i.e. has a runny nose, he is classified as having FEVER – NO MALARIA.

FOR MALARIA NON-ENDEMIC AREAS ONLY:

Any general danger sign or Stiff neck	**VERY SEVERE FEBRILE DISEASE**
• Fever for more than 2 days • Measles PRESENT or • Runny Nose PRESENT • Other cause of fever PRESENT	**FEVER – NO-MALARIA**

He recorded the classification on the Recording Form:



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. See page 6 of chart booklet in column of measles

If the child has no signs suggesting measles, or has not had measles within the last three months, do not classify measles. Then check for malnutrition.

There are three possible classifications of measles:

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

The classification for measles if present now or within the last 3 months is on the next page.

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.

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.

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 vitamin A.

5.4 CLASSIFY DENGUE FEVER:

A child who has the main symptom "fever" is classified for fever including dengue.
Dengue fever may be complicated because of bleeding and shock. And sick children with dengue who have bleeding, or a positive tourniquet test are classified as DENGUE HAEMORRHAGIC FEVER.
Those who do not have bleeding symptoms, or a negative tourniquet test are classified as FEVER: DENGUE HAEMORRHAGIC FEVER UNLIKELY.

DENGUE HAEMORRHAGIC FEVER

A child with any of the following signs is classified as DENGUE HAEMORRHAGIC FEVER:

- Bleeding from the nose or gums
- Bleeding in the stool or vomitus
- Black stool or vomitus
- Skin bruises or petechiae
- Cold, clammy extremities
- Slow capillary refill (more than 3 sec)
- Persistent abdominal pain
- Persistent vomiting
- Positive tourniquet test

FEVER, DENGUE HEAMORRHAGC FEVER UNLIKELY

If none of the above mentioned symptoms and signs of bleeding are present with the fever, classify the child as FEVER, DENGUE HAEMORRHAGIC FEVER UNLIKELY.

The classifications for Dengue are shown in the below classification table.

• Bleeding from the nose or gums • Bleeding in the stool or vomitus • Black stool or vomitus • Skin petechiae • Cold, clammy extremities • Slow capillary refill (more than 3 sec) • Persistent abdominal pain • Persistent vomiting • Positive tourniquet test	**SEVERE DENGUE HEMORRHAGIC FEVER**
• No signs of severe dengue hemorrhagic fever	**FEVER ONLY:** **DENGUE HEMORRHAGIC FEVER UNLIKELY**

EXERCISE J

Case 1: Kareem

Kareem is 5 months old. He weighs 5.2 kg , MUAC 121 mm and length 62 cm. His axillary temperature is 37.5°C. His mother said he is not eating well. She said he feels hot, and she wants a health worker 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 health worker assessed Kareem further for signs related to fever. It is the rainy season, and malaria transmission has started to occur in the area, so the risk of contracting 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 nose is not runny, and there are no signs suggesting measles.

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

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature:^{O}_C____^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____ For how long? ____ Days If more than 7 days, has fever been present every day? Has child had measles within the last 3 months Decide malaria risk High____ Low____ No____ Malaria transmission in the area = YES____ NO____ Transmission season = YES____ NO____ In non or low endemic areas travel history within the last 15-days to an area where malaria transmission occurs =YES____ NO ____	Look or feel for stiff neck. Look for runny nose Look for signs of MEASLES Generalized rash ***AND*** One of these: cough, runny nose, or red eyes Look for any other causes of fever *Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test* (if yes, use the relevant treatment instructions) Do a malaria test, if No general danger sign in all cases in High malaria risk or No obvious causes of fever in low Malaria risk: Test POSITIVE? P. falciporium P. vlvax NEGATIVE?	
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 cornea	

Case 2: Aamir

Aamir is 3 years old. He weighs 9.4 kg, height 80 cm, MUAC 116 mm. His temperature is 37°C. His mother says he feels hot. He also has a cough, she says.

The health worker checked for general danger signs. Aamir was able to drink, had not vomited, did not have convulsions, and was not lethargic or unconscious.

The mother said Aamir had been coughing for 3 days. The health worker counted 51 breaths a minute. He did not see chest indrawing. There was no stridor or wheeze when Aamir was calm.

Aamir does not have diarrhoea or ear problem.

The health worker also thought that Aamir felt hot. He assessed the child further for signs of fever. The risk of malaria is high because Aamir lives in high malaria endemic area and malaria transmission is known to occur in the area. He has felt hot for 5 days, the mother said. He has not had measles within the last 3 months. He did not have a stiff neck, there was no runny nose, and no generalized rash.

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

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____ For how long? ____ Days If more than 7 days, has fever been present every day? Has child had measles within the last 3 months Decide malaria risk High____ Low____ No____ Malaria transmission in the area = YES____ NO____ Transmission season = YES____ NO____ In non or low endemic areas travel history within the last 15-days to an area where malaria transmission occurs =YES____ NO ____	Look or feel for stiff neck. Look for runny nose Look for signs of MEASLES Generalized rash ***AND*** One of these: cough, runny nose, or red eyes Look for any other causes of fever *Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test* (if yes, use the relevant treatment instructions) Do a malaria test, if No general danger sign in all cases in High malaria risk or No obvious causes of fever in low Malaria risk: Test POSITIVE? P. falciporium P. vlvax NEGATIVE?	
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 cornea	

Case 3: Surita

Surita is 3 years old. She weighs 10 kg, height 88 cm, MUAC 120mm. Her axillary temperature is 38°C.

Her mother brought her to the health centre because she has a cough. She also has a rash.

The health worker checked Surita for danger signs. She was able to drink, she had not been vomiting everything, and she did not have convulsions. She was not lethargic or unconscious.

The health worker assessed Surita's cough. The mother told the health worker Surita had been coughing for 2 days. The health worker counted 42 breaths per minute. The health worker did not see chest indrawing. He did not hear stridor or wheeze when Surita was calm.

When the health worker asked if Surita had diarrhoea, the mother said, "No."

Next the health worker assessed Surita's fever. It is the dry season and the risk of malaria is low because she lives in low malaria endemic area. She has not travelled outside her area. She has

felt hot for 3 days, the mother said. She does not have stiff neck. She does not have a runny nose.

Surita has a rash. She has throbbing pain behind eyes, Her eyes are red. She does not have mouth ulcers but there's bleeding. Pus is not draining from the eye. There is no clouding of the cornea.

