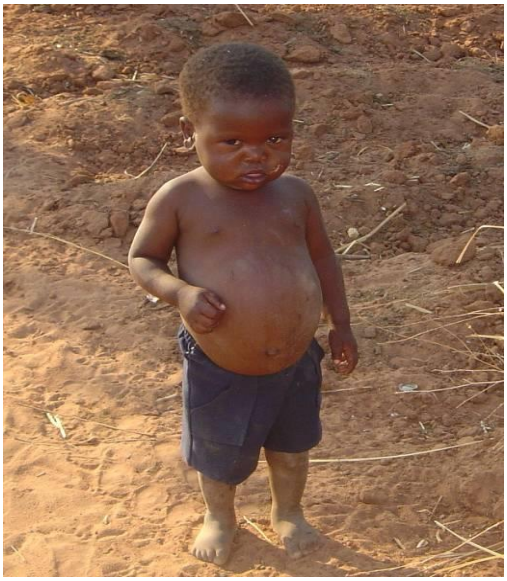
iCCM Refresher Course

Manual for the Health Surveillance Assistant



Caring for the sick child in the community

Identify signs of illness, and decide to refer or treat the child

World Health Organization

Acknowledgements

The original manual ***Caring for Newborns and Children in the Community*** was developed by World Health Organisation (WHO) specifically to improve management of common childhood illnesses at community level. The original manual is the source of this refresher manual.

The refresher manual covers early identification and management of diarrhoea, pneumonia, malaria, malnutrition and eye infection.

Members of the adaptation and review team were most instrumental in the processes.

Many thanks go to the following experts representing relevant Government Ministries and departments and its partners for their inspiration, input, feedback and ideas:

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With profound appreciation and gratitude it should be noted that this refresher manual has been compiled with the financial and technical support from POPULATION SERVICE INTERNATIONAL (PSI).

Contents

1. Introduction:

Situation analysis

The Ministry of Health has been implementing a successful IMCI strategy since 1998 to deal with the high under-five morbidity and mortality. IMCI is a broad strategy with an overall objective of contributing to reducing childhood illnesses and deaths in developing countries (UNICEF and WHO, 2010). It encompasses a range of interventions through a holistic approach to prevent illness and reduce deaths from common childhood conditions as well as promoting child health and development at health facility, community and household levels (Ministry of Health, 2006a:3).

The IMCI strategy has three main objectives. Firstly, it aims at improving health workers' skills through training of health workers in the integrated management of sick children. Secondly, it endeavours to improve the availability of essential drugs and referral mechanism, and thirdly, it aims at improving and promoting family and community childcare practices for child survival, growth and development. The three objectives constitute the components of the strategy. The three components were not implemented concurrently in that while component one started in 1998, the third component started in 2000. By 2006 when the IMCI policy was launched, the IMCI approach was scaled up to all districts. The 2003 Lancet child survival publication inspired the development of the ACSD policy and Strategic Plan (2008 to 2012) on focussing on the 15 high impact interventions.

Although the risk of death is high in the first month of life when 40% of deaths take place, the remaining 60% of deaths occur between 1-59 months (UN Report 2011). The major causes of under-five deaths in Malawi are malaria (17%), HIV/AIDS (14%), pneumonia (11%), and diarrhoea (11%) (Black et al, 2010).

According to the 2010 DHS the prevalence of pneumonia in under-five children is 7%, of which 70% receive antibiotic treatment for pneumonia. The prevalence of diarrhoea is at 18% and stunting at 47%, malaria at 35%. Among children 6-59 months 80% receive vitamin a supplementation. The proportion of children sleeping under Long Lasting Insecticide Net (LLIN) is 28% and the proportion of children fully immunised is at 81%. Early HIV testing for infected infants is at 43% (HIV Unit 3rd quarter report 2014)

From 2008 IMCI has focussed on Community Case Management in which HSAs are trained and deployed in hard to reach areas where access to health services was restricted by distance (more than 8km) and other geographical features. The HSAs are entrusted to open village clinics where they manage uncomplicated cases of malaria, pneumonia, diarrhoea, newborn sepsis eye infection and refer the severe cases to the higher level health facilities. To date CCM is implemented in all the 28 districts with partners allocated to support specific districts.

Course objectives

This is a refresher manual for HSAs who have already undergone a six days training in iCCM. The manual will strengthen the HSAs in their knowledge and skills in the management of sick children at community level. The course is designed for four days.

This refresher course on *Caring for Newborns and Children in the Community* helps you support families to provide good care for their children. It is part of the strategy called Integrated Management of Childhood Illness (IMCI).

In this manual you will be refreshed to identify signs of illness in a sick child, age 2 months up to 5 years. Some children you will refer to the health facility for more care. For some children, you will help their families treat them at home. You will later be refreshed more about how to treat a child with diarrhoea, fever, or fast breathing at home.

At the end of the refresher training, you will be able to:

- Identify signs of common childhood illness and malnutrition.
- Decide whether to refer a child to a health facility, or to help the family treat the child at home.
- Assist the family with a child who is referred to a health Facility.
- Help the family treat the child's illness at home.
- Counsel families to bring a child immediately, if the child becomes sicker, and to return for scheduled follow-up visits.
- Identify the child's progress and ensure good care at home; and, if the child does not improve, to refer the child to the health facility.

With this refresher training, you will acquire more knowledge and skills in managing sick children in your community.

Course methods and materials

In this refresher course, you will read about, observe, and practise the case management tasks.

The course provides these materials:

- *iCCM Refresher Manual for the Health Surveillance assistant*

  You are now reading the iCCM Refresher *HSA Manual.* It contains the content, discussions, and exercises for the course *Caring for Children in the Community.*

- *Sick Child Recording Form*

  The recording form also is a guide to identify signs of illness and refer or treat the child. On the form, you will record

information on the child and the child's family. You will also record the child's signs of illness, treatments, and other actions.

- *RDT and Rectal Artesunate administration guide*

At the end of this refresher training you will also receive a new job aids.

- *Other materials*

  The facilitator will use *charts, videotapes,* and other materials to introduce and review the case management tasks.

You will have many chances to practise what you are learning: written exercises and skill practice in the clinic and hospital.

Caring for children in the community

Case Study

Two-year-old Linda has diarrhoea. She needs to go to the health facility.

The health facility, however, is very far away. Mrs. Shaba, her mother, is afraid that Linda is not strong enough for the trip.

So Mrs. Shaba takes her daughter to see the Health Surveillance Assistant. The Health Surveillance Assistant asks questions. He looks at Linda from head to toe. Linda is weak. The Health Surveillance Assistant explains that Linda is losing a lot of fluid with the diarrhoea. She is in danger from dehydration. Linda needs medicine right away. The Health Surveillance Assistant praises Mrs. Shaba for seeking help for Linda.

The Health Surveillance Assistant shows Mrs. Shaba how to prepare Oral Rehydration Salts (ORS) solution and how to give it slowly with a spoon. Linda eagerly drinks the ORS solution and becomes more awake and alert. Mrs. Shaba continues to give Linda the ORS solution until Linda no longer seems thirsty and is not interested in drinking. The Health Surveillance Assistant then gives Mrs. Shaba more ORS packets for her to use at home. He explains when and how much ORS solution to give Linda.

Before Mrs. Shaba leave, the Health Surveillance Assistant dissolves a zinc tablet in water for Mrs. Shaba to give Linda by spoon. He gives Mrs. Shaba a packet of zinc tablets and asks her to give Linda one tablet each morning until all the tablets are gone. The zinc will help prevent Linda from having severe diarrhoea for the next few months.

The Health Surveillance Assistant also explains how to care for Linda at home. Mrs. Shaba should give breast milk more often, and continue to feed Linda while she is sick. If she becomes sicker or has blood in her stool, Mrs. Shaba should bring Linda back immediately.

Even if Linda improves, the Health Surveillance Assistant wants to see her again. Mrs. Shaba agrees to bring Linda back in 3 days for a follow up visit.

Mrs. Shaba is grateful. Linda has already begun treatment. If Linda gets better, they will not need to go to the health facility. And soon Linda will be smiling and playing again.

What Health surveillance Assistants can do

Linda has a better chance to survive because one of her neighbours is a Health Surveillance Assistant. Trained Health Surveillance Assistants identify signs of illness and help families take care of their sick children at home.

Some children are very sick, and treatment at home is not enough. Health Surveillance Assistants help families take their very sick children to a health facility.

Health Surveillance Assistants also promote good health. They advise families on how to care for their children at home. They help families prevent illness, give their children nutritious food, and take them for vaccinations. They support families as they teach their children the first steps to becoming happy and productive adults. Health Surveillance Assistants also organize their communities. They help their neighbours make a safer environment, and demand health and other services for children.

Take-home messages for this section:

- Children under 5 years of age die mainly from: pneumonia, diarrhoea, malaria, and malnutrition. All of these can easily be treated or prevented.
- You will still be able to treat many children in the community, and for those you cannot treat, you will refer them to the nearest health facility.

2. Welcoming the caregiver and child

At the end of this session, you will be able to:

- Greet and welcome a caregiver, and ask questions about her child
- Start to use the Sick Child Recording Form.

Who is the caregiver?

The caregiver is the most important person to the young child. The caregiver feeds and watches over the child, gives the child affection, communicates with the child, and responds to the child's needs. If the child is sick, the caregiver is usually the person who brings the child to you.

TIP: Greet caregivers in a friendly way whenever and wherever you see them. Through good relationships with caregivers, you will be able to improve the lives of children in your community.

Ask about the child and caregiver

Greet the caregiver. Invite the caregiver to sit with the child in a comfortable place while you ask some questions. Sit close, talk softly, and look directly at the caregiver and child.

Communicate clearly and warmly.

Ask questions to gather information on the child and the caregiver. Listen carefully to the caregiver's answers. Record information about the child and the visit on a Sick Child Recording Form

[The facilitator will now give you a recording form.]

During this refresher course, you will be reminded about the recording form, section by section. We will now start with the information on the top of the form.

TIP: Be ready with the—

- Sick child recording form
- Pencil

Keep nearby—

- Medicine (ORS, zinc, antimalarial, and antibiotic)
- Utensils to prepare and give ORS solution, mRDT and other medicines

- **Date:** the day, month, and year of the visit.
- **HSA:** the full name of the Health Surveillance Assistant seeing the child.
- **Child's name:** the first name and surname.
- **Other information on the child:**
  - Write the **age** in years and/or months.
  - Circle **boy** or **girl.**
- **Caregiver's name, and relationship to child**
  Write the caregiver's name. Circle the relationship of the caregiver to the child: **Mother, Father,** or **Other**. If other, describe the relationship (for example, grandmother, aunt, or neighbour).
- **Address** or **Community:** to help locate where the child lives, in case the Health Surveillance Assistant needs to find the child.

What do we know about Grace from the information on her recording form below?

Sick Child Recording Form

(for community -based treatment of child age 2 months up to 5 years)

Date: 16/5/2015 (Day/Month/Year) HSA: John Banda

Child's First Name: Grace Surname Wadza Age: 2 Years/2 Months Boy / (Girl)

Caregiver's name: Patricia Wadza Relationship: (Mother) / Father / Other: _____

Physical Address: behind Hilltop Mosque Village / TA: Ntonya / Malambe

Exercise: Use the recording form (1)

You will now practise completing the top of the recording form.

Child: Comfort Kazombo

Comfort Kazombo is a 4 month old boy. His father, Paul Kazombo, brought Comfort to see you. He usually takes care of the baby. The Kazombos live near you at Chitala Farm, VH Palasa, TA Nyanja. Complete the recording form below.

Sick Child Recording Form

(for community –based treatment of child age 2 months up to 5 years)

Date: _____/____/_____ (Day/Month/Year) **HSA**: _____

Child's First **Name:** _____Surname _____ Age: __Years/__Months **Boy / Girl**

Caregiver's name: _____**Relationship:** Mother / Father / Other:_____

Physical Address: _____ **Village / TA:** _____

Did you remember to add today's **date** and your **full name**?

Take-home messages for this section:

- The way you greet and talk with a caregiver is very important; she or he must be made to feel comfortable.
- Good relationships will help you to improve the lives of children in your community.

3. Identify problems

Next you will identify the child's health problems and signs of illness. Any problems you find will help to decide whether to:

- **Refer** the child to a health facility or
- **Treat** the child at home and **advise** the family on home care.

In this section, you will be reminded on how to gather information about the child's health, and how to use the recording form to guide the visit.

You will be able to:

- Identify children with diarrhoea for less than 14 days or fever for less than 7 days in a malaria area who can be treated at home.
- Determine if the child with cough has fast breathing (a sign of pneumonia).
- Identify chest indrawing as a danger sign (severe pneumonia).
- Identify children with other danger signs—cough for 14 days or more, diarrhoea for 14 days or more, diarrhoea with blood in stool, fever for 7 days or more, not able to drink or feed, vomiting everything, convulsions, and unusually sleepy or unconscious.
- Identify children with danger signs for malnutrition—Red/yellow result using the MUAC tape and swelling of both feet.
- Use the Sick Child Recording Form

To identify the child's problems, first ASK the caregiver. Then LOOK at the child for signs of illness.

ASK: What are the child's problems?

Ask the caregiver: **What are the child's problems?** These are the reason the caregiver wants you to see the child.

The recording form lists common problems. A caregiver may report: **cough, diarrhoea, diarrhoea with blood in stool, fever, convulsions, difficult drinking or feeding,** and **vomiting**, or other problems**.**

◻ Cough

If the child has cough, ask: *"For how long?"* Write how many days the child has had cough.

◻ Diarrhoea (3 or more loose stools in 24 hours)

If the child has diarrhoea, ask: *"For how long?"*

Use words the caregiver understands. For example, ask whether the child has had loose or watery stools. If yes, then ask how many times a day. It is diarrhoea when there are *3 or more loose or watery stools in a 24-hour day.* Frequent passing of normal, formed stools is not diarrhoea.

Blood in stool

If the child has diarrhoea, ask: "Is there blood in the stool?" Check the caregiver understands of what blood in stool looks like.

◻ Fever (now or in the last 3 days)

Identify fever by the caregiver's report or by feeling the child. For the caregiver's report, ask: *"Does the child have fever now or did the child have fever anytime during the last 3 days?"* You ask about fever anytime during the last 3 days because fever may not be present all the time. If the caregiver does not know, feel the child's forehead. If the body feels hot, the child has a fever now.