The health worker then assessed Sarah for signs of Dengue. He found petechiae on abdomen, legs and arms. The tourniquet test was positive.

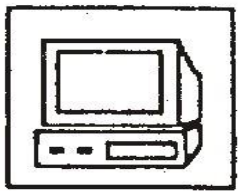
Record the child's signs and classify them on the Recording Form

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature:^{O}_C____^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____ For how long? ____ Days If more than 7 days, has fever been present every day? Has child had measles within the last 3 months Decide malaria risk High____ Low____ No____ Malaria transmission in the area = YES____ NO____ Transmission season = YES____ NO____ In non or low endemic areas travel history within the last 15-days to an area where malaria transmission occurs =YES____ NO ____	Look or feel for stiff neck. Look for runny nose Look for signs of MEASLES Generalized rash ***AND*** One of these: cough, runny nose, or red eyes Look for any other causes of fever *Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test* (if yes, use the relevant treatment instructions) Do a malaria test, if No general danger sign in all cases in High malaria risk or No obvious causes of fever in low Malaria risk: Test POSITIVE? P. falciporium P. vlvax NEGATIVE?	
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 cornea	



EXERCISE K

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		

Video Case Study: Record the child's signs and their classifications on the Recording Form

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

ASSESS (Circle all signs present)		**CLASSIFY**
CHECK FOR GENERAL DANGER SIGNS LETHARGIC OR UNCONSCIOUS NOT ABLE TO DRINK OR BREASTFEED CONVULSIONS	CONVULSING NOW VOMITS EVERYTHING **ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)**	
DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____		
For how long? ____ Days Look and listen for stridor Look and listen for wheeze	Count the breaths in one minute. (child must be calm) _____ breaths per minute. Fast breathing? YES____ NO____	
DOES THE CHILD HAVE DIARRHOEA? YES____ NO____ For how long? ____ Days Is there blood in the stools? YES____ NO____ Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds) Slowly	Look at the child's general condition. Is the child: Lethargic or unconscious Restless or irritable Offer the child fluid. Is the child: Not able to drink or drinking poorly? Drinking eagerly, thirsty?	
DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____ For how long? ____ Days If more than 7 days, has fever been present every day? Has child had measles within the last 3 months Decide malaria risk High____ Low____ No____ Malaria transmission in the area = YES____ NO____ Transmission season = YES____ NO____ In non or low endemic areas travel history within the last 15-days to an area where malaria transmission occurs =YES____ NO ____	Look or feel for stiff neck. Look for runny nose Look for signs of MEASLES Generalized rash ***AND*** One of these: cough, runny nose, or red eyes Look for any other causes of fever *Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test* (if yes, use the relevant treatment instructions) Do a malaria test, if No general danger sign in all cases in High malaria risk or No obvious causes of fever in low Malaria risk: Test POSITIVE? P. falciporium P. vlvax NEGATIVE?	
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 cornea	

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.

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.

See the chart booklet page 8 from the "Assess" column that tells you how to assess a child for ear problem.

-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. Go to the next question and ask about nutrition status.

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. The pain is very severe and agonizing if a child is having acute ear infection. If the mother is not sure that the child has ear pain, ask if the child has been irritable continuously crying 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.

CLASSIFY EAR PROBLEM

There are 4 classifications of ear problems:

- MASTOIDTIS
- ACUTE EAR INFECTION
- CHRONIC EAR INFECTION
- NO EAR INFECTION

CLASSIFICATION OF EAR PROBLEM

Based on the clinical signs found during the clinical assessment, the child's condition should be classified in the following ways:

MASTOIDITIS

A child presenting with tenderness and swelling of the mastoid bone is classified as having MASTOIDITIS,

TENDER SWELLING BEHIND THE EAR.

Treatment: Refer the child urgently to the hospital for treatment. Before referral, give the first dose of antibiotics and one dose of paracetamol for pain.

ACUTE EAR INFECTION

A child with ear pain or ear discharge (or pus) for fewer than 14 days is classified as having ACUTE EAR INFECTION.

PUS IS SEEN DRAINING FROM THE EAR AND DISCHARGE IS REPORTED FOR LESS THAN 14 DAYS

6.2.3 CHRONIC EAR INFECTION
If there is ear discharge (or pus) for 14 days or more, the child's classification is CHRONIC EAR INFECTION.

PUS IS SEEN DRAINING FROM THE EAR AND DISCHARGE IS REPORTED FOR MORE THAN 14 DAYS

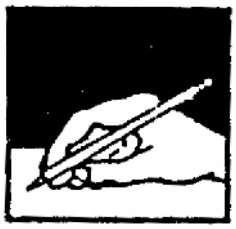
Treatment: Dry the ear by wicking. Give ear drops for at least two weeks. See chart booklet in treatment Column.

NO EAR INFECTION

If no signs of ear infection are found, the child is classified as having NO EAR INFECTION.

NO EAR PAIN

NO PUS SEEN DRAINING FROM THE EAR



EXERCISE L

These two case studies describe children who have ear problems. Record each child's signs and their classifications on the part of the Recording Form for ear problem. Look at the wall chart or in your chart booklet for help classifying signs.

Case 1: Hira

Hira is 3 years old. She weighs 13 kg, ht. 92 cm. Her temperature is 37.5°C. Her mother came to the clinic today because Hira has felt hot for the last 2 days. She was crying last night and complained that her ear is hurting.

The health worker checked and found no general danger signs.

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

Next the health worker asked about Hira's ear problem. The mother said she is sure Hira has ear pain. The child cried most of the night because her ear hurt. There has been discharge coming from Hira's ear on and off for about a year, said the mother. The health worker did not see any pus draining from the child's ear. He felt behind the child's ears and felt tender swelling behind one ear.

Record Hira's signs of ear problem and classify them on the Recording Form.

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____ Is there severe 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.	

Case 2: Dana

Dana is 18 months old. She weighs 9 kg, ht.80 cm. Her temperature is 37°C. Her mother said that Dana had discharge coming from her ear for the last 3 days.

Dana does not have any general danger signs. She does not have cough or difficult breathing. She does not have diarrhoea and she does not have fever.

The health worker asked about Dana's ear problem. The mother said that Dana does not have ear pain, but the discharge has been coming from the ear for 3 or 4 days. The health worker saw pus draining from the child's right ear. He did not feel any tender swelling behind either ear.

Record Dana's signs of ear problem and classify them on the Recording Form.