If the child has fever, ask *"When did it start?"* Record how many days since it started. The fever does not need to be present every day, all the time. Fever caused by malaria, for example, may not be present all the time, or the body may be hotter at some times than other times.

◻ Convulsions

During a convulsion, also called fits or spasms, the child's arms and legs stiffen. Sometimes the child stops breathing. The child may lose consciousness and for a short time cannot be awakened. When you ask about convulsions, use local words the caregiver understands to mean a convulsion from this illness. Ask whether there was a convulsion in this episode of illness.

◻ Difficult drinking or feeding

Ask if the child is having any difficulty in drinking or feeding. If there is a problem, ask: *"Is the child not able to drink or feed anything at all?"* A child is not able to drink or feed if the child is too weak to suckle or swallow when offered a drink or breast milk.

TIP: If you are unsure whether the child can drink, ask the **caregiver** to offer a drink to the child.

For a child who is breastfed, see if the child can breastfeed or take breast milk from a cup.

◻ Vomiting

If the child is vomiting, ask: "Is the child vomiting everything?" A child who is not able to hold anything down at all has the sign "vomits everything". Ask the caregiver how often the child vomits. Is it every time the child swallows food or fluids, or only some times? A child who vomits several times but can hold down some fluids does not "vomit everything".

The child who vomits everything will not be able to use the oral medicine you have in your medicine kit.

- **Red eye**

Ask the caregiver if the child has red eyes. Ask for how long the child has had the red eye. Record how many days it has been present.

A child who presents with red eyes may have redness of the eye, pus discharge and / or swollen sticky eyes.

A child with red eye could have problems in seeing. Prolonged red eyes with difficult seeing may lead to blindness.

- **Difficulty in seeing**

Ask the caregiver if the child has difficulty in seeing. Ask for how long the child has had difficulty in seeing. Record how many days it has been present.

- **Any other problem**

There is a small space on the back of the recording form, item 5, to write any other problem to refer because you cannot treat it. For example, a child may have a problem in breastfeeding, a skin or ear infection, or a burn or other injury.

On the other hand, some other problems you may be able to treat. For example, you may have learned how to advise caregivers on how to feed their children. If the caregiver might have a question about feeding the child, you would be able to help overcome a feeding problem. The child may not need to be referred.

Record the child's problems

As the caregiver lists the problems, listen carefully and record them on the Sick Child Recording Form. The caregiver may mention more than one problem. For example, the child may have cough and fever.

If the caregiver reports any of the listed problems, tick [✓] the small empty box next to the problem

Some items ask you to add brief answers. For example, write how many days the child has been sick.

Ask about *all* the problems on the list, even if the caregiver does not mention them. Perhaps the caregiver is only worried about one problem. If you ask, however, the caregiver may tell you about other problems. Record (tick or write) any problems you find.

If the caregiver says the child does NOT have a problem, circle the solid box next to the listed problem.

Now, look at the sample form for Karen Shabani on the next page. The Health Surveillance Assistant asked the caregiver, "What are the child's problems?"

What problems did the mother report?

What problems did the mother say Karen does not have?

Karen Shabani

Sick Child Recording Form

(for community-based treatment of child age 2 months up to 5 years)

Date: 14/5/2015 (Day / Month / Year) **HSA:** Lameck Chirwa

Child's First Name: Grace **Surname** Chadza Age: 0 Years/ 3 Months **Boy** / (Girl)

Caregiver's name: Monika Chadza Relationship: Mother / Father / Other: (Aunt)

Physical Address: Tikambe Estate **Village/ TA:** Chamba / Zobwe

1. Identify problems

ASK and LOOK	Any DANGER SIGN?	SICK but NO Danger Sign?
ASK: What are the child's problems? If not reported, then ask to be sure. **YES,** sign present ➔ Tick ☑ **NO** sign ➔ Circle ■		
☑ ■ Cough? If yes, for how long? _3_ days	☐ Cough for 14 days or more	
☐ ■ Diarrhoea (loose stools)?	☐ Diarrhoea for 14 days or more	☐ Diarrhoea (less than 14 days AND no blood in stool)
☐ If YES, for how long? _____days.	☐ Blood in stool	
If yes, Blood in stool? ☐ ■		
☐ ■ Fever (reported or now)? If yes, started 3 days ago.	☐ Fever for last 7 days	☐ Fever (less than 7 days)
☐ ■ Convulsions?	☐ Convulsions	
☑ ■ Difficulty drinking or feeding? sore throat	☐ Not able to drink or feed anything	
IF YES, not able to drink or feed anything? ☐ ■		
☐ ■ Vomiting?	☐ Vomits everything	
☐ ■ If yes, vomits everything?		
☐ ■ Red eyes? If yes, for how long _____days.	☐ Red eye for 4 days or more	☐ Red eye less than 4 days
☐ ■ Difficulty in seeing? If Yes for how long _days	☐ Visual problem	
☐ ■ Any other problem I cannot treat (E.g. problem in breast feeding, injury)? See 5 If any OTHER PROBLEMS, refer.	☐ Other problem to refer:	
LOOK:		
☐ ■ Chest indrawing? (FOR ALL CHILDREN)	☐ Chest indrawing	
IF COUGH, count breaths in 1 minute: 42 bpm		
☐ ■ Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		☐ Fast breathing
☐ ■ Very sleepy or unconscious?	☐ Very sleepy or unconscious	
☐ ■ Palmar pallor	☐ Palmar pallor	
☐ **For child 6 months up to 5 years, MUAC tape colour:**	☐ Red on MUAC tape ☐ Yellow on MUAC tape	
☐ ■ Swelling of both feet?	☐ Swelling of both feet	

Decide: Refer or treat child (tick decision)

☐ **If ANY Danger, refer to health facility**

☐ **If NO Danger Sign, treat at home and advise caregiver**

Exercise: Use the recording form to identify problems (2)

Complete the recording form below for Joana. Indicate whether you had any difficulties.

Child: Joana Valani

Joana Valani is 3 and a half years old. She lives with her aunt Maria Lomos. They are your neighbours in Kalulu village T/A Nkhope near Amagwa CBCC.

Joana has been coughing. You ask her aunt, "For how long?" She says, "For 5 days." Joana now seems to be breathing with greater difficulty than usual.

Miss Lomos says that Joana does not have any other problems. However, when you ask about diarrhoea, you learn that Joana has had diarrhoea for 3 days. You also ask about blood in stool, fever, convulsions, difficult drinking or feeding, vomiting, and any other problem. To each, Miss Lomos says, "No." Joana does not have any of these problems.

Sick Child Recording Form

(for community -based treatment of child age 2 months up to 5 years)

Date: _/_/_ _ (Day/Month/Year) **HSA:** _

Child's First **Name:** _____Surname _____ Age: __Years/__Months **Boy / Girl**

Caregiver's name: _____**Relationship:** Mother / Father / Other:_____

Physical Address: _____**Village / TA:** _____

1. Identify problems

	ASK and LOOK
	ASK: What are the child's problems? If not reported, then ask to be sure. **YES,** sign present ➔ Tick ☑ **NO** sign ➔ Circle ■
☐	■ Cough? If yes, for how long? _____ days
☐	■ Diarrhoea (loose stools)?
☐	IF YES, for how long? _____days. Blood in stool? ☐ ■
☐	■ Fever (reported or now)? If yes, started _____days ago.
☐	■ Convulsions?
☐	■ Difficulty drinking or feeding? IF YES, not able to drink or feed anything? ☐ ■
☐	■ Vomiting? If yes, vomits everything? ☐ ■
☐	■ Red eyes? If yes, for how long _____days. ☐ ■Difficulty in seeing? If Yes for how long __days
☐	■ Any other problem I cannot treat (E.g. problem in breast feeding, injury)? See 5 If any OTHER PROBLEMS, refer.

LOOK for signs of illness

Health Surveillance Assistants ask questions to identify the child's problems. They also look for signs of illness and check for malnutrition in the child.

Signs of illness are introduced here: **chest in drawing, fast breathing, very sleepy or unconscious child, palmar pallor, red/yellow on MUAC tape, swelling of both feet.**

These signs require skill and practice to learn to identify them and use them to determine what the child needs.

Chest in drawing

Children often have cough and colds. A child may have a cough because moisture drips from the nose down the back of the throat. The child with only a cough or cold is not seriously ill.

Sometimes a child with cough, however, is very sick. The child might have pneumonia. Pneumonia is an infection of the lungs.

Pneumonia can be severe. You identify SEVERE PNEUMONIA by looking for ***chest in drawing.***

When pneumonia is severe, the lungs become very stiff. Breathing with very stiff lungs causes chest in drawing. The chest works hard to pull in the air, and breathing can be difficult. Children with severe pneumonia must be referred to a health facility.

Look for chest in drawing in all sick children. Pay special attention to children with cough or cold, or children who are having any difficulty breathing.

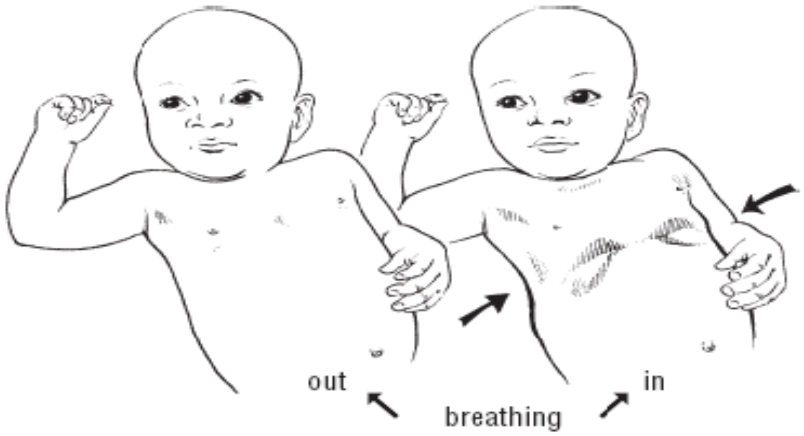
To look for chest in drawing, the child must be calm. The child should not be breastfeeding. If the child is asleep, try not to waken the child.

Ask the caregiver to raise the child's clothing above the chest. Look at the lower chest wall (lower ribs).

Look for chest in drawing when the child breathes IN. Normally when a child breathes IN, the chest and abdomen move out together.

In a child with chest in drawing, however, the chest below the ribs pulls in instead of moving out; the air does not come in and the chest is not filling with air.

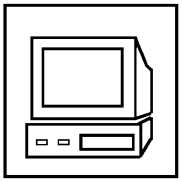
In the picture below, the child on the right has chest in drawing. See the lines on the chest as the child on the right breathes in. The chest below the ribs pulls in instead of moving out. The child has chest in drawing if the lower chest wall goes **IN** when the child breathes **IN**.



Chest in drawing is not visible when the child breathes OUT. In the picture, the child on the left is breathing out—pushing the air out.

For chest in drawing to be present, it must be clearly visible and present at every breathing in.

If you see chest in drawing only when the child is crying or feeding, the child does not have chest in drawing. If you are unsure whether the child has chest in drawing, look again. If other Health Surveillance Assistants are available, ask what they see.



Video exercise:
Identify chest in drawing

For each of the children shown in the video, answer the question: ***Does the child have chest in drawing?*** Circle Yes or No.

Does the child have chest in drawing?		
Mary	**Yes**	**No**
Jenna	**Yes**	**No**
Ho	**Yes**	**No**
Amma	**Yes**	**No**
Lo	**Yes**	**No**

You may ask to see any of these children again.

Look for signs of illness (continued)

◻ Fast breathing

Another sign of pneumonia is fast breathing. To look for fast breathing, count the child's breaths for one full minute. Count the breaths of all children with cough.

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

The child must be quiet and calm when you count breaths. If the child is frightened, crying, angry, or moving around, you will not be able to do an accurate count.

TIP: Looking at the watch and the child's breathing at the same time can be difficult.

Ask someone, if available, to help time the count. Ask them to say "Start" at the beginning and "Stop" at the end of 60 seconds.

Choose a place on the child's chest or stomach where you can easily see the body move as the child breathes in. To count the breaths in one minute:

1. Use a watch with a second hand (or a digital watch, or a timer). Put the watch in a place where you can see the watch and the child's breathing.

2. Look for breathing movement anywhere on the child's chest or stomach.

3. Start counting the child's breaths when the child is calm. Start when the second hand on the watch reaches an easy point to remember, such as at the number 12 or 6 on the watch face. (On a digital watch, start when the second numbers are :00.)

4. When the time reaches exactly 60 seconds, stop counting.

5. Repeat the count if you have difficulty. If the child moves or starts to cry, wait until the child is calm. Then start again.

After you count the breaths, record the number of breaths per minute in the space provided on the recording form. Decide if the child has fast breathing.

Fast breathing depends on the child's age:

In a child age 2 months up to 12 months, fast breathing is 50 breaths or more per minute.

In a child age 12 months up to 5 years, fast breathing is 40 breaths or more per minute.

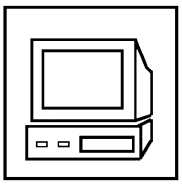
A child with cough and fast breathing has PNEUMONIA.

Exercise: Identify fast breathing

For each of the children below, decide if the child has fast breathing. Circle Yes or No.

Refer to the Sick Child Recording Form for the breathing rates per minute of children with fast breathing, depending on age.

	Does the child have fast breathing?	
Limbani Age 2 years, has a breathing rate of 45 breaths per minute	**Yes**	**No**
Chimwemwe Age 4½ years, has a breathing rate of 38 breaths per minute	**Yes**	**No**
Chikondi Age 2 months, has a breathing rate of 55 breaths per minute	**Yes**	**No**
Nindi Age 4 months, has a breathing rate of 45 breaths per minutes	**Yes**	**No**
Joseph Age 10 weeks, has a breathing rate of 57 breaths per minute	**Yes**	**No**
Yankho Age 36 months, has a breathing rate of 47 breaths per minute	**Yes**	**No**



Video exercise: Count the child's breaths

You will practise counting breaths and looking for fast breathing on children in the videotape.

For each of the children shown:

1. Record the child's age below.

2. Count the child's breaths per minute. Write the breaths per minute in the box.

3. Then, decide if the child has fast breathing. Circle Yes or No.

	Age?	Breaths per minute?	Does the child have fast breathing?	
Mano			**Yes**	**No**
Wumbi			**Yes**	**No**

TIPS on looking for chest indrawing and counting the child's breaths:

Do not upset the child. The child must be calm to look for chest indrawing and count the child's breaths.