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____ Is there severe 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.	

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

7.0 CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Check all sick children for signs suggesting malnutrition and 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 malnutrition or anaemia. A sick child can be malnourished, but the health worker 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, blood transfusion, or specific treatment of a disease contributing to malnutrition (such as tuberculosis).

Malnutrition is associated with many childhood illnesses and deaths. There are several types of malnutrition.

One type of malnutrition is **ACUTE MALNUTRITION**. Acutely malnourished children lack growth nutrients that are required to build new tissues. These nutrients also aid weight gain after illness, repair damaged tissues and help replace the rapid turn-over of cells (intestine and immune cells). Correct replenishment of nutrients is essential for recovery from malnutrition. A child who has had frequent illnesses can also develop acute malnutrition. The child's appetite decreases, and the food that the child eats is not used efficiently.

Severe acute malnutrition (SAM) is a life-threatening condition requiring urgent treatment. Until recently, the recommendation was to refer children suffering from SAM to hospital to receive therapeutic diets along with medical care. Treating severely malnourished children in hospitals however, is not always desirable or practical especially in rural settings. The situation has changed with the advent of ready to use therapeutic foods (RUTF) which allows the management of a large numbers of children who are severely malnourished above the age of 6 months and without medical complications at home.

RUTF is made according to a standard, energy-rich composition defined by the World Health Organization. Typically, RUTF is made from full-fat milk powder, sugar, peanut butter, vegetable oil, and vitamins and minerals. The benefits of RUTF include low moisture content, a long shelf life without needing refrigeration and that it requires no preparation.

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.

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.

Look is the box of malnutrition page 9 at the chart booklet for the "Assess" column on the *ASSESS & CLASSIFY* chart. It describes how to assess a child for malnutrition and anaemia.

CLINICAL ASSESSMENT

After assessing for general danger signs and the four main symptoms (cough or difficulty breathing, diarrhoea, fever, ear problem), assess all children for malnutrition and anaemia:

Signs of acute malnutrition

- Oedema of both feet
- WFH/L - weight for height (more than 2 years of age) or weight for length (up to 2 years of age) for Z score
- Mid-upper arm circumference (MUAC) in children aged 6 months or more

In the presence of signs of SEVERE ACUTE MALNUTRITION check for any medical complications and assess appetite or breastfeeding when indicated.

Sign of anaemia

- Palmar pallor

LOOK and FEEL for oedema of both feet

A child with oedema of both feet may have kwashiorkor, another form of severe acute 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. Other common signs of kwashiorkor include sparse and pale hair which easily falls out, dry, scaly skin especially on the arms and legs, and a puffy or "moon" face.

Look and feel to determine whether 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.

ASSESS weight for height or length (WFH/L)

Assess the child's body weight in proportion to attained growth in height or length.

Look now at the example WHO weight-for-length graph below.

The line labelled 0 is the median which is, generally speaking, the average. Most healthy children are near the median curve, a little either above or below it.

The other lines, called z-score or standard deviations (SD) lines, indicate distance from the average.

You will identify children whose weight for length or height is below -3 z-scores curve of the graph; it is the bottom curve of the graph. These children suffer from severe acute malnutrition. You will also identify children whose weight-for-height or length is between -2 and -3 z-scores. These are children who have moderate acute malnutrition.

To determine weight-for-height or length:

• Calculate the child's age in months.

• Weigh the child (unless the child has already been weighed today). The child should wear light clothing when being weighed.

• Measure length or height:

- If a child is less than 2 years old, measure lying down (recumbent) length.
- If the child is aged 2 years or older and able to stand, measure standing height.

NOTE: In general, standing height is about 0.7 cm less than lying down length. Therefore, if a child less than 2 years old will not lie down for measurement of length, measure standing height and add 0.7 cm to convert it to length; if child aged 2 years or older cannot stand, measure lying down length and subtract 0.7 cm to convert it to height.

Select an appropriate weight-for-height or length chart.

• Look at the left-hand axis to locate the line that shows the child's weight in kilograms.

• Look at the bottom axis of the chart to locate the line that shows the child's height or length.

• Find the point on the chart where the line for the child's weight meets the line for the child's height or length.

• See where the point is:

- If the point is below the bottom curve (-3 z-score), the child has severe acute malnutrition.
- If the point is below -2 and above or on -3 z-score curve (between < -2 and ≤ -3 z-score), the child has moderate acute malnutrition
- If the point is on or above -2 z-score curve (≥-2 z-score), the child does not have acute malnutrition

• If the point is above or on the bottom curve, the child is not very low weight for ht/l and see if it comes in between -3 and -2 z scores. If so, it comes in between the yellow column. At the same time measure MUAC, if it comes between 115 mm-124 mm, it is classified as moderate acute malnutrition.

MEASURE mid-upper arm circumference (MUAC)

A quick way of identifying acute malnutrition in children aged 6 months and more is measuring the mid-upper arm circumference (MUAC).

To measure the mid upper arm circumference:

- Use a special tape for measuring MUAC or, if not available, a string
- Place the tape or string placed around the upper arm, midway between the tip of shoulder and the tip of bent elbow
- Do not to pull the tape or string too tightly

- To obtain the mid upper arm circumference:
    - Read the measurement if you used a tape
    - Measure the string with a ruler if you used a string

MUAC interpretation

- If MUAC is less than 115 mm - severe acute malnutrition and threat of death
- If MUAC is 115 up to 124 mm - moderate acute malnutrition
- If MUAC is 125 mm or more – no malnutrition

CHECK for medical complications

Severely malnourished children who have also medical complications have a high risk of death and need to be treated in a hospital.

Check a child that has oedema of both feet or MUAC less than 115 mm or WHF/L less than -3 z-scores for medical complications necessitating referral.

Medical complications necessitating referral are:

- Any general danger sign
- Any severe classification
- Pneumonia with chest indrawing

Note that these complications include main symptoms which would have been already assessed.

7.1 ASSESS APPETITE

An appetite test is an important criterion that helps to decide, if a child suffering from severe acute malnutrition needs to be referred or can be treated at home

Malnutrition changes the way infections and other diseases express themselves. Children severely affected by infections or and other diseases, who are malnourished, frequently show no signs of these diseases. Major complications lead to a loss of appetite. **A poor appetite means that the child has a significant infection or a major metabolic abnormality** such as liver dysfunction, electrolyte imbalance, cell membrane damage, or damaged biochemical pathways. Such child is at immediate risk of death.

Conducting an appetite test means offering the child Ready-to-Use Therapeutic Food (RUTF) and assessing whether the child ate at least the amount described below. The appetite test is conducted at the initial visit and each follow-up visit to the health facility. The test usually takes a short time but may take up to 30 minutes.

Conduct an appetite test for a child aged 6 months or more who:

- has MUAC less than 115 mm OR
- has WFH/L less than -3 z- score OR
- has oedema of both feet AND
- does NOT have medical complications

Conduct an appetite test

- **Arrange a quiet corner where the child and mother can take their time to get accustomed to eating the RUTF.**

Sometimes a child will not eat the RUTF because he or she is frightened, distressed or fearful of the

environment or staff. This is particularly likely if there is a crowd, a lot of noise, other distressed children or intimidating health professionals (white coats, awe-inspiring tone). The appetite test should therefore be conducted a separate quiet area. If a quiet area is not possible then the appetite can be tested outside the clinic.

- **Explain to the mother:**

  o Your child is malnourished and needs to eat the Ready-to-Use Therapeutic Food (RUTF) until he or she will grow well again. RUTF is a food and medicine for malnourished children.

  o I need to see if your child has a good appetite and will eat the RUTF in sufficient amounts at home. So, I will give you some RUTF and you will feed it to your child now.

- **Advise the mother to:**

  o Wash hands before giving the RUTF.

  o Sit with the child on her lap and gently offer the child RUTF to eat.

  o Encourage the child to eat the RUTF. If the child refuses, continue to quietly encourage the child and take your time. Do not force the child to eat the RUTF.

  o Offer plenty of clean water to drink from a cup when the child is taking the RUTF.

After 30 minutes asses the results of appetite test:

O A child that takes at least one-third of a packet of RUTF (92 g) or 3 teaspoons from a pot passes **the appetite test.**

Explain now to the mother that the child can be treated at home. You will learn how to explain to her how to feed the child at home and when to return for the follow-up visit later in this training.

o A child that does NOT take at least one-third of a packet of RUTF (92 g) or 3 teaspoons from a pot **fails the appetite test.**

Explain now to the mother that her child needs to eat the RUTF to treat his or her malnutrition but because of poor appetite the child would not take sufficient amounts of the RUTF at home and would continue to get worse and could even die. For this reason, the child needs to be urgently treated in a hospital.

Even if you or the mother think that the child did not take the RUTF because he or she doesn't like the taste or is frightened, the child still needs to be referred to in-patient care for least a short time. If it is later found that the child actually takes sufficient RUTF to pass the test, then he or she can be immediately transferred to the out-patient treatment.

7.2 CLASSIFICATION OF NUTRITIONAL STATUS

Based on the presence or absence of oedema of both feet, WFH/L, and/or MUAC (in a child 6 months or older), the child's condition can be classified as:

- SEVERE ACUTE MALNUTRITION,
  - COMPLICATED SEVERE ACUTE MALNUTRITION
  - UNCOMPLICATED SEVERE ACUTE MALNUTRITION
- MODERATE MALNUTRITION, OR
- NO MALNUTRITION.

Look at chart booklet page 9 for classification of nutritional status

A child classified as severe acute malnutrition based on WFH/L, and/or MUAC is classified further as complicated severe acute malnutrition or uncomplicated severe acute malnutrition based on the presence or absence of medical complications and, depending on the age, the results of appetite test or breastfeeding assessment.

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

COMPLICATED SEVERE ACUTE MALNUTRITION

A child with oedema of both feet is classified as having **COMPLICATED SEVERE ACUTE MALNUTRITION**. A child with WFH/L less than -3 z-scores or MUAC less than 115 mm with a medical complication or not able to finish RUTF if aged 6 months or more or having a breastfeeding problem if aged less than 6 months, is classified as having **COMPLICATED SEVERE ACUTE MALNUTRITION.**

UNCOMPLICATED SEVERE ACUTE MALNUTRITION

A child with WFH/L less than -3 z-scores or MUAC less than 115 mm and able to finish RUTF is classified as having UNCOMPLICATED SEVERE ACUTE MALNUTRITION**.**

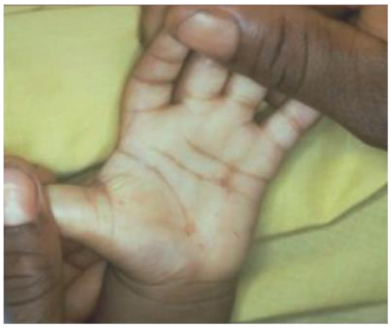
MODERATE ACUTE MALNUTRITION

A child with WFH/L between -3 z and - 2 z-scores or MUAC 115 up to 124 mm is classified as having MODERATE ACUTE MALNUTRITION.

NO ACUTE MALNUTRITION

A child with WFH/L -2 z-scores or more or MUAC 125 mm or more is classified as having NO ACUTE MALNUTRITION.

7.3 LOOK for PALMAR PALLOR



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

Look at chart booklet page 10 for classification of nutritional status

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.

7.4 CLASSIFICATION OF ANAEMIA

Look at chart booklet page 10 for classification of nutritional status

SEVERE ANAEMIA

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

ANAEMIA

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

NO ANAEMIA

If the child does not have palmar pallor, classify the child as having **NO ANAEMIA**

EXERCISE M

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

Part 1: Now study photographs 47 through 50.

Photograph 47: 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 check fat on the child's face.

Photograph 48: This is the same child as in photograph 47 showing loss of buttock fat.

Photograph 49: This is the same child as in photograph 47 showing folds of skin ("baggy pants") due to loss of bullock fat. Not all children with visible severe wasting have this sign. It is an extreme sign.

Photograph 50: This child has oedema of both feet

Part 2: Now look at photographs numbered 51 through 58. For each photograph, tick whether the child has visible severe wasting. Also look at photograph 59 and tick whether the child has oedema of both feet.

	Does the child have severe wasting?	
	YES	**NO**
Photograph 51		
Photograph 52		
Photograph 53		
Photograph 54		
Photograph 55		
Photograph 56		
Photograph 57		
Photograph 58		
	Does the child have edema of both feet?	
	YES	**NO**
Photograph 59		

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

EXERCISE N

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 38 through 40b. Read the explanation below for each photograph.