Look for signs of illness in the order they are listed on the recording form. The tasks start with those that require a calm child. Look for chest indrawing and count breaths before the tasks which require waking or touching the child.

If the child becomes upset, wait until the caregiver calms the child.

Ask the caregiver to slowly roll up the child's shirt. A rolled shirt will stay in place better. Tugging and pulling the shirt upsets the child.

If the child's body is bent at the waist, it is difficult to see the chest move. If you cannot see the chest, ask the caregiver to slowly, gently lay the child on her lap.

Stand or sit where you can see the chest movement. There needs to be enough light. The angle of light needs to show the indentation on the chest wall that occurs when there is chest indrawing.

A contrast in colour or light between the child's chest and the background makes it easier to see the chest expand when you count the child's breaths.

Look for signs of illness (continued)

◻ Very sleepy or unconscious

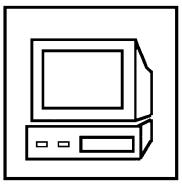
While looking for signs of illness, look at the child's general condition. Look to see if the child is very sleepy or unconscious.

If the child has been sleeping and you have not seen the child awake, ask the caregiver if the child seems very sleepy. Gently try to wake the child by moving the child's arms or legs. If the child is difficult to wake, see if the child responds when the caregiver claps.

A very sleepy child is not alert when the child should be. The child is drowsy and does not seem to notice what is around him or her.

An unconscious child cannot awaken. The child does not respond when touched or spoken to. An unusually sleepy or unconscious child will not be fussy or crying.

In contrast, an alert child pays attention to things and people around him or her. Even though the child is tired, the child awakens.



Video exercise: Identify an unusually sleepy or unconscious child and other signs of severe illness

Your facilitator will now show a video of signs of severe illness: not able to drink or feed anything, vomiting everything and unusually sleepy or unconscious.

You might not see these signs very often. However, when you do see these signs, it is important to recognize them. These children are very sick.

The video will then show an exercise with four children. For each child, answer the question: ***Is the child unusually sleepy or unconscious?*** Circle Yes or No.

Is the child unusually sleepy or unconscious?		
Child 1	**Yes**	**No**
Child 2	**Yes**	**No**
Child 3	**Yes**	**No**
Child 4	**Yes**	**No**

How are the children who are *very* sleepy or unconscious different from those who are just sleepy?

LOOK for signs of anaemia

Palmar pallor

A child with palmar pallor has anaemia. Anaemia is a reduction of red blood cells. A child can develop anaemia as a result of:

Malaria which can destroy the red blood cells. Children can develop anaemia if they have repeated episodes of malaria or if the malaria was inadequately treated.

Parasites such as hook worm that can cause blood loss from the gut and lead to anaemia.

All sick children should be checked for signs of anaemia. Check anaemia by comparing the caregivers palm and the child's palm. If the child's palm looks white than the palm of the caregiver, the child has palmar pallor and should be considered as having anaemia. If the palm of the child looks red, the child does not have palmer pallor and anaemia.

Your facilitator will show you some photos with examples of palmar pallor.

Look at the photos in the photo booklet 40 - 46 and decide whether the child has palmar pallor. Tick Yes or No in the boxes below:

Does the child have palmar pallor?		
Child 40	**Yes**	**No**
Child 41	**Yes**	**No**
Child 42	**Yes**	**No**
Child 43	**Yes**	**No**

LOOK for signs of severe malnutrition

Malnourished children do not grow well. Their bodies do not have enough energy and nutrients (vitamins and minerals) to meet their needs for growing, being active, learning, and staying healthy. By helping children receive better nutrition, you can help children develop stronger bodies and minds.

Malnourished children often become sick. Malnourished children are more likely to die than well-nourished children. Over half the children who die from common childhood illness—diarrhoea, pneumonia, malaria, and measles—are poorly nourished. If you identify children with malnutrition, you can help them get proper care. You might be able to prevent these children from dying.

Your facilitator will demonstrate two ways to look for SEVERE MALNUTRITION:

- **Use a MUAC (Mid-Upper Arm Circumference) tape.** A small arm circumference (red/yellow on the MUAC tape) identifies severe malnutrition in children with severe wasting (very thin), a condition called **marasmus.**

- **Look at both of the child's feet for swelling (oedema).** This identifies severe malnutrition in children with the condition called **kwashiorkor**. Although these children have severe malnutrition, their bodies are swollen, round and plump, not thin.

Discussion: Severe malnutrition

Your facilitator will show photos of malnourished children and will demonstrate two ways to identify children with SEVERE malnutrition.

After the discussion, read below and on the following pages to review how to identify severe malnutrition.

Look for signs of severe malnutrition (continued)

The two signs of severe malnutrition are: Red/yellow on MUAC tape, and swelling on both feet.

☐ Red/Yellow on MUAC tape

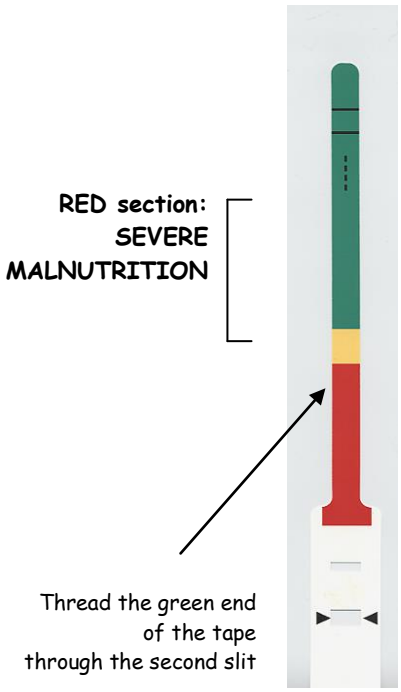
The circumference of the arm is the distance around the arm. Measure the arm circumference of all children age 6 months up to 5 years with a MUAC tape. A RED reading on the MUAC tape indicates severe malnutrition.

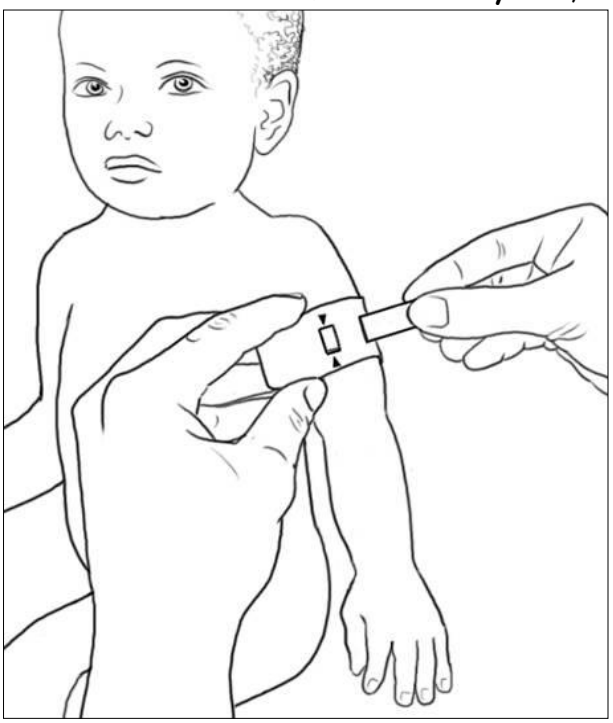
Yellow colour on MUAC tape means that the child is moderately malnourished and should therefore be referred for supplementary feeding.

A MUAC tape is easy to use to identify a child with a very small mid-upper arm circumference. Review the instructions in the box on the next page.

How to use a MUAC tape

1. The child must be age 6 months up to 5 years.
2. Gently outstretch the child's arm to straighten it.
3. On the upper arm, find the midpoint between the shoulder and the elbow.
4. Hold the large end of the tape against the upper arm at the midpoint.
5. Put the other end of the tape around the child's arm. And thread the green end of the tape through the second small slit in the tape—coming up from below the tape.
6. Pull both ends until the tape fits closely, but not so tight that it makes folds in the skin.
7. Press the window at the wide end onto the tape, and note the colour at the mark.
8. The colour indicates the child's nutritional status. If the colour is **RED** at the two marks on the tape, the child has **SEVERE MALNUTRITION**. If the colour is **yellow**,





Look for signs of severe malnutrition (continued)

◻ Swelling of both feet

With severe malnutrition, a large amount of fluid may gather in the body, which causes swelling (oedema). For this reason, a child with severe malnutrition may sometimes look round and plump.

Because the child like this does not look thin, the best way to identify severe malnutrition is to look at the child's feet.

Gently press with your thumbs on the top of each foot for three seconds. (Count 1001, 1002, 1003.) The child has SEVERE malnutrition, if dents remain on the top of BOTH feet when you lift your thumbs.

For the sign to be present, the dent must clearly show on both feet.

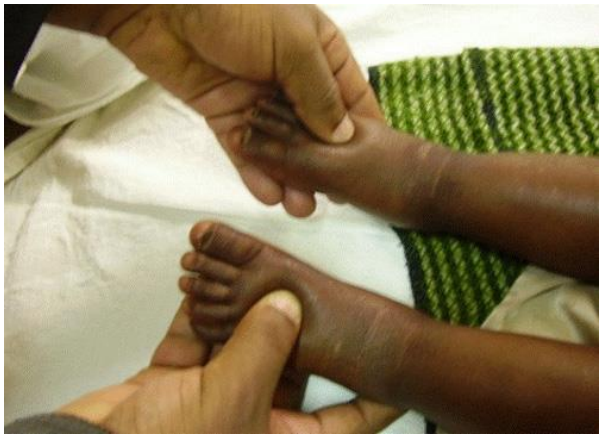


Photo: Motherandchildnutrition.org

Press your thumbs gently *for a few seconds* on the top of each foot.

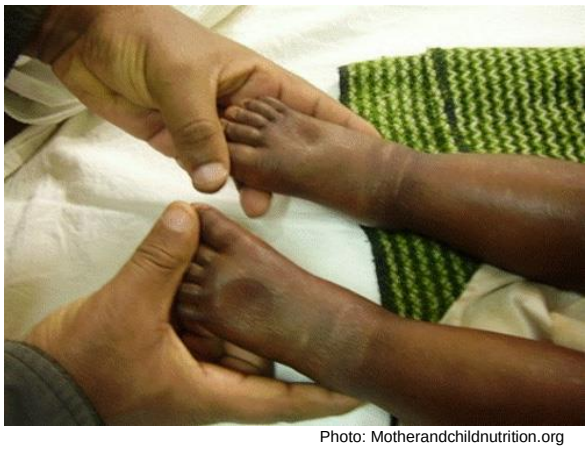


Photo: Motherandchildnutrition.org

Look for the dent that remains after you lift your thumb.

Take-home messages for this section:

- The recording form is like a checklist. It helps you remember everything you need to ask the caregiver.
- It is also a record of what you learned from the caregiver. With this information, you will be able to plan the treatment for the child.
- You learn some information by asking questions (about cough, diarrhoea, fever, convulsions, difficult drinking or feeding, vomiting, red eye and any other problems).
- You learn other information by examining the child (for chest in drawing, fast breathing, very sleepy or unconscious, colour of the MUAC tape, and swelling of both feet).

Decide: Refer or treat the child

The problems identified will help you decide whether to **refer** the child to the health facility or **treat** the child at home.

Some problems are **Danger Signs.** A danger sign indicates that the child is too ill for you and the family to treat in the community. You do not have the medicines this child needs. To help this child survive, you must URGENTLY refer the child to the health facility.

You may see another problem you cannot treat. You may not be able to identify the cause of the problem, or you may not have the correct medicine to treat it. Although the problem is not a danger sign, you will refer the child to the health facility. There a trained health worker can better assess and treat the child.

In this section, you will be reminded to:

- Identify danger signs.
- Identify signs of illness (that are not danger signs).
- Decide if the child must be referred to the health facility or whether you can treat the child in the community.

Any DANGER SIGN: Refer the child

On the recording form, the middle column—**Any DANGER SIGN?**—lists the danger signs. *[Find the column that lists the danger signs.]*

Any one of these signs is a reason to refer the child URGENTLY to the health facility. Using the information you have about the child, tick [✓] the danger sign or signs you find, if any.

The first nine danger signs are found by asking the caregiver about the child's problems.

☐ Cough for 14 days or more

A child who has had cough for 14 days or more has a danger sign. The child may have tuberculosis (TB), asthma, whooping cough, or another problem. The child needs more assessment and treatment at the health facility. **Refer a child with cough for 14 days or more.**

☐ Diarrhoea for 14 days or more

Diarrhoea often stops on its own in 3 or 4 days. Diarrhoea for 14 days or more, however, is a danger sign. It may be a sign of a severe disease. The diarrhoea will contribute to malnutrition. Diarrhoea also can cause dehydration, when the body loses more fluids than are being replaced. If not treated, dehydration results in death. **Refer a child with diarrhoea for 14 days or more.**

Blood in stool

Diarrhoea with blood in the stool, with or without mucus, is *dysentery.* If there is blood in the stool, the child needs medicine that you do not have in the medicine kit. **Refer a child with blood in the stool.**

Fever for last 7 days or more

Most fevers go away within a few days. Fever that has lasted for 7 days or more can mean that the child has a severe disease. The fever does not have to occur every day, all the time. **Refer a child who has had fever for the last 7 days or more**.

Convulsions

A convulsion during the child's current illness is a danger sign. A serious infection or a high fever may be the cause of the convulsion. The health facility can provide the appropriate medicine and identify the cause. **Refer a child with convulsions.**

Not able to drink or eat anything

One of the first indications that a child is very sick is that the child cannot drink or swallow. Dehydration is a risk. Also, if the child is not able to drink or eat anything, then the child will not be able to swallow the oral medicine you have in your medicine kit. **Refer a child who is not able to drink or eat anything.**

Vomits everything

When the child vomits everything, the child cannot hold down any food or drink at all. The child will not be able to replace the fluids lost during vomiting and is in danger from dehydration. A child who vomits everything also cannot take the oral medicine you have in your medicine kit. **Refer a child who vomits everything.**

Red eye for 4 days or more

A child who presents with red eye is commonly due to acute conjunctivitis. Acute conjunctivitis presents with discomfort in the eye, swollen eye lids, pus discharge and the redness in the white part of the eye

Refer a child with red eye if child has had 4 days or more of treatment for it. Also refer a child with visual problem or history of trauma and any other child with red eye but without signs of conjunctivitis.

These danger signs are identified based on the caregiver's answers to your questions. Other danger signs you identify by looking at the child. The list of danger signs will continue after an exercise.