Photograph 38: This child's skin is normal. There is no palmar pallor. Photograph 39a: The hands in this photograph are from two different children.

The child on the left has some palmar pallor.

Photograph 39b: The child on the right has no palmar pallor.

Photograph 40a: The hands in this photograph are from two different children.

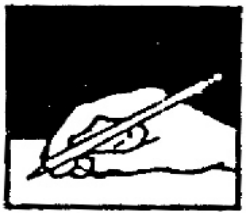
The child on the left has no palmar pallor.

Photograph 40b: The child on the right has severe palmar pallor.

Part 2: Now look at photographs numbered 41 through 46. 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 41			
Photograph 42			
Photograph 43a			
Photograph 43b			
Photograph 44			
Photograph 45			
Photograph 46			

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



EXERCISE O

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

Case 1: Nadia

Nadia is 18 months old. She weighs 7 kg, length 77 cm MUAC 11cm. Her temperature is 38.5°C. Her mother brought her today because the child has felt hot and has a rash. The health worker saw that Nadia looks like skin and bones.

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

She does not have cough or difficult breathing. She does not have diarrhoea. Nadia does not have an ear problem.
Because Nadia's mother said the child felt hot, and because her temperature is 38.5°C, the health worker assessed her for fever. Nadia lives where there is a high malaria endemicity. 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 health worker 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.

The health worker next checked her for malnutrition or anaemia. Nadia has visible severe wasting. There is no palmar pallor. She does not have oedema of both feet. The health worker determined her weight for length. (Look at the weight for height /L chart in your chart booklet.
Determine if this child's weight for length is very low and record this on the Recording Form.) Record Nadia's signs and classify them on the Recording Form on the next page.

EXERCISE O, Case 1

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{o}_C____ ^{o}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____
For how long? ____ Days
If more than 7 days, has fever been present every day?

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

Case 2: Khalifa

Khalifa is 11 months old. He weighs 8 kg, length 75 cm, MUAC 12 cm His temperature is 37C. His mother says he has had a dry cough for the last 3 weeks.

Khalifa does not have any general danger signs. The health worker assessed his cough. It has been present for 21 days. He counted 41 breaths per minute. The health worker does not see chest indrawing. There is no stridor or wheeze when the child is calm.

Khalifa does not have diarrhoea. He has not had a fever during this illness. He does not have an ear problem.

The health worker checked Khalifa for malnutrition and anaemia. Khalifa does not have visible severe wasting. His palms are very pale and appear almost white. There is no oedema of both feet. The health worker determined Khalifa's weight for Length. (Look at the weight for length chart in your chart booklet and determine Khalifa's weight for length.)

Record Khalifa's signs and their classifications on the Recording Form.

EXERCISE O, Case 2

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{o}_C____ ^{o}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____
For how long? ____ Days
If more than 7 days, has fever been present every day?

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

Case 3: Alam

Alam is 9 months old. He weighs 5 kg and length is 65 cm, MUAC 11.4 cm His temperature is 36.8C. He is at the clinic today because his mother and father are concerned about his diarrhoea.

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

He has had diarrhoea for 5 days, the father said. They have not seen any blood in the stool. Alam is not restless or irritable. He is not lethargic or unconscious. His eyes are not sunken. He is thirsty and eager to take the drink of water offered to him. His skin pinch goes back slowly.

He does not have a fever. He does not have an ear problem.

Next, the health worker checked for signs of malnutrition and anaemia. The child does not have visible severe wasting. There is no palmar pallor. He does not have oedema of both feet. The health worker determined Alam's weight for length.

Record Alam's signs and classify them on the Recording Form

EXERCISE O, Case 3

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{o}_C____ ^{o}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____
For how long? ____ Days
If more than 7 days, has fever been present every day?

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

Case 4: Anwar

Anwar is 37 months old. He weighs 9.5 kg, ht.88cm, MUAC 12 cm. His temperature is 37.5C. His mother says he feels hot. He has been crying and rubbing his ear.

The health worker checks Anwar for general danger signs. He is able to drink, does not vomit everything he drinks, has not had convulsions and is not lethargic or unconscious. He does not have cough or diarrhoea.

Because his mother has reported a history of fever and because his temperature is 37.5C, the health worker assesses Anwar for fever. Anwar live in high malaria endemic area and the risk for malaria is high. He has had fever for 3 days, says his mother. He has not had measles in the last 3 months. His neck moves easily. He has a runny nose, and there are no signs suggesting measles. He does not have sore throat.

The health worker asks if Anwar has an ear problem. The mother says he has had ear pain. She also says she has seen ear discharge for about 5 days. The health worker sees pus draining from the ear. He does not feel any tender swelling behind either ear.

He then checks the child for malnutrition and anaemia. Anwar looks thin, but he does not have visible severe wasting. He does not have palmar pallor. He does not have oedema of both feet. The health worker determined his weight for height.

Record Anwar's signs and their classification on the Recording Form on the next page.

EXERCISE O, Case 4

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{o}_C____ ^{o}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____
For how long? ____ Days
If more than 7 days, has fever been present every day?

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

8.0 CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A SUPPLEMENTATION AND DEWORMING STATUS

8.1 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 A RECOMMENDED IMMUNIZATION SCHEDULE

Use the recommended immunization schedule for Pakistan 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.

AGE	VACCINE	DOSE	ROUT/SITE
At Birth	BCG	0.05 ml 0.1 ml	Intradermal/ upper right arm
	OPV-0	2 drops	Oral
	HBV-0[3]	0.5 ml	Intramuscular/left thigh-front outer side
6 weeks	PENTA[4]-1	0.5 ml	Intramuscular/left thigh-front outer side
	Pneumococcal-1	0.5 ml	Deep IM / right thigh
	Rota 1	2 drops	Oral
	OPV-1	2 drops	Oral
10 weeks	PENTA -2	0.5 ml	Intramuscular/left thigh-front outer side
	Pneumococcal-2	0.5 ml	Deep IM / right thigh
	Rota-2	2 drops	Oral
	OPV-2	2 drops	Oral
14 weeks	PENTA-3	0.5 ml	Intramuscular/left thigh-front outer side
	Pneumococcal-3	0.5 ml	Deep IM / right thigh
	Rota-3	2 drops	Oral
	OPV-3	2 drops	Oral
	IPV	0.5 ml	Intramuscular/left thigh-front outer side
9 months	Measles	0.5 ml	Deep IM / right thigh
15 months	Measles	0.5 ml	Deep IM / right thigh

If the child receives an immunization when the child is too young, the child's body will not be able to fight the disease very well.[5] Also, if the child does not receive an immunization as soon as he is old enough, his risk of getting the disease increases.

[3] In selected districts

[4] Diphtheria, Pertusis,Tetnus,Heptitis-B and H.Influenza

[5] In exceptional situations where measles morbidity and mortality before nine months of age represent a significant problem (more than 15% of cases and deaths), an extra dose of measles vaccine is given at 6 months of age. This is in addition to the scheduled dose given as soon as possible after 9 months of age. This schedule is also recommended for groups at high risk of measles death, such as infants in refugee camps, infants admitted to hospitals, infants affected by disasters and during outbreaks.

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.

Never repeat the earlier dose

OBSERVE CONTRAINDICATIONS TO IMMUNIZATION

In the past some health workers thought minor illness was a contraindication to immunization (a reason to not immunize the child). They sent sick children away and told the mothers to bring them back when the children are well. This is a bad practice because it delays immunization.
The mother may have travelled a long distance to bring her sick child to the clinic and cannot easily bring the child back for immunization at another time. The child is left at risk of getting measles, polio, diphtheria, pertussis, tetanus or tuberculosis. It is very important to immunize sick and malnourished children against these diseases.

There are only three situations at present which are contraindication to immunization:

* Do not give BCG to a child known to have AIDS.
* Do not give Pentavalent 2 or Pentavalent 3 to a child who has had convulsions or shock within 3 days of the most recent dose.
* Do not give a vaccine containing pertusis to a child with recurrent convulsions or another active neurological disease of the central nervous system.

In all other situations, here is a good rule to follow:

There are no contraindications to immunization for a sick child

if the child is well enough to go home, should go immunized.

If a child is going to be referred, do not immunize the child before referral. The hospital staff at the referral site should make the decision about immunizing the child when the child is admitted. This will avoid delaying referral.

Children with diarrhoea who are due for OPV should receive a dose of OPV (oral polio vaccine) during this visit. However, do not count the dose. The child should return in 4 weeks for an extra dose of OPV.

Advise the mother to be sure the other children in the family are immunized. Give the mother tetanus toxoid, if required.

To decide if the child needs an immunization today:

LOOK at the child's age on the clinical record.
If you do not already know the child's age, ask about the child's age.

ASK the mother if the child has an immunization card.

If the mother answers YES, ask her if she has brought the card to the clinic today.

* If she has brought the card with her, ask to see the card.

* Compare the child's immunization record with the recommended immunization schedule. Decide whether the child has had all the immunizations recommended for the child's age.

* On the Recording Form, check all immunizations the child has already received. Write the date of the immunization the child received most recently. Circle any immunizations the child needs today.

* If the child is not being referred, explain to the mother that the child needs to receive an immunization (or immunizations) today.

If the mother says that she does NOT have an immunization card with her:

* Ask the mother to tell you what immunizations the child has received.

* Use your judgement to decide if the mother has given a reliable report. If you have any doubt, immunize the child. Give the child OPV, Pentavalent and measles vaccine according to the child's age.

* Give an immunization card to the mother and ask her to please bring it with her each time she brings the child to the clinic.

* Advise the mother to make sure that the other children in the family are immunized.

* Please initiate vaccination as per recommendations in un- immunized or partially immunized child.

* Give the mother tetanus toxoid, if required.

8.2. CHECK THE CHILD'S VITAMIN-A SUPPLEMENTATION STATUS:

Vitamin A is given both to treat and to prevent disease.

* It is given as treatment to children with measles or severe malnutrition.
* It is given as a supplement to prevent vitamin A deficiency.

Many children in Pakistan have some degree of vitamin A deficiency which does not show. Therefore, giving vitamin A to all children age 6 months or older will prevent vitamin A deficiency. This will of course include children with persistent diarrhoea, malnutrition, pneumonia and other illnesses. In several studies, this approach has been shown to reduce mortality in areas with vitamin-A deficiency. Another important way to prevent deficiency is to make sure that infants are breastfed and, that after 6 months of age, they are fed complementary foods which are rich in vitamin A.

When giving vitamin A as a supplement to prevent deficiency, make sure that it is not given more often than every 6 months. Record the date on which the vitamin A dose is given on the child's card.

When supplies of vitamin A are adequate, all children age 6 months up to 5 years should receive vitamin A every 6 months. Visits to clinic for illness are an opportunity to check when the child most recently received vitamin A. If the child is age 6 months or older and has not received vitamin A in the previous 6 months, give a single dose of vitamin A in the clinic.

Giving vitamin A for treatment of measles or severe malnutrition is the most important use. If vitamin A supplies are limited, use what vitamin A you have to treat children with these illnesses.

To check a child's vitamin A supplementation status:

Look at the child's age. You will only give the vitamin A supplement if the child is age 6 months or older.

Look at the child's card.

* See if there is a record of previous vitamin A doses.
* If no vitamin A has been given in the last 6 months, the child should receive a dose. Circle the vitamin A supplementation box on the recording form.

8.3. CHECK THE CHILD'S DEWORMING STATUS:

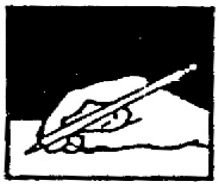
Many children age 12 months or older in Pakistan have anaemia that is caused or made worse by hookworm infection. Mebendazole will reduce or eliminate the infection. Mebendazole is a safe drug. After 6 months children often become re-infected and the treatment should be repeated.

To check a child's deworming status:

Look at the child's age. You will only give Mebendazole if the child's age is 12 months or older.

Look at the child's card or ask the mother.

If no Mebendazole has been given in the last 6 months, the child should receive a dose. Circle Mebendazole on the recording form.



EXERCISE P

Part 1: Review the information in section 8.1 about contraindications to immunizations. Then decide if a contraindication is present for each of the following children:

If the child,,,,,	Immunize this child today if due for immunization	Do not immunize today
will be treated at home with antibiotics		
has a local skin infection		
had convulsion immediately after pentavalent 1 and needs pentavalent 2 and OPV2 today		
has a chronic heart problem		
is being referred for severe classification		
is exclusively breastfed		
has an older brother who had convulsion last year		
was jaundiced at birth		
Has uncomplicated severe acute malnutrition		
is known to have aids and has not received any immunizations at all		
has cough or cold		

Part 2: Read about the following children. For each one, decide if the child needs any immunizations or vitamin A supplementation or deworming today.