Exercise: Decide to refer (1)

The children below have cough, diarrhoea, fever, and other problems reported by the caregiver. Assume the child has no other relevant condition for deciding whether to refer the child. **Which children have a danger sign?** Circle Yes or No. To guide your decision, refer to the recording form.

Which children must be referred to the health facility? Tick [✓] if the child should be referred

[The facilitator may ask you to do this exercise as a group discussion.]

Does the child have a danger sign? (Circle Yes or No.)			**Refer child?** Tick [✓]
Sam – cough for 2 weeks	**Yes**	**No**	
Beauty – diarrhoea with blood in stool	**Yes**	**No**	
Marco – diarrhoea for 10 days	**Yes**	**No**	
Nilgun – low fever for 8 days, not in a malaria area	**Yes**	**No**	
Ida – diarrhoea for 2 weeks	**Yes**	**No**	
Tika – convulsion yesterday	**Yes**	**No**	
Nonu – very hot body since last night, in a malaria area	**Yes**	**No**	
Maria – vomiting food but drinking water	**Yes**	**No**	
Thomas – not eating or drinking anything because of mouth sores	**Yes**	**No**	

Any DANGER SIGN: Refer the child (continued)

Cough for 14 days or more, diarrhoea for 14 days or more, blood in stool, fever for the last 7 days or more, convulsions, not able to drink or eat anything, and vomits everything—all are danger signs, based on the caregiver's report.

There are five more danger signs. You may find these danger signs when you LOOK at the child:

☐ Chest in drawing

Chest in drawing is a sign of severe pneumonia. This child will need oxygen and appropriate medicine for severe pneumonia. **Refer a child with chest in drawing.**

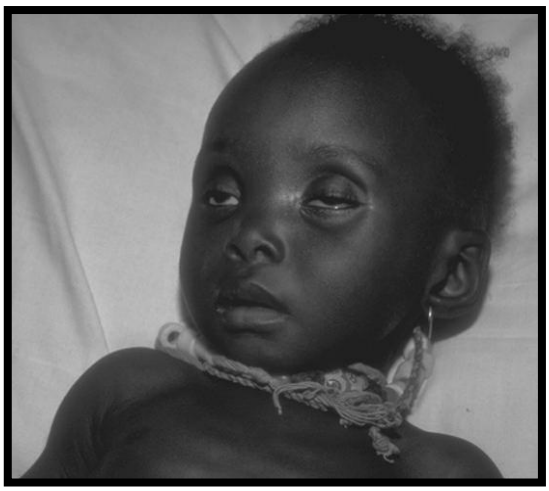


Photo WHO CAH

Refer a very sleepy or unconscious child urgently to the nearest health facility.

☐ Very sleepy or unconscious

A child who is unusually sleepy is not alert and falls back to sleep after stirring. An unconscious child cannot awaken. There could be many reasons. The child is very sick and needs to go to the health facility urgently to determine the cause and receive appropriate treatment. **Refer a child who is very sleepy or unconscious.**

☐ Anaemia

Anaemia presents with pallor. Pallor is unusual paleness of the skin.

It is therefore a sign of anaemia.

Not eating foods rich in iron can lead to iron deficiency and anaemia.

Anaemia is a reduction of red cells or a reduced amount of haemoglobin in each red cell.

A child can develop anaemia as a result of:

- Malaria which can destroy red cells rapidly. Children can develop anaemia if they have repeated episodes of malaria or if the malaria

was inadequately treated. The anaemia may develop very suddenly due to massive destruction of red blood cells.

- Infections

- Parasites such as hook worms or whip worms. They can cause blood loss from the gut and lead to anaemia.

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

Compare the colour of the child's palm with mother's palm and with the palms of other children. If the skin of the child's palm is pale, the child has palmar pallor. All children with palmar pallor should be given pre-referral treatment and be referred urgently to health facility

☐ Red on MUAC tape

Red on the MUAC tape indicates severe malnutrition. The child needs to be seen at a health facility to receive proper care and to identify the cause of the severe malnutrition. **Refer a child who has a red or yellow reading on the MUAC tape.**

[Where there is a community-based feeding programme, you will refer the child with yellow on the tape for supplemental feeding.]

☐ Swelling of both feet

Swelling of both feet indicates severe malnutrition due to the lack of specific nutrients in the child's diet. The child needs to be seen at a health facility for more assessment and treatment. **Refer a child who has swelling of both feet.**

Exercise: Decide to refer (2)

The children below have cough, diarrhoea, fever, or other problems reported by the caregiver and found by you. Assume the child has no other relevant condition for deciding whether to refer the child. **Does the child have a danger sign?** Circle Yes or No. **Should you urgently refer the child to the health facility?** Tick [✓] if the child should be referred. To guide your decision, use the recording form. *[The facilitator may ask you to put the example on a chart for the group discussion.]*

Does the child have a danger sign? (Circle Yes or No.)			**Refer child?** Tick [✓]
1. Child age 11 months has had cough during three days; he is not interested in eating but will breastfeed	**Yes**	**No**	
2. Child age 4 months is breathing 48 breaths per minute	**Yes**	**No**	
3. Child age 2 years vomits all liquid and food her mother gives her	**Yes**	**No**	
4. Child age 3 months frequently holds his breath while exercising his arms and legs	**Yes**	**No**	
5. Child age 12 months is too weak to drink or eat anything	**Yes**	**No**	
6. Arms and legs of child, age 4 months, stiffen and shudder for 2 or 3 minutes at a time	**Yes**	**No**	
7. Child age 2 years has a YELLOW reading on the MUAC tape	**Yes**	**No**	
8. Child age 4 months has chest in drawing while breastfeeding	**Yes**	**No**	
9. Child age 2 years has had diarrhoea for one week with no blood in her stools	**Yes**	**No**	
10. Child 8 months old with fever since 2 days ago and palmer pallor	**Yes**	**No**	

SICK but NO DANGER SIGN: Treat the child

Look at the far right column on the recording form—**SICK but NO Danger Sign?** The column lists signs of illness that can be treated at home if the child has no danger sign. You will tick [✓] the signs of illness that are listed in this column, if the child has any.

For these problems, you treat the child with medicine, advise the family on home care for the sick child, and follow up until the child is well. If the child does not improve with home care, then refer the child to a health facility for assessment and treatment.

The list includes four signs of illness that require attention and can be treated at home:

- **Diarrhoea (less than 14 days AND no blood in stool)**

Diarrhoea for less than 14 days, with no danger sign, needs treatment. You will be able to give the child Oral Rehydration Salts (ORS) solution and zinc. Zinc helps to reduce the severity of diarrhoea and can even prevent diarrhoea in future months.

- **Fever for less than 7 days**

Various studies have shown that not all fevers are due to malaria. Giving antimalarial to children with fever without testing for malaria results in wastage of costly medicines and risk of drug resistance Therefore, the new policy in Malawi is to test all fever cases for malaria. If the test result is positive for malaria, you will treat the child with an antimalarial. If the test is negative, the child should return for a follow-up visit in 3 days or sooner if the child becomes sicker. During the follow-up visit, look for signs of illness again. Refer the child if the child is not improving.

- **Red eye**

Often a red eye in a child is a sign of local infection of the eye (conjunctivitis). A child with red eye may have difficulties in seeing. If left untreated, a red eye may become blind. Red eyes for less than 4 days have to be treated at home. The treatment policy is to apply an antibiotic eye ointment on the inner lower lids of both eyes.

- **Fast breathing**

Cough with fast breathing is a sign of pneumonia. If there is no chest in drawing or any other danger sign, you can treat the child at home with an oral antibiotic (Amoxicillin).

In addition, a cough for less than 14 days may be a simple cough or cold, if the child does not have a danger sign AND does not have fast breathing. A cough can be uncomfortable and can irritate the throat. A sore throat may prevent the child from drinking and eating well.

For a child who is not exclusively breastfed, sipping a safe, soothing remedy—like honey in warm (not hot) water—can help relieve a cough and soothe the throat. There is no need for other medicine.

Tell the caregiver that cough medicines may contain harmful ingredients, and they are expensive.

Practice

The Health Surveillance Assistant found the signs for each of the children below. Identify which are **DANGER SIGNS** and which are other signs that the child is **SICK but NO Danger Sign**. Tick [✓] the appropriate box to indicate your decision.

Then, decide to **refer or treat the child at home**. Tick [✓] the appropriate decision box to indicate your decision.

Sue Chimunthu

Sick Child Recording Form

(for community-based treatment of child age 2 months up to 5 years)

Date: 14/5/2015 (Day / Month / Year) **HSA:** Lameck Chirwa

Child's First Name: Sue **Surname** Chimuntha Age: 1 Year 2 Months **Boy** / **Girl**

Caregiver's name: Lin Chawinga **Relationship:** Mother / Father / Other: _____

Physical Address: Fodya School **Village / TA:** Sibweni / Khobwe

1. Identify problems

ASK and LOOK		Any DANGER SIGN?	SICK but NO Danger Sign?
ASK: What are the child's problems? If not reported, then ask to be sure. **YES,** sign present ➔ Tick ☑ **NO** sign ➔ Circle ■			
√	■ Cough? If yes, for how long? _3_____ days	☐ Cough for 14 days or more	
☑	■ Diarrhoea (loose stools)? IF YES, for how long? 2 days. If yes, Blood in stool? ☐ ■	☐ Diarrhoea for 14 days or more ☐ Blood in stool	☐ Diarrhoea (less than 14 days AND no blood in stool)
☐	■ Fever (reported or now)? If yes, started _____ days ago.	☐ Fever for last 7 days	☐ Fever (less than 7 days)
☐	■ Convulsions?	☐ Convulsions	
☐	■ Difficulty drinking or feeding? IF YES, not able to drink or feed anything? ☐ ■	☐ Not able to drink or feed anything	
☑	■ Vomiting? If yes, vomits everything? ☐ ■	☐ Vomits everything	
☑ ☐	■ Red eyes? If yes, for how long 3 days. ■ Difficulty in seeing? If Yes for how long __days	☐ Red eye for 4 days or more ☐ Visual problem	☐ Red eye less than 4 days
☐	■ Any other problem I cannot treat (E.g. problem in breast feeding, injury)? See 5 If any OTHER PROBLEMS, refer.	☐ Other problem to refer:	
LOOK:			
☐	■ Chest in drawing? (FOR ALL CHILDREN)	☐ Chest in drawing	
√	**IF COUGH, count breaths in 1 minute:** __48___ bpm ■ Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		☐ Fast breathing
☐ ☑	■ Very sleepy or unconscious?	☐ Very sleepy or unconscious	
☑	■ Palmar pallor	☐ Palmar pallor	
	For child 6 months up to 5 years, MUAC tape colour: Yellow	☐ Red on MUAC tape ☐ Yellow on MUAC tape	
☐	■ Swelling of both feet?	☐ Swelling of both feet	

Decide: Refer or treat child
(tick decision)

☐ **If ANY Danger, refer to health facility**

☐ **If NO Danger Sign, treat at home and advise caregiver**

Take-home messages for this section:

- There are **fifteen danger signs** for which a child must be referred to a health facility: cough for 14 days or more, diarrhoea for 14 days or more, diarrhoea with blood in the stool, fever for 7 days or more, convulsions, not able to drink or feed anything, vomits everything, red eye for 4 days or more, visual problem, chest in drawing, very sleepy or unconscious, Palmer pallor, shows red on the MUAC tape, yellow on the MUAC tape, or has swelling of both feet.
- A child who has convulsions, fever for 7 days or more, is unable to drink or feed anything, who vomits everything or is unusually sleepy or unconscious is in danger of dying quickly and must be referred immediately.
- Other signs of illness (diarrhoea less than 14 days, fever less than 7 days in a malaria area and cough with fast breathing) can be treated in the community by you and the caregiver.

Treat or refer children in the community

Introduction

A Health Surveillance Assistant who has been well trained in community case management and provided with medicine for common childhood illness can bring treatment to many children. Children receive life-saving treatment with less delay, when medicine is available in the community.

Course objectives

By the end of this section, you will be reminded to do the following **tasks:**

- To teach caregivers on how to give ORS solution and zinc for diarrhoea, an antimalarial medicine for fever, an eye ointment for red eye (conjunctivitis) and an oral antibiotic for fast breathing.
- To give pre-referral treatment children who are referred to a health facility
- To assist the families of children who are referred to health facility in taking care of their families
- To counsel families to bring their children immediately if they become sicker, and to return for scheduled follow-up visits.
- To identify the vaccines the child has received, and to help the family complete the child's remaining vaccines.
- To assess children on a follow up visit if improving, help the caregiver to continue appropriate treatment at home, and if child is not improving, refer to the health facility.
- To use a Sick Child Recording Form to guide the tasks in caring for a sick child and to record your decisions and actions.

Case Study 1

One-year-old Natasha has had fever and was coughing for three days. She is weak. She needs to go to the health facility. The health facility, however, is very far away.

So Mrs. Phiri first takes her daughter to see the Health Surveillance Assistant. The Health Surveillance Assistant has medicine for children. He asks questions. He examines Natasha carefully. He decides that Natasha does not have any danger signs.

Malaria is very common in the area, and Natasha has fever. The Health Surveillance Assistant does a rapid diagnostic test (RDT) for malaria. The RDT result is positive, so Natasha needs an antimalarial.

The Health Surveillance Assistant also counts Natasha's breaths. He finds that Natasha has fast breathing and needs an oral antibiotic right away.

The Health Surveillance Assistant washes his hands, and shows Mrs. Phiri how to prepare the antimalarial medicine and the oral antibiotic by mixing each with water. Mrs. Phiri then gives Natasha the first dose of each medicine slowly with a spoon.

The Health Surveillance Assistant gives Mrs. Phiri medicine to give Natasha at home. He explains how much, at what time, and how many days to give the antibiotic and antimalarial to Natasha.

The Health Surveillance Assistant also explains how to care for Natasha at home. Mrs. Phiri should give breast milk more often, and continue to feed Natasha while she is sick. If Natasha becomes sicker, Mrs. Phiri should bring her back right away.

At home Mrs. Phiri has a bed net, treated with insecticide. The Health Surveillance Assistant asks Mrs. Phiri to describe how she uses the bed net. He explains that it is very important for Natasha and the other young children to sleep under the bed net, to prevent malaria.

Before Natasha leaves, the Health Surveillance Assistant checks her vaccination record. Natasha has had all his vaccines.