1. Salim, 6 months old. No general danger signs. Classified as: COUGH OR COLD and NOANAEMIAAND NO ACUTE MALNUTRITION.
   Immunization history: BCG, OPV 0, OPV 1, OPV 2, Pentavalent 1and
   Pentavalent 2. OPV 2 and Pentavalent 2 given, RTV 1 &2 And PCV 1 &2, 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?

d. Should he be given vitamin A today?

e. Should he be given Mebendazole today?

2. Shaheen 3 months old. No general danger signs. Classified as diarrhoea with NO DEHYDRATION and also ANAEMIA.
Immunization history: BCG, OPV 0, OPV 1, and Pentavalent 1, PCV1, RTV 1. OPV 1 and Pentavalent 1 given 5 weeks ago.

a. Is Shaheen up-to-date with her immunizations?

b. What immunizations, if any, does Shaheen need today?

c. Shaheen has diarrhoea. What immunizations will she receive at her next visit?

d. When should she return for her next immunization?

e. Should she be given vitamin A today?

f. Should she be given Mebendazole today?

3. Ali, 9 months old. No general danger signs. Classified as PNEUMONIA, MALARIA, NOANAEMIAAND NO ACUTE MALNUTRITION.
Immunization history: BCG, OPV 0, OPV 1 and Pentavalent 1, PCV1, RTV1, When Ali was 7 months old, he received OPV 2 and Pentavalent 2, PCV2, and vitamin A supplementation was given 3 months back.

a. Is Ali up-to-date with his immunizations?

b. What immunizations, if any, does Ali need today?

c. When should he return for his next immunizations?

d. Should he be given vitamin A today?

e. Should he be given Mebendazole today?

Tell your facilitator when you have completed this exercise

Your facilitator will lead a drill to give you practice using weight-for-age-chart

9.0 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.

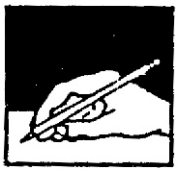
* * * * *

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

> **MAKE SURE A CHILD WITH ANY GENERAL DANGER SIGN IS REFERRED** after the 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 and Treat the Child.*

ANNEXES



EXERCISE Q
(Assessment to do at home)

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.

The first case begins on the next page.

Case 1: Daniyal

Daniyal is 9 months old. He weighs 9.5 kg, ht 68 and MUAC 13 mm, His temperature is 39.5C. His mother says he has had diarrhoea for 1 week.

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

The health worker assessed Daniyal for signs of diarrhoea. The mother said earlier that Daniyal has had diarrhoea for 1 week. Daniyal 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 health worker assessed for additional signs related to fever. Daniyal's mother says he has felt hot for about 2 days. The risk of malaria is high because Daniyal live high malaria endemic area. 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 health worker checked for signs of malnutrition and anaemia. Daniyal does not have visible severe wasting. There are no signs of palmar pallor. He does not have oedema of both feet. The health worker determined his weight for HT/L and MUAC.

Daniyal has had BCG, Pentavalent 1, Pentavalent 2, and Pentavalent 3. He has also had OPV 0, OPV 1, OPV 2 and OPV 3, PCV1,2,3 AND RTV 1&2.

Daniyal's card has no record of previous vitamin A and D treatment or supplementation, and his mother does not recall his receiving any.

Record Daniyal's signs and their classifications on the Recording Form on the next page.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____

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

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

Case 2: Misha

Misha is 4 months old. She weighs 5.5 kg. Her temperature is 38.0C. 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 health worker assessed her further for signs of diarrhoea. She has had diarrhoea for 2 days and there is blood in the stool, said the mother. Misha 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 health worker next assessed her for fever. The malaria risk is high at this time of year because it is an area with high malaria endemicity and known malaria transmission. Misha 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.

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

At birth Misha received BCG and OPV 0. Four weeks ago, she received Pentavalent 1 and OPV 1, PCV1 AND RTV1.

Record Misha's signs and their classifications on the Recording Form on the next page.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature:^{O}_C____^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____

For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____

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

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____

Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**

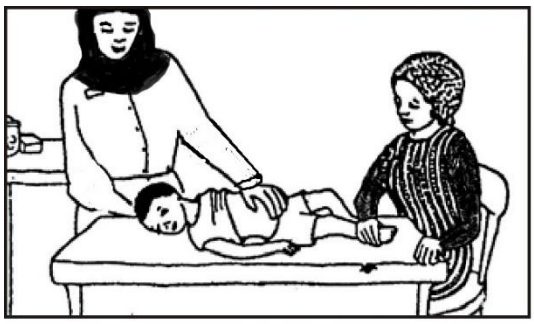
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

Case 3: Jamila

Jamila is 37 months old. She weighs 15.3 kg, height 95 cm. Her temperature is 38.5C. Jamila's family brought her to the clinic today because she has a stomach ache, feels hot, has a runny nose and rash, and is coughing.



The health worker checked her for general danger signs. She was able to drink, did not vomit everything she drank, did not have convulsions, and was not lethargic or unconscious.

The health worker assessed the child for cough or difficult breathing. The parents said she has been coughing for 2 days. The health worker counted 55 breaths a minute. He did not see chest indrawing. He did not hear any unusual noise when she breathed in or out.

Jamila does not have diarrhoea, said the parents. However, she has been feeling hot, they said. Her risk of malaria is high because she lives in high malaria endemic area and known malaria transmission. She has had fever for two days. She has not had measles in the last 3 months. Her neck moves easily. She has a runny nose. The health worker looked for signs suggesting measles. Her rash was not generalized; it was only on her hand.

Jamila did not have an ear problem, said the parents.

The health worker checked Jamila for malnutrition and anaemia. She does not have visible severe wasting. She does not have palmar pallor. She does not have oedema of both feet. The health worker determined her weight for ht and 16cm.

Jamila has received BCG, OPV 0, OPV 1, OPV 2, OPV 3, Pentavalent 1, Pentavalent 2, and pentavalent 3, PCV 1,2,3 and RTV 1&2. There is no record that she has ever received vitamin A and treatment for worms.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____

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

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

Case 4: Talat

Talat is 6 months old. She weighs 4 kg. Her temperature is 37C, length 57cm, MUAC 11cm. Her mother brought her to the clinic because Talat has a cough. Her mother is also concerned that Talat looks thin.