Mrs. Phiri agrees to bring Natasha back in 3 days for a follow-up visit. Even if Natasha improves, the Health Surveillance Assistant explains that he wants to see Natasha again.

Mrs. Phiri is grateful. Natasha has already begun treatment. If Natasha gets better, they will not need to go the long distance to the health facility.

A Health Surveillance Assistant who has medicine for common childhood illnesses and is trained to use it correctly can bring treatment to many children.

You have been refreshed to identify signs of illness and to use the signs to decide whether to refer the child to a health facility or treat the child at home.

If NO danger sign: Treat the child at home

You have been seeing many sick children who do not have danger signs or any other problem needing referral. Children with diarrhoea, malaria, and fast breathing may be treated at home. **This treatment is essential.** Without treatment, they may become sicker and die.

You will be refreshed to:

- Decide on treatment based on child's signs of illness.
- Decide when a child should come back for a follow up visit.
- Use the Sick Child Recording Form as a resource for determining the correct treatment and home care.

This box below summarizes the home treatments for diarrhoea, fever, and fast breathing:

☐ If **diarrhoea for less than 14 days**	☐ **Give ORS.** ☐ **Give zinc supplement.**
☐ If **fever** for less than 7 days (in malaria area)	☐ **Do a rapid diagnostic test (RDT):** __POSITIVE __NEGATIVE ☐ **If RDT is positive, give oral antimalarial (LA)**
☐ If cough (for less than 14days) with **fast breathing**	☐ **Give oral antibiotic (Amoxicillin).**

It is common for a child to have two or all three of these signs. The child needs treatment for each. If a child has diarrhoea and malaria, for example, give the child: ORS, zinc supplement, and an oral antimalarial for treatment at home. More details on these medicines and how to give them will be discussed later.

In addition, advise caregivers on home care. The following box, copied from the recording form, summarizes the basic home care.

☐ For **ALL children treated at home, advise on home care**	☐ **Advise caregiver to give more fluids and continue feeding.** ☐ **Advise on when to return. Go to nearest health facility immediately** or if not possible return **if child** ☐ Cannot drink or feed ☐ Becomes sicker ☐ Has blood in the stool ☐ **Advise caregiver on use of a bed net (ITN)** ☐ **Follow up child in 3 days.**

Demonstration and Practice: Decide on treatment for the child

Practice

For each child below, tick [✓] all the treatments to give at home. No child has a danger sign. Each child has ONLY the signs mentioned in the box. All children will be treated at home. No child will be referred.

To decide, refer to the yellow box for **TREAT at home and ADVISE on home care** on page 2 of the Sick Child Recording Form. Discuss your decisions with the group.

After you decide the treatment, the facilitator will give you medicine to select for the child's treatment. For a child with fever, the facilitator (and the worksheet below) will tell you whether the RDT was positive or negative for malaria.

1. Child age 3 years has cough and fever for 5 days	☐ **Give ORS** ☐ **Give zinc supplement** ☐ **Do a rapid diagnostic test (RDT):** __POSITIVE _✓_NEGATIVE ☐ **If RDT is positive, give oral antimalarial LA** ☐ **Give oral antibiotic** ☐ **Advise on home care** ☐ **Advise caregiver to give more fluids and continue feeding** ☐ **Advise on when to return** ☐ **Advise caregiver on use of a bed net (ITN)** ☐ **Follow up child in 3 days**
2. Child age 6 months has fever for 2 days and is breathing 55 breaths per minute	☐ **Give ORS** ☐ **Give zinc supplement** ☐ **Do a rapid diagnostic test (RDT):** _✓_POSITIVE __NEGATIVE ☐ **If RDT is positive, give oral antimalarial LA** ☐ **Give oral antibiotic** ☐ **Advise on home care** ☐ **Advise caregiver to give more fluids and continue feeding** ☐ **Advise on when to return** ☐ **Advise caregiver on use of a bed net (ITN)** ☐ **Follow up child in 3 days**

3. Child age 1 year has had fever, diarrhoea, and vomiting (not everything) for 3 days	☐ **Give ORS** ☐ **Give zinc supplement** ☐ **Do a rapid diagnostic test (RDT):** _✓_POSITIVE __NEGATIVE ☐ **If RDT is positive, give oral antimalarial LA** ☐ **Give oral antibiotic** ☐ **Advise on home care** ☐ **Advise caregiver to give more fluids and continue feeding** ☐ **Advise on when to return** ☐ **Advise caregiver on use of a bed net (ITN)** ☐ **Follow up child in 3 days**
4. Child age 10 months has cough for 4 days. He vomits ground food but continues to breastfeed for short periods of time	☐ **Give ORS** ☐ **Give zinc supplement** ☐ **Do a rapid diagnostic test (RDT):** __POSITIVE __NEGATIVE ☐ **If RDT is positive, give oral antimalarial LA** ☐ **Give oral antibiotic** ☐ **Advise on home care** ☐ **Advise caregiver to give more fluids and continue feeding** ☐ **Advise on when to return** ☐ **Advise caregiver on use of a bed net (ITN)** ☐ **Follow up child in 3 days**
5. Child age 6 months has fever and cough for 2 days	☐ **Give ORS** ☐ **Give zinc supplement** ☐ **Do a rapid diagnostic test (RDT):** _✓_POSITIVE __NEGATIVE ☐ **If RDT is positive, give oral antimalarial LA** ☐ **Give oral antibiotic** ☐ **Advise on home care** ☐ **Advise caregiver to give more fluids and continue feeding** ☐ **Advise on when to return** ☐ **Advise caregiver on use of a bed net (ITN)** ☐ **Follow up child in 3 days**

Take-home messages for this section:

- Each illness has its own treatment:
  - ORS and zinc for diarrhoea for less than 14 days
  - Amoxicillin for fast breathing (pneumonia)
  - Antimalarial LA for fever for less than 7 days with confirmed malaria
- Caregivers of all sick children should be advised on home care.

Give oral medicine and advise the caregiver

Sick children need treatment quickly. Begin treatment before the child leaves, if the child can drink.

Help the caregiver give the first dose in front of you. This way you can be sure that the treatment starts as soon as possible, and that the caregiver knows how to give it correctly. Then ask the caregiver to give the child the rest of the medicine at home.

The child you refer to a health facility should also receive the first dose, if the child can drink. It takes time to go to the health facility. The child may have to wait to receive treatment there. In the meantime, the first dose of the medicine starts to work.

You will be able to:

- Select the dose of the antimalarial (LA, the antibiotic Amoxicillin, and/or zinc to give a child, based on the child's age, including the amount, how many times a day, and for how many days.
- Demonstrate with ORS, zinc, antimalarial LA and antibiotic Amoxicillin, how to give the child one dose, and help the mother to do this.
- Follow correct procedures to do the Rapid Diagnostic Test (RDT).
- Read and interpret the results of the RDT.
- Identify, by the expiration date, the medicines and RDT kits that have expired.
- Advise caregivers of all sick children on home care: more fluids, continued feeding, when to return, and use of bednet.
- Identify and record the vaccines a child has had.
- Identify where the caregiver should take a child for the next vaccination (e.g. health facility, village health day, mobile clinic).

Check the expiration date

Old medicine loses its ability to cure illness, and may be harmful. Check the expiration date (also called "expiry date") on all medicines before you use them. Today's date should not be later than the expiration date.

For example, if it is now May 2010 and the expiration date is December 2009, the medicine has expired. Do not use expired medicines. They may no longer be effective, and may be harmful. If medicines expire, replace them during the next visit to the dispensary of the health facility.

Also check the expiration date on the rapid diagnostic test packet (RDT). Do not use an expired test. It may give false results.

☐ *If diarrhoea*

If the child has diarrhoea for less than 14 days, with no blood in stool and no other danger sign, the family can treat the child at home. A child with diarrhoea receives ORS solution and a zinc supplement.

Below is the box on treating diarrhoea, from page 2 of the recording form. The box is there to remind you about what medicine to give and how to give it.

☐ If **diarrhoea** (less than 14 days AND no blood in stool)	☐ **Give ORS.** Help caregiver to give child ORS solution in front of you until child is no longer thirsty. ☐ **Give caregiver 2 ORS packets to take home.** Advise to give as much as the child wants, but at least 1/2 cup ORS solution after each loose stool. ☐ **Give zinc supplement.** Give 1 dose daily for 10 days: ☐ Age 2 months up to 6 months—1/2 tablet (total 5 tabs) ☐ Age 6 months up to 5 years—1 tablet (total 10 tabs) Help caregiver to give first dose now.

☐ Give ORS

A child with diarrhoea can quickly become dehydrated and may die. Giving water, breast milk, and other fluids to children with diarrhoea helps to prevent dehydration.

However, children who are already dehydrated—or are in danger of becoming dehydrated—need a mixture of Oral Rehydration Salts (ORS) and water. The ORS solution replaces the water and salts that the child loses in the diarrhoea. It prevents the child from getting sicker.

Use every opportunity to teach caregivers how to prepare ORS solution.

If the child does not improve, or develops a danger sign, urgently refer the child to the health facility.

If the child improves, give the caregiver 2 packets of ORS to take home. Advise the caregiver to give as much ORS solution as the child wants. But give ***at least 1/2 cup*** of a 250 ml cup (about 125 ml) after each loose stool.

TIP: Be ready to give ORS solution to a child with diarrhoea. Keep with your medicine kit:

- A supply of ORS packets
- A 1 litre bottle or other measuring container
- A container and spoon for mixing the ORS solution
- A cup and small spoon for giving ORS
- A jar or bottle with a cover, to send ORS solution with the caregiver on the trip to health facility or home.

☐ Give zinc supplement

Zinc is an important part of the treatment of diarrhoea. Zinc helps to make the diarrhoea is less severe, and it shortens the number of days of diarrhoea. Zinc increases the child's appetite and makes the child stronger.

Zinc also helps prevent diarrhoea in the future. Giving zinc for the full 10 days can help prevent diarrhoea for up to the next three months. For these reasons, we give zinc to children with diarrhoea.

☐ If **Diarrhoea** (less than 14 days AND no blood in stool)	☐ **Give ORS.** Help caregiver to give child ORS solution in front of you until child is no longer thirsty. ☐ **Give caregiver 2 ORS packets to take home.** Advise to give as much as the child wants, but at least 1/2 cup ORS solution after each loose stool. ☐ **Give zinc supplement.** Give 1 dose daily for 10 days: Age 2 months up to 6 months—1/2 tablet (total 5 tabs) Age 6 months up to 5 years—1 tablet (total 10 tabs) Help caregiver to give first dose now.

A 10-day treatment with zinc supplements helps to prevent diarrhoea for the next three months.

In some countries, zinc supplements come in a 10-tablet blister pack. One blister pack is enough for the full treatment of a child age 6 months up to 5 years.

Cut the packet in half to give 5 tablets to the child age 2 months up to 6 months. (See the example.)

Finally, tick [✓] the treatment you gave in the diarrhoea box on the recording form (☐ Give ORS and ☐ Give zinc supplement, and the correct dose). The form is a record of the treatment, as well as a guide for making decisions.

☐ *If fever*

Many children become sick with fever. You can identify fever by touch. Fever in a sick child, however, is not always present. Therefore, also ask the caregiver and accept the caregiver's report of fever now or in the last three days.

Often fever is a sign of malaria. Malaria is the most common cause of childhood deaths in some communities. Therefore, it is important to treat children who have malaria with an antimalarial.

The antimalarial medicine should not be given to a child who does not need it. Use a rapid diagnostic test (RDT) to determine whether a child with fever has malaria (for *falciparum* malaria). The test can be done in the community. The fever box (below) on the recording form reminds you to do the RDT before you treat the child for malaria.

☐ If **Fever** (less than 7 days)	☐ **Do a rapid diagnostic test (RDT):** __Positive __Negative ☐ **If RDT is positive, give oral antimalarial LA (Artemether-Lumefantrine)** **Give twice daily for 3 days:** ☐ Age 2 months up to 5 months— Not recommended ☐ Age 5 months up to 3 years—1 tablet (total 6 tabs) ☐ Age 3 years up to 5 years—2 tablets (total 12 tabs) Help caregiver give first dose now. Advise to give 2nd dose after 8 hours, and to give dose twice daily for 2 more days.

Demonstration: Do a rapid diagnostic test for malaria

Your facilitator will demonstrate the steps to do a rapid diagnostic test (RDT) in a falciparum. As you follow the demonstration, read the summary of the steps in the section that follows. If you use a different RDT in your area, your facilitator will demonstrate using the locally available kit.

[Note: If there is a video available to demonstrate the use of the RDT you use locally, it may be used instead of this demonstration by your facilitator.]

☐ Do a rapid diagnostic test (RDT)[1]

Organize the supplies

First, collect the supplies for doing the RDT (see below). Organize a table area to keep all supplies ready for use.

For each child with fever, collect these supplies for the RDT:

1. NEW unopened **test packet**
2. NEW unopened **spirit (alcohol) swab**
3. NEW unopened **lancet**
4. New pair of **disposable gloves**
5. **Buffer**
6. **Timer** (up to at least 15 minutes)
7. **Sharps box**
8. **Non-sharps waste container (no photo)**

1. Test packet

2. Spirit (alcohol) swab

4. Disposable gloves

3. Lancet

5. Buffer

6. Timer

7. Sharps box

Perform the test

[1] The instructions with diagrams, here and in Annex A, are taken from *How to use a rapid diagnostic test (RDT): A guide for training at a village and clinic level* (2006). The Quality Assurance Project (QAP) and the World Health Organization (WHO). Bethesda, MD, and Geneva, Switzerland. The national malaria programme will substitute the instructions for the locally used test kit, if different.

1. **Check the expiry date of the packet.**

   The expiry date marked on the test package must be after today's date to be sure that the test materials will be effective.

2. **Put on the gloves. Use new gloves for each child.**

3. **Open the test packet and remove the test items: test, loop, and desiccant sachet.**

   The desiccant sachet is not needed for the test. It protects the test materials from humidity in the packet. Throw it away in a non-sharps waste container.

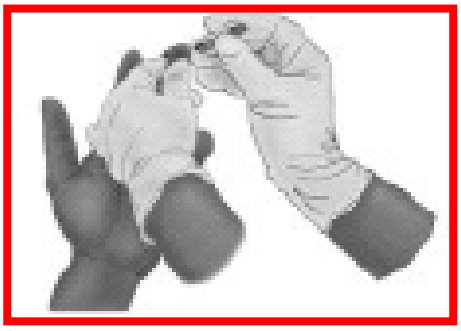
4. **Write the child's name on the test.**

5. **Open the spirit swab. Use the spirit swab to clean the child's fourth finger (ring finger) on the left hand** (or, if the child is left-handed, clean the fourth finger on the right hand).

   Then, allow the finger to dry in the air. Do not blow on it, or you will contaminate it again.

6. **Open the lancet. Prick the child's fourth finger—the one you cleaned—to get a drop of blood.** Prick towards the side of the ball of the finger, where it will be less painful than on the tip.

   Then, turn the child's arm so the palm is facing downward. Squeeze the pricked finger to form a drop of blood.



7. **Discard the lancet *immediately* in the sharps box.**

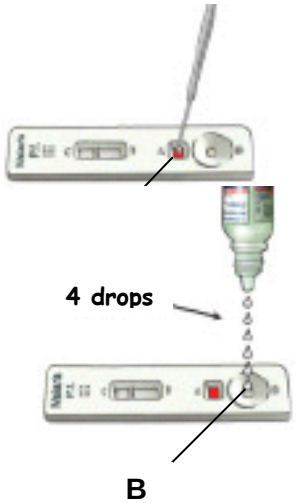
   Do not set the lancet down. There is an increased risk of poking yourself (with contamination by the blood) when you try to pick up the lancet later.

8. **Use the loop in the test kit to collect the drop of blood.**

9. **Use the loop to put the drop of blood into the square hole marked A.**

10. **Discard the loop in the non-sharps box.**

11. **Put 4 drops of the buffer into the round hole marked B.**

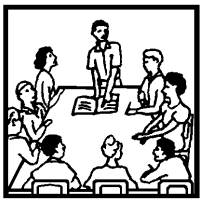


Record the time you added the buffer.

12. **Wait 20 minutes after adding the buffer.**

    After 20 minutes the red blood will drain from the square hole **A.**

Note: The waiting time before reading the results may differ according to the type of RDT used in each country.



Exercise: Do an RDT

Your facilitator will divide the participants into groups of two or three participants to practice doing an RDT.

1. **Organize the supplies.** From the table display, take a set of supplies for performing the tests—one for each participant in your group. Lay them out in order of their use.

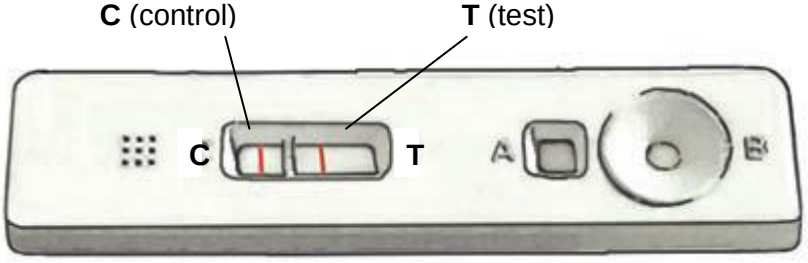
2. **Perform the test.** Do a rapid diagnostic test on each other. Use the job aid in Annex A to guide the test.

   A facilitator will observe to ensure that the test is done correctly and the safety procedures are followed.

   When you add the buffer, write the time on a piece of paper. Keep the test until later, when you will read the results.

Read the test results

13. **Read and interpret the results in the C (control) and T (test) windows.**



14. How to read and interpret the results:

Result	Decide	Comment
INVALID test: **No line in control window C.**	Repeat the test with a new unopened test kit	Control window C must *always* have a red line. If it does not, the test is damaged. The results are INVALID.
POSITIVE: **Red line in control window C AND** **Red line in test window T.** See the example in above test.	Child has **MALARIA**	The test is POSITIVE even if the red line in test window T is faint.
NEGATIVE: **Red line in control window C AND** **NO red line in test window T.**	Child has **NO MALARIA**	To confirm that the test is NEGATIVE, be sure to wait the full 15 minutes after adding the buffer.

15. Dispose of the gloves, spirit swab, desiccant sachet, and packaging in a non-sharps waste container. Wash your hands with soap and water.

Record the test results on the recording form. Tick [✓] the results of the test for malaria, __Positive or __Negative, in the fever box on the back of the recording form

Then dispose of the test in a non-sharps garbage container.

Each test can be used only once. For the safety of the child, start with a new unopened test packet, spirit (alcohol) swab, lancet, and disposable gloves. While doing the test and disposing of used items, prevent the possibility that one child's blood will be passed to yourself or to another child.

Exercise: Read the RDT

Part 1. Read the result of the demonstration test

The results of the test done during the demonstration should now be ready. Your facilitator will ask you to read the results of the demonstration test. Remember to always check first whether the test is valid.

Tick [✓] the result here (do not share your answer with others):

Invalid__ Positive__ Negative__

The facilitator will then discuss the results. Be ready to explain your decision. What do the results mean?

Part 2. Read the result of the test you completed

If 15 minutes have passed since you added the buffer to the test you gave your partner, then read the results of the test: Tick [✓] the result here: Invalid__ Positive__ Negative__

Discuss the results with the facilitator.

mRDT video exercises

Exercise: 1

You will watch the video and indicate using a Tick [✓] the result (do not share your answer with others): Invalid__ Positive__ Negative__.

For test number 1-5, you will be shown the correct answer after each test. For test number 6-10 you will be shown the correct answers at the end of the exercise.

Record [✓] the results here

Test number: 1	Invalid___	Positive___	Negative___
Test number: 2	Invalid___	Positive___	Negative___
Test number: 3	Invalid___	Positive___	Negative___
Test number: 4	Invalid___	Positive___	Negative___
Test number: 5	Invalid___	Positive___	Negative___

Record [✓] the results here

Test number: 6	Invalid___	Positive___	Negative___
Test number: 7	Invalid___	Positive___	Negative___
Test number: 8	Invalid___	Positive___	Negative___
Test number: 9	Invalid___	Positive___	Negative___
Test number: 10	Invalid___	Positive___	Negative___

☐ If RDT is positive, give oral antimalarial LA

If the rapid diagnostic test results are positive for malaria, your ability to start treatment quickly with an antimalarial medicine can save the child's life.

The malaria programme recommends the oral antimalarial LA. It combines medicines that together are currently effective against malaria in many communities.[1] Many countries provide pre-packaged LA for two age groups of children.

Before you give a child an antimalarial, **check the expiration date** on the package. Do not use an antimalarial that has expired.

Refer to the fever box below, which is also on the recording form.

☐ If **Fever** (less than 7 days) in a malaria area	☐ **Do a rapid diagnostic test (RDT):** __Positive __Negative ☐ **If RDT is positive, give oral antimalarial LA (Lumefantrine - Artemether)** **Give twice daily for 3 days:** ☐ Age 2 months up to 5 months – Not recommended ☐ Age 5 months up to 3 years—1 tablet (total 6 tabs) ☐ Age 3 years up to 5 years—2 tablets (total 12 tabs) Help caregiver give first dose now. Advise to give 2nd dose after 8 hours, and to give dose twice daily for 2 more days.

[1] The effectiveness of an antimalarial in acting against malaria can be lost, sometimes quite quickly. The malaria programme responds with new guidelines when an antimalarial is no longer effective. Many malaria programs now distribute ACT (an Artemisinin-based Combination Therapy) for treating *falciparum* malaria. As this manual cannot present all formulations, the one discussed here is based on an antimalarial that combines Artemether (20 mg) and Lumefantrine (120 mg). Your malaria programme will adapt these guidelines to current policies and antimalarials available for use in community settings.

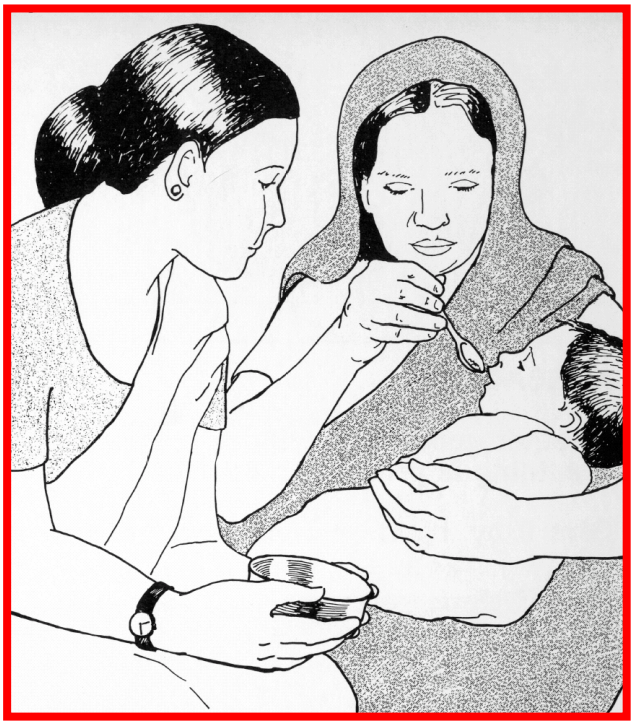
You do not have to memorize the doses. As with zinc and other treatments, refer to the box on the recording form. Tick [✓] the treatment and dose you give for malaria in the fever box.

Ask the caregiver for any questions or concerns she may have, and answer them. The caregiver should give the child the antimalarial the same way at home.

Before the caregiver leaves, ask the caregiver to repeat the instructions. Mark the dose on the packet to help the caregiver remember.

Help the caregiver give the first dose of a medicine. If the child spits up the medicine, help the caregiver use the spoon to gather up the medicine and try to give it again.

If the child spits up the entire dose, give the child another full dose. If the child is unable to take the medicine, refer the child to the health facility.



Many fevers are due to illnesses that go away within a few days. If the child has had fever for <u>less than 7 days</u> and the results of the RDT are negative, or the child lives in a non-malaria area, then ask to see the child in 3 days for a follow-up visit. Also advise the caregiver to bring the child back right away if the child becomes sicker.

If the child is not better when you see the child during the follow-up visit, refer the child to a health facility.

Give Paracetamol

A child with malaria should also be given paracetamol. Paracetamol lowers fever and reduces pain.

☐**Give Paracetamol**. Give 4 times a day for 3 days

- ☐ Age 5 months up to 3 years - ¼ tablet (total 3 tabs)
- ☐ Age 3 years up to 5 years – ½ tablet (total 6 tabs)

If a child has high fever, give one dose of paracetamol in clinic.

If the child has malaria, give the caregiver enough paracetamol for 3 days. Tell the caregiver to give one dose every 6 hours until fever or pain is gone.

Tick [✓] the treatment you give for fever in the fever box.

Exercise: Decide on the dose of an antimalarial to give a child

Your facilitator will give you a card with the name and age of a child, from the list below. The child has fever (less than 7 days with no danger sign) and lives in a malaria area. The results of the RDT are **positive** for malaria, and the child will be treated at home. Complete the information for your child in the table below.

The facilitator will also give you blister packs of tablets of the antimalarial AL. Demonstrate the dosage using the tablets. Refer to the box on the treatment of fever on the recording form to guide your answers.

1. How many tablets should the child take in **a single dose? How many times a day? For how many days?**
2. Count out the tablets for the child's full treatment. (If the tablets are in a blister pack, do not remove them from the pack.) **How many tablets totally should the child take?**
3. Based on the time when the child received the first dose, **what time should the caregiver give the child the next dose?**

Raise your hand when you have finished. The facilitator will check your decisions, and then will give you a card for another child.

Child with fever and positive RDT result for malaria	Age	How many tablets are in a single dose?	How many times a day?	For how many days?	How many tablets totally?	First dose was given at:	What time to give next dose?
1. Carlos	2 years					8:00	
2. Ahmed	4 and a half years					14:00	
3. Jan	3 months					now	
4. Anita	8 months					10:00	
5. Peter	5 months					16:00	

☐ Advise caregiver on use of Long Lasting Insecticide Treated Nets (LLINs)

Children under 5 years (and pregnant women) are particularly at risk of malaria. They should sleep under an ITN that has been treated with an insecticide to repel and kill mosquitoes.

The mosquitoes that carry the malaria parasite come out to bite at night. Without the protection of ITNs, children will get malaria repeatedly. They are at great risk of dying.

Types of insecticide-treated nets (ITNs).

- **The recommended net is now a long-lasting insecticidal net (LLIN).**

☐ *If red eye*

Red eye may be a sign of local infection of the eye (conjunctivitis). A child with red eye may have difficulties in seeing. If untreated, red eye may lead to blindness – Give children with red eyes an antibiotic eye ointment.

☐ Give an antibiotic eye ointment

Check the expiry date on the eye ointment tube. Do not use it if the drug has expired.

Always wash hands before and after applying the ointment

Clean the child's eyes immediately before applying the tetracycline eye ointment.

Then apply tetracycline ointment in both eyes 3 times daily (in the morning, at mid-day and in the evening).

The dose is about the size of a grain of rice.

Squeeze the dose of tetracycline (or chloramphenicol) eye ointment onto both lower eyelids.

Treat for **three** days. Do not use other eye ointments or drops, or put anything else in the eye

Teach the caregiver to apply the antibiotic eye ointment.

Tell caregiver that treatment should be applied onto both eyes to prevent damage to the eyes.

Also tell the caregiver that the ointment will slightly sting the child's eye. Below is a box (from the recording form) showing treatment for red eye:

☐ **If red eye**	☐ **Apply antibiotic eye ointment.** Squeeze the size of a grain of rice on each of the inner lower eyelids, three times a day for 3 days

☐ *If cough with fast breathing*

Cough with fast breathing is a sign of pneumonia. The child with cough and fast breathing must have an antibiotic or the child will die. With good care, families can treat a child with cough and fast breathing—with no chest in drawing or other danger sign—at home with an antibiotic (Amoxicillin).

☐ Give oral Amoxicillin

A child with cough and fast breathing needs an antibiotic. An antibiotic, such as Amoxicillin, is in your medicine kit. It may be in the form of a tablet. Or it may be a suspension in a bottle to mix with water to make syrup.

Check the expiration date on the Amoxicillin package. Do not use Amoxicillin that has expired.

The instructions here are for Amoxicillin in the form of an adult 250 mg tablet. *NB: If you have a different antibiotic in your medicine kit, the national programme will adapt these instructions.*

☐ If **Cough with Fast Breathing**	☐ **Give oral antibiotic** (Amoxicillin—250 mg). Give twice daily for 5 days: ☐ Age 2 months up to 12 months— 1 tablet (total 10tabs) ☐ Age 12 months up to 5 years—2 tablet (total 20 tabs) Help caregiver give first dose now.