The health worker did not find any general danger signs.

The health worker assessed her cough. The mother said Talat had the cough for 4 days. The health worker counted 52 breaths per minute. Talat did not have chest indrawing, and there was no stridor or wheeze when the child was calm.

Talat did not have diarrhoea, and she did not have fever. There was no ear problem, said the mother.

The health worker saw that Talat had visible severe wasting. She did not have palmar pallor. She did not have oedema of both feet. The health worker determined the child's weight for HT/L.

She has had BCG, OPV 0, OPV 1, PENTA1, PCV1, RTV1 and she has not had vitamin A.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____
For how long? ____ Days
If more than 7 days, has fever been present every day?

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

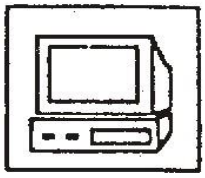
Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS: | **ASK ABOUT MOTHER'S OWN HEALTH?** | **FOLLOW UP:**



EXERCISE R

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. You will see a case study. Record the child's signs and classifications on the Recording Form on the next page.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature: ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING

ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____

For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____

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

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A
						Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

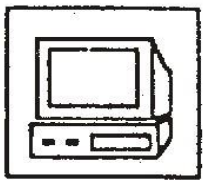
Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**



EXERCISE S

In this video exercise, you will practice assessing chest in drawing. For each of the children shown, answer the question.

	Does the child have chest indrawing?	
	YES	**NO**
Child 1		
Child 2		
Child 3		
Child 4		
Child 5		
Child 6		
Child 7		

You will also watch two case studies. Record the child's signs and classifications on the Recording Form on the next two pages.

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____

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

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
Transmission season = YES____ NO____
In non or low endemic areas
travel history within the last 15-days to an area
where malaria transmission occurs =YES____ NO ____

Look or feel for stiff neck.
Look for runny nose
Look for signs of MEASLES
Generalized rash ***AND***
One of these: cough, runny nose, or red eyes
Look for any other causes of fever
Look for signs and symptoms of DENGUE FEVER; if suspected do tourniquet test
(if yes, use the relevant treatment instructions)

Do a malaria test, if No general danger sign in all cases in
High malaria risk or No obvious causes of fever in low
Malaria risk:
Test POSITIVE? P. falciporium P. vlvax NEGATIVE?

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 cornea

DOES THE CHILD HAVE AN EAR PROBLEM? YES____ NO____
Is there severe ear pain?
Is there ear discharge?
If Yes, for how long? ____ Days

Look for pus draining from the ear.
Feel for tender swelling behind the ear.

THEN CHECK FOR ACUTE MALNUTRITION AND ANAEMIA

Look for oedema of both feet
Determine WFH/L z-score:
Less than -3 Between -3 and -2 -2 or more
Child 6 months or older measure MUAC____ mm
Look for palmar pallor:
Severe palmar pallor Some palmar pallor No palmar pallor

If child has MUAC less than 115 mm or WFH/L less than -3 z-score

Is there any medical complication: General Danger Sign?
Any Severe Classification? Pneumonia with Chest Indrawing?
Child 6 months or older, Offer RUTF to eat. Is the child:
Not able to finish? Able to finish?
Child less than 6 months Is there a breastfeeding problem?

CHECK THE CHILD'S IMMUNIZATION, VITAMIN-A AND DEWORMING STATUS

BCG OPV0	OPV-I *Pentavalent–I Pneumococcal – I Rota 1	OPV-II *Pentavalent–II Pneumococcal – II Rota 2	OPV-III *Pentavalent–III Pneumococcal – III IPV	Measles-I	Measles-II**	Vitamin A Mebendazole

*Pentavalent: DPT+HepB+Hib ^If the child is seen b/w 12-15 months of age,
**2nd dose of measles can be given if one month passed since the Measles 1st dose is given

Return for next immunization on:

_____
(DATE)

ASSESS FEEDING if the child is less than 2 years old, has **MODERATE ACUTE MALNUTRITION, ANAEMIA.**
Do you breastfeed your child? YES____ NO____ If YES how many times in 24 hours? ____times. Do you breastfeed during the night?
Does the child take any other foods or fluids? YES____ NO____
If YES what foods or fluids?
How many times per day? ____times What do you use to feed the child?
If MODERATE ACUTE MALNUTRITION: How large are the servings?
Does the child receive his own serving? YES____ NO____ Who feeds the child and how?
During this illness, has the child's feeding changed? YES____ NO____
If YES, how?

FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**

IMNCI Case Recording Form: MANAGEMENT OF THE SICK CHILD AGE 2 MONTHS UP TO 5 YEARS

ID No._____

Name_____Age_____Months Weight_____Kg Temperature ^{O}_C____ ^{O}F

ASK What are the child's problems?_____Initial visit?_____Follow up visit?_____

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

CHECK FOR GENERAL DANGER SIGNS

LETHARGIC OR UNCONSCIOUS
NOT ABLE TO DRINK OR BREASTFEED
CONVULSIONS

CONVULSING NOW
VOMITS EVERYTHING
ANY GENERAL DANGER SIGN PRESENT YES___ NO___ (remember to use when selecting classification)

DOES THE CHILD HAVE COUGH OR DIFFICULT BREATHING? YES____ NO____

For how long? ____ Days
Look and listen for stridor
Look and listen for wheeze

Count the breaths in one minute. (child must be calm) _____ breaths per minute.
Fast breathing? YES____ NO____

DOES THE CHILD HAVE DIARRHOEA? YES____ NO____
For how long? ____ Days
Is there blood in the stools? YES____ NO____
Pinch the skin of the abdomen. Does it go back:
Very slowly (longer than 2 seconds)
Slowly

Look at the child's general condition. Is the child:
Lethargic or unconscious
Restless or irritable
Offer the child fluid. Is the child:
Not able to drink or drinking poorly?
Drinking eagerly, thirsty?

DOES THE CHILD HAVE FEVER? (by history/feels hot/temperature 37.5C or above) YES____ NO____

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

Has child had measles within the last 3 months

Decide malaria risk High____ Low____ No____
Malaria transmission in the area = YES____ NO____
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In non or low endemic areas
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FEEDING PROBLEMS

ASSESS OTHER PROBLEMS:	**ASK ABOUT MOTHER'S OWN HEALTH?**	**FOLLOW UP:**


AZAD JAMMU & KASHMIR