Look in the box above (from the recording form). **What is the dose for a child age 2 months up to 12 months?**

- One adult tablet of Amoxicillin
- Twice daily (morning and night)
- For 5 days

You will give the caregiver a supply of 10 tablets for the 5-day treatment for a child age 2 months up to 12 months.

What is the dose for a child age 12 months up to 5 years?

- Two adult tablets of Amoxicillin
- Twice daily (morning and night)
- For 5 days.

You will give the caregiver a supply of 20 tablets for the 5-day treatment for a child age 12 months up to 5 years.

Do not give medicine to a child who does not need it.

- Giving medicine to a child who does not need it will not help the child get well. An antibiotic, for example, does not cure a simple cough.
- Misused medicines can be harmful to the child.
- Misused medicines become ineffective. They lose their strength in fighting illness.
- Giving medicine to a child who does not need it is wasteful. It can mean that later the medicine is not there for that child or other children when they need it.

Emphasize that it is important to give the Amoxicillin for the full 5 days, even if the child feels better.

If the caregiver must give more than one medicine, review how to give each medicine to the child. Check the caregiver's understanding again.

Finally, advise the caregiver to keep all medicine out of reach of children. She should also store the medicine in a clean, dry place, free of mice and insects.

Exercise:
Decide on the dose of Amoxicillin to give a child

Your facilitator will give you a card with the name and age of a child, from the list below. The child has cough with fast breathing (with no danger sign) and will be treated at home. On the table below, write the dose of the antibiotic Amoxicillin to give the child. Complete the information for the child's treatment.

The facilitator will also give you Amoxicillin tablets. Demonstrate the dosage using the tablets. Refer to the box on the treatment of cough with fast breathing on the recording form to guide your answers.

1. How much should the child take in **a single dose? How many times a day? For how many days?**

2. Count out the tablets for the child's full treatment. (If the tablets are in a blister pack, do not remove them from the pack.) **How many tablets totally should the child take?**

Raise your hand when you have finished. The facilitator will check your decisions, and then will give you a card for another child.

Child with fast breathing	Age	How many tablets are in a single dose?	How many times a day?	For how many days?	How many tablets totally?
1. Carlos	2 years				
2. Ahmed	4 and a half years				
3. Jan	3 months				
4. Anita	8 months				
5. Peter	5 months				

☐ *For ALL children treated at home: Advise on home care*

Treatment with medicine is only one part of good care for the sick child. All sick children also need good home care to help them get well.

The box below (from the recording form) summarizes the advice on home care for a sick child.

☐ For **ALL children treated at home, advise on home care**	☐ **Advise the caregiver to give more fluids and continue feeding.** ☐ **Advise on when to return.** Go to nearest health facility or, if not possible, return immediately if child ☐ Cannot drink or feed ☐ Becomes sicker ☐ Has blood in the stool ☐ **Advise caregiver on use of a bed net (ITN).** ☐ **Follow up child in 3 days.**

☐ Advise to give more fluids and continue feeding

During illness a child loses fluid. For children who are exclusively breastfeeding, advise the mother to breastfeed more frequently, and for longer at each feed. This should be enough fluid, even when the weather is hot and dry.

For children who are exclusively breastfeeding, advise the mother to breastfeed more frequently, and for longer at each feed. This should be enough fluid, even when the weather is hot and dry.

For children who are not exclusively breastfed, give clean water and more fluid foods. Soup and rice water will help to replace the lost fluid during illness. The child with diarrhoea should also take ORS solution.

A child often loses an appetite during illness and has less interest in food. The caregiver might think that she should stop offering food until the child feels better.

Instead, advise the caregiver of a sick child to continue feeding. If the child is breastfed, continue breastfeeding.

For the child who is taking foods, advise the caregiver to offer the child's favourite nutritious foods. Do not force the child to eat. But take more time and offer food more often. Expect that the appetite will improve as the child gets better.

Unfortunately, children who are frequently sick can become malnourished. Being malnourished makes the child more at risk of serious illness. Advise the caregiver to continue to offer more foods, more frequently after the child is well. This will help the child catch up after the illness.

A child with cough may also have a sore throat. A sore throat is uncomfortable and can prevent the child from drinking and feeding well.

If the child is *not* exclusively breastfed, advise the caregiver to soothe the throat with a safe remedy. For example, give the child warm—not hot—water with honey.

Tell the caregiver not to give cough medicine to a child. Cough medicines are expensive. And they often contain ingredients that are harmful for children. Warm water with honey will be comforting. It will be all that the child needs.

If the child is exclusively breastfed, advise the caregiver to continue offering the breast. Do not give any throat or cough remedy. A child, even with a sore throat, will usually take the breast when offered.

☐ Advise on when to return

Advise the caregiver to go to the nearest health facility if the child becomes sicker. This means that the medicine is not working or the child has another problem. If she cannot get to the health facility, she should return to see you.

Emphasize that it is urgent to seek care immediately if the child:

- Cannot drink or feed
- Becomes sicker
- Has blood in the stool

Usually a caregiver will know when a child is improving or becoming sicker. Ask the caregiver what she will look for. A child may become weaker and very sleepy. A child with a cough may have difficulty in breathing. Make sure that the caregiver recognizes when the child is not getting better with home care.

If the caregiver sees signs that the child is getting sicker, she should take her child directly to the health facility. She should not delay. If this is not possible, she should return immediately to you, and you will assist the referral.

Check the vaccines the child received

Vaccines protect children from many illnesses. With vaccines, children no longer need to suffer and die from diphtheria, whooping cough, hepatitis, persistent diarrhoea, pneumonia, otitis media, meningitis or measles. A vaccine can protect against a life-long disability from polio.

Childhood vaccines

- BCG—tuberculosis vaccine
- OPV—oral polio vaccine
- IPV – Injectable Polio Vaccine
- Rota virus vaccine
- DPT- HepB + Hib (pentavalent)

DPT—combined diphtheria, pertussis (or whooping cough), and tetanus vaccine

- Hib—meningitis, pneumonia and other serious infections vaccine
- HepB—hepatitis B vaccine
- PCV
- Measles vaccine

4. CHECK VACCINES RECEIVED (tick ☐ vaccines completed) **Advise caregiver, if needed: WHEN and WHERE is the next vaccine to be given**

Age	Vaccine	Advice to the Caregiver
Birth	□■BCG □■OPV-0	
6 weeks	□■DPT-Hib + HepB 1 □■OPV-1 □■ PCV □■Rotavirus	
10 weeks	□■ DPT-Hib + HepB 2 □■OPV-2 □■ PCV □■Rotavirus	
14 weeks	□■ DPT -Hib + HepB 3 □■OPV-3 □■ PCV	
9 month 15 months	□■Measles 1 □ ■Measles 2	

The box above, on the recording form, lists the vaccines according to the recommended schedule. It lists the vaccines given at birth, and at age 6 weeks, 10 weeks, 14 weeks, 9 months and at 15 months.

Even if the child is sick and will be treated at home, give the needed vaccine at the first opportunity.

Reminder: A child may need to receive a set of vaccines to catch up on missed ones. If so, the child should wait 4 weeks before receiving the next, subsequent set of vaccines.

Follow up the sick child treated at home

☐ Follow up child in 3 days

All sick children sent home for treatment or basic home care need your attention. This is especially important for children who receive an antimalarial for malaria or an antibiotic for fast breathing, as well as ORS and zinc for diarrhoea. The follow-up visit is a chance to check whether the child is receiving the medicine correctly and is improving.

Set an appointment for the follow-up visit

Even if the child improves, ask the caregiver to bring the child back to see you in 3 days for a follow-up visit. Help the caregiver agree on the visit. Record the day you expect the follow-up visit on the back of the recording form (item 6). If a time is set—for example, at 9:00 in the morning—also record the time.

If the caregiver says that the family cannot bring the child to see you, it is important to find a way to see the child. If the family cannot come, perhaps a neighbour might be willing to bring the child to see you. **If not, you must go to visit the child at home, especially if you have given the child an antimalarial or antibiotic.**

During the follow-up visit

During the follow-up visit, ask about and look for the child's problems. Look for danger signs, and any new problems to treat.

Then, make sure that the child is receiving correct treatment. Find out if the caregiver is continuing to give the medicine. Remind her that she must give the daily dose of zinc, or the antibiotic, until the tablets are gone, even if the child is better. Also she must give the missing doses of the antimalarial if the 6 recommended doses were not yet completed.

If it is a new problem that you can treat, treat the child at home, and advise on good home care.

If you find that—in spite of treatment—the child has a danger sign, is getting sicker, or even is not getting better, refer the child urgently to the health facility. On the recording form, tick [✓] the appropriate note to indicate what you have found and your decision (item 7): **Child better, Child is not better,** or **Child has a danger sign**.

If the child is not better or now has a danger sign, write a referral note, and assist the referral to prevent delay.

If the child continues treatment at home, circle the next follow-up day. Ask the caregiver to bring the child back, for example, if you have found a new problem or you are concerned about whether the caregiver will finish the treatment with the oral medicine.

Remind the caregiver to bring the child back immediately if the child cannot drink or feed, becomes sicker, or has blood in the stool.

Record the treatments given and other actions

The recording form lists the treatments and home care advice for children treated at home. This list is a reminder of the important tasks to help the child get correct treatment at home. It also is a record. Tick [✓] the treatments given and other actions as you complete them.

Note: During practice in the classroom, hospital, or outpatient health facility, you may not be able to give a recommended treatment to a sick child.

If so, on the recording form ***tick [✓] all the treatments and other actions you would plan to give the child,*** if you saw the child in the community.

Exercise: Decide on and record the treatment and advice for a child at home

Jenna Odala, age 6 months, has visited the Health Surveillance Assistant.

1. Use the information on the child's recording form on the next page to complete the rest of the form.

    a. Decide whether Jenna has fast breathing.

    b. Identify danger signs, if any, and other signs.

2. Decide to refer or treat Jenna.

3. Decide on treatment.

    a. Tick [✓] the treatment you would give the child. Select the medicine to give, the dose, and how much to send home with the caregiver. Use your supply of medicine to demonstrate the treatment. *Note: The result of the RDT was positive.*

    b. Decide on the advice on home care to give the caregiver. Tick [✓] the advice.

    c. At birth, Jenna received her BCG and OPV vaccines. At six weeks, Jenna had her full series of vaccines, but since then she has not received any vaccines. Indicate on the form what vaccines Jenna received. In your community, when and where should she go to receive the vaccines?

    d. Indicate when the child should come back for a follow-up visit.

4. Do not complete item 7, the note on the follow-up visit that will happen later.

5. Make sure that you have recorded all the decisions on the recording form.

Ask the facilitator to check the recording form and the medicine you have selected to give the child. If there is time, the facilitator will give you a second recording form to complete

Sick Child Recording Form

(for community-based treatment of child age 2 months up to 5 years)

Date: 15/5/2015 (Day / Month / Year) **HSA:** Jane Manda

Child's First Name: Jenna **Surname** Odala **Age:** __Years/_6_Months **Boy** / **Girl**

Caregiver's name: Peter Odon **Relationship:** Mother / Father / Other: _____

Physical Address: Near Market Borehole **Village / TA:** Madala / Usipa

Identify problems

ASK and LOOK		Any DANGER SIGN?	SICK but NO Danger Sign?
ASK: What are the child's problems? If not reported, then ask to be sure. **YES,** sign present ➔ Tick ☑ **NO** sign ➔ Circle ■			
☑	■ Cough? If yes, for how long? 3 days	☐ Cough for 14 days or more	
☐	■ Diarrhoea (loose stools)? IF YES, for how long? _____days.	☐ Diarrhoea for 14 days or more	☐ Diarrhoea (less than 14 days AND no blood in stool)
	If yes, Blood in stool? ☐ ■	☐ Blood in stool	
☑	■ Fever (reported or now)? If yes, started 2 days ago.	☐ Fever for last 7 days	☐ Fever (less than 7 days)
☐	■ Convulsions?	☐ Convulsions	
☐	■ Difficulty drinking or feeding? IF YES, not able to drink or feed anything? ☐ ■	☐ Not able to drink or feed anything	
☑	■ Vomiting? If yes, vomits everything? ☐ ■	☐ Vomits everything	
☐	■ Red eyes? If yes, for how long _____days.	☐ Red eye for 4 days or more	☐ Red eye less than 4 days
☐	■ Difficulty in seeing? If Yes for how long _____days	☐ Visual problem	
☐	■ Any other problem I cannot treat (E.g. problem in breast feeding, injury)? See 5 If any OTHER PROBLEMS, refer.	☐ Other problem to refer:	
LOOK:			
☐	■ Chest in drawing? (FOR ALL CHILDREN)	☐ Chest in drawing	
☐	**IF COUGH, count breaths in 1 minute:** _45_____breaths per minute (bpm) ■ Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		☐ Fast breathing
☐	■ Very sleepy or unconscious?	☐ Very sleepy or unconscious	
☐	■ Palmar pallor	☐ Palmar pallor	
	For child 6 months up to 5 years, MUAC tape colour: Green	☐ Red on MUAC tape ☐ Yellow on MUAC tape	
☐	■ Swelling of both feet?	☐ Swelling of both feet	

Child's name: *Jenna Odala* **Age:** 6 Months

Refer or treat child

(tick treatments given and other actions)

Refer or treat child
(tick treatments given and other actions)

☐ If ANY Danger Sign, refer to health facility

☐ If NO Danger Sign, treat at home and advise caregiver

☐ If ANY Danger Sign, refer to health facility

☐ If NO Danger Sign, treat at home and advise careaiver

If any danger sign, **REFER URGENTLY to health facility:**

ASSIST REFERRAL to health facility:

☐**Explain why child needs to go to health facility.**

☐**FOR SICK CHILD WHO CAN DRINK, BEGIN TREATMENT:**

☐ If **Diarrhoea**	☐**Begin giving ORS solution** immediately.
☐ If **Fever AND** ☐**Convulsions or** ☐Very sleepy or unconscious or ☐Not able to drink or feed anything ☐Vomits everything ☐Palmar pallor --- If Fever AND danger signs other than the 5 above	☐**Give Rectal Artesunate suppository (100mg)** ☐Age 2months up to 3 years—1 suppository ☐Age 3 year up to 5 years— - 2 suppositories --- ☐Give first dose of oral antimalarial LA ☐Age up to 5 months – not recommended ☐Age 5 months up to 3 years— 1 tablet ☐Age 3 years up to 5 years – 2 tablets
☐ If **Chest in drawing**, or ☐ **Fast breathing and danger sign**	☐**Give first dose of oral antibiotic** (Amoxicillin adult tablet—250 mg) ☐Age 2 months up to 12 months— 1 tablet ☐Age 12 months up to 5 years— 2 tablet
If red eye for 4 days or more	☐ **Apply antibiotic eye ointment**

☐**For any sick child who can drink, advise to give fluids and continue feeding.**

☐**Advise to keep child warm, if child is NOT hot with fever.**

☐**Write a referral note.**

☐**Arrange transportation, and help solve other difficulties in referral. FOLLOW UP child on return at least once a week until child is well.**

If no danger sign,

TREAT at home and ADVISE on home care:

☐ If **Diarrhoea**	☐**Give ORS.** Help caregiver give child ORS solution in front of you until child is no longer thirsty. ☐**Give caregiver 2 ORS packets to take home.** Advise to give as much as child wants, but at least ½ cup ORS solution after each loose stool. ☐**Give zinc supplement.** Give 1 dose daily for 10 days: ☐Age 2 months up to 6 months – ½ tablet (total 5 tabs) ☐Age 6 months up to 5 years—1 tablet (total 10 tabs) Help caregiver to give first dose now.
☐ If **Fever**	☐**Do rapid diagnostic test (RDT).** **___Positive ___Negative** ☐If RDT is positive, give oral antimalarial LA Give twice daily for 3 days ☐Age up to 5 months —not recommended ☐Age 5 months up to 3 years—1 tablet (6 tablets) ☐Age 3 years up to 5 years—2 tablets (total 12 tabs) Help caregiver give first dose now and 2nd dose after 8 hours. Then give dose twice daily for 2 more days. ☐**Advise caregiver on use of an ITN** ☐**Give Paracetamol**. Give 4 times a day ☐ Age 5 months up to 3 years - ¼ tablet (total 3 tabs) ☐ Age 3 years up to 5 years – ½ tablet (total 6 tabs)
☐ If **Fast breathing**	☐**Give oral antibiotic** (Amoxicillin adult tablet—250 mg). Give twice daily for 5 days: ☐Age 2 months up to 12 months— 1 tablet (total 10 tabs) ☐Age 12 months up to 5 years—2 tablets (total 20 tabs) Help caregiver give first dose now.
☐ **If red eye**	☐ **Apply antibiotic eye ointment.** Squeeze the size of a grain of rice on each of the inner lower eyelids, 3 times a day for 3 days.
☐ For **ALL children treated at home, advise on home care**	☐**Advise caregiver to give more fluids and continue feeding.** ☐**Advise on when to return.** Go to nearest health facility or, if not possible, return immediately if child ☐ Cannot drink or feed ☐ Becomes sicker ☐ Has blood in the stool ☐**Follow up child in 3 days** (schedule appointment in item 6 below).

4. CHECK VACCINES RECEIVED(tick ☑ vaccines completed, circle ■ vaccines missed)

Age	**Vaccine**		**➔ Advise caregiver, if needed:**
Birth	☐ ■ BCG	☐ ■ OPV-0	**WHEN is the next vaccine to be given?** **WHERE?**
6 weeks*	☐ ■ DPT—Hib + HepB 1 ☐ ■PCV1 ☐ ■Rota1	☐ ■ OPV-1	
10 weeks*	☐ ■ DPT—Hib + HepB 2 ☐ ■PCV2 ☐ ■Rota2	☐ ■ OPV-2	
14 weeks*	☐ ■ DPT—Hib + HepB 3 ☐ ■PCV3	☐ ■ OPV-3	
9 months 15 months	☐ ■ Measles 1 ☐ ■ Measles 2		

*Keep an interval of 4 weeks between DPT-Hib + HepB and OPV doses. Do not give OPV 0 if the child is 14 days old or more

5. If any OTHER PROBLEM or condition I cannot treat, refer child to health facility, write referral note. (If diarrhoea, give ORS. Do not give antibiotic or antimalarial.)

Describe problem:_____**6. When to return for FOLLOW UP** (circle): Monday Tuesday Wednesday Thursday Friday Weekend

7. Note on follow up: ☐ Child better—continue to treat at home. Day of next follow up:_____.

☐ Child is not better—refer **URGENTLY** to health facility.

☐ Child has danger sign—refer **URGENTLY** to health facility.

Take-home messages for this section:

- In case of fever for less than 7 days, malaria should be confirmed using an RDT.
- Each medicine has its own dose. The dose depends on the child's age and size.
- All medicines have an expiration date, after which they may not be effective or could be harmful.
- The caregiver should give the first dose of treatment in your presence, and take home the correct amount of medicine to complete the child's treatment.
- Caregivers of all sick children should receive advice on home care and on when to return.
- All children should be vaccinated according to the national schedule.

If DANGER SIGN, refer urgently: Begin treatment and assist referral

By the end of this section, you will be able to:

- Decide on pre-referral treatments for children who have a danger sign or other problem needing referral to a health facility.
- Use the Sick Child Recording Form to guide decisions on how to treat the child who will be referred.
- Assist referral and write a referral note.
- Follow-up the child at home.

Begin treatment

A very sick child needs to start treatment right away. You will be able to start *pre-referral treatment* before the child leaves for the health facility. You will begin treating a child with a danger sign and diarrhoea or fever or fast breathing. Also, you will begin treating a child with chest in drawing, one of the danger signs.

The pre-referral treatment is the same as **the first dose** of the medicine. The first dose of the medicine will start to help the child on the way to the health facility. ORS, an antimalarial, and an antibiotic are in your drug box to use as pre-referral treatments.
Do not waste time doing rapid diagnostic test for malaria if a child has any danger sign.
If the child with **fever has:**
Convulsions, or is unusually sleepy or unconscious, or is vomiting everything or is not able to drink or feed anything and palmar pallor give rectal artesunate.

Doses for Rectal Artesunate:
2 months up to 3 years – 1 suppository (100 mg)
3 years up to 5 years – 2 suppositories (200 mg)

Administration of Rectal Artesunate for treatment of severe malaria at community level

What is rectal Artesunate

Rectal Artesunate are antimalarial medicines prepared specifically for insertion into the rectum. They usually take a bullet-shaped form and they dissolve after insertion into the rectum. Rectal Artesunate medications are administered when a patient is vomiting everything, unable to swallow, convulsions, very sleepy or unconscious and / or palmar pallor. Rectal Artesunate is therefore ideal at community level as it can be given to a sick child with danger signs (as pre-referral treatment) on the way to the health facility.

Precautions

Rectal medicines should not be taken orally. Only medications labelled as rectal preparations should be placed in the rectum. Rectal medication should not be given to children with rectal bleeding or with rectal prolapse i.e. where rectal tissue is protruding from the rectal opening/anus.

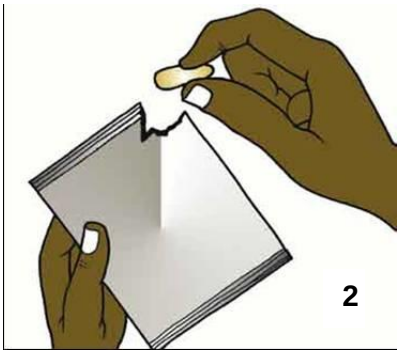
Procedures for administration of rectal artesunate

- Explain the procedure to the caregiver
- Caregiver should clean the anal area
- Wash your hands thoroughly with soap and water.
- Put on disposable gloves.
- If the suppository is soft, hold it under cool water for a few minutes to harden it before removing the wrapper
- Remove the suppository wrapper, if present

- Moisten the anal area with cotton swab soaked in clean cool water and cotton.
- Lie the child on his/her side with its lower leg straightened out and the upper leg bent forward toward his/her abdomen.
- Gently insert the suppository, pointed end first, with your finger until it passes the muscular sphincter of the rectum, about 1/2 to 1 inch in infants (If not inserted past this sphincter, the suppository may pop out.)
- Ask the caregiver or mother to hold buttocks of the child together for at least 30-60 seconds.
- The child should remain lying down for about 5 minutes to avoid having the suppository come out
- Discard used materials and wash your hands thoroughly with soap.

Pictures to demonstrate each step


1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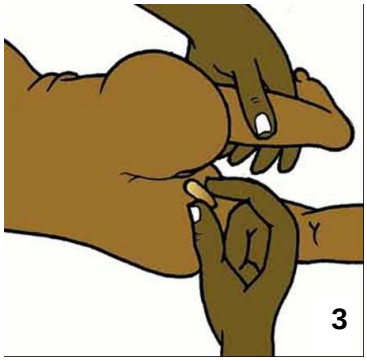

3


4

For the rest of danger signs, give first dose of oral antimalarial LA and refer. Note that a **zinc supplement is not a pre-referral treatment**. You do not need to give it before referral.]

Refer to the box on the Recording Form to guide you in selecting and giving a pre-referral treatment. See the examples on the next page.

You will *not* take time to do a rapid diagnostic test for malaria; however you will give a pre-referral dose of an antimalarial if the child has fever:

- A rectal artesunate suppository if the child with fever has convulsions, or is unusually sleepy or unconscious, or is vomiting everything or is not able to drink or feed anything.
- A first dose of the oral antimalarial LA if the child with fever has any other danger sign

The health worker at the health facility will determine whether the child has malaria. If the child has malaria, the health facility will be able to continue the most appropriate antimalarial treatment

The pre-referral treatment is the same as **the first dose** of the medicine. The first dose of the medicine will start to help the child on the way to the health facility. ORS, antimalarial LA, artesunate suppository and Amoxicillin are in your medicine kit to use as pre-referral treatments.

Remember: You cannot give oral medicine to a child who cannot drink.

If the child with fever is having convulsions, is unusually sleepy or unconscious, is vomiting everything, or in any other way unable to drink, do not give oral medicine. Give a rectal artesunate suppository and refer the child **urgently** to the health facility.

Then, tick [✓] the pre-referral treatment you would give the child.
Tick [✓] the dose for the pre-referral treatment

Note that the pre-referral dose for ORS solution is: As much as the child will take. Then, help the caregiver start giving ORS right away. Continue to give ORS on the way to the health facility.

Discussion: Select a pre-referral treatment for a child

For each child listed below:

1. Circle the sign or signs for which the child needs referral.
2. Decide which sign or signs need a pre-referral treatment.
3. Tick [✓] all the pre-referral treatments to give before the child leaves for the health facility.
4. Write the dose for each pre-referral treatment. Refer to the recording form to guide you. Be prepared to discuss your decisions. *[The facilitator may give you a child's card for the group discussion.]*

Circle the **signs to refer the child**	Tick [✓] **pre-referral treatment**	Write the **dose** for each pre-referral treatment
Leslie (4 year old boy) – Cough for 14 days Fever with positive RDT	☐ **Begin giving ORS solution** ☐ **Give first dose of oral antimalarial** ☐ **Give first dose of oral antibiotic** ☐ **Give first dose of rectal artesunate**	
Anita (2 year old girl) – Cough for 14 days, Diarrhoea No blood in stool	☐ **Begin giving ORS solution** ☐ **Give first dose of oral antimalarial** ☐ **Give first dose of oral antibiotic** ☐ **Give first dose of rectal artesunate**	
Kofi (3 year old boy) – Cough for 3 days, Chest in drawing, Very sleepy or unconscious	☐ **Begin giving ORS solution** ☐ **Give first dose of oral antimalarial** ☐ **Give first dose of oral antibiotic** ☐ **Give first dose of rectal artesunate**	
Thomas (3 year old boy) – Diarrhoea for 8 days, Fever for last 8 days, Vomits everything Red on MUAC tape	☐ **Begin giving ORS solution** ☐ **Give first dose of oral antimalarial** ☐ **Give first dose of oral antibiotic** ☐ **Give first dose of rectal artesunate**	
Nellie 7 months Diarrhoea for 2 days, palmar pallor with fever	☐ **Begin giving ORS solution** ☐ **Give first dose of oral antimalarial** ☐ **Give first dose of oral antibiotic** ☐ **Give first dose of rectal artesunate**	

Assist referral

A pre-referral treatment for fever or fast breathing is only the first dose. This is not enough to treat the child. The child with a danger sign must go to the health facility.

The recording form guides you through a list of tasks to assist the child's urgent referral to the health facility. As you complete each task to assist referral, tick [✓] each task on the recording form.

☐ Explain why the child needs to go to the health facility

Once you have given the first dose, the caregiver may think that you have the medicine to save the child. You must be firm. Explain that this medicine alone is not enough. The child must go to the health facility for treatment.

Going right away to the health facility may not be possible in some conditions. Perhaps the child is too sick. Perhaps travel at night is dangerous. Perhaps the rains have closed or blocked the roads.

Discuss with your facilitator what you can do when referral is not possible. Remember that your medicine will not be enough for the child. You must try to get a child with a danger sign to a health facility as soon as possible.

☐ For any sick child who can drink, advise to give fluids and continue feeding

If the child can drink and feed, advise the caregiver to continue to offer fluids and food to the child on the way to the health facility.

If the child is still breastfeeding, advise the mother to continue breastfeeding. Offer the breast more frequently and for a longer time at each feed.

If the child is not breastfeeding, advise the caregiver to offer water to drink and some easy-to-eat food.

If the child has diarrhoea, help the caregiver start giving ORS solution right away. Sometimes the ORS solution can help the child stop vomiting. Then the child can take other oral medicines.

☐ Advise to keep child warm, if child is NOT hot with fever

Some children have a hot body because of fever. The bodies of other sick children, however, may become too cold. How the caregiver covers the child's body will affect the body temperature. What to advise depends on whether the child has a fever and on the weather.

To keep the child warm, cover the child, including the child's head, hands, and feet with a blanket. Keep the child dry if it rains. If the weather is cold, advise the caregiver to put a cap on the child's head and hold the child close to her body.

If the child is hot with fever, covering the body too much will raise the body temperature. It may make the child sicker and increase the danger of convulsions.

A light cloth or blanket may be enough to cover the child with fever if the weather is warm. If the body becomes very hot, advise the caregiver to remove even the light blanket.

☐ Write a referral note

To prevent delay at the health facility, write a referral note to the nurse or other person who will first see the child. You may have a specific referral form to complete from your health facility.

A referral form or note should give:

1. The name and age of the child
2. A description of the child's problems
3. The reason for referral (list the danger signs or other reason you referred the child)
4. Treatment you have given
5. Your name
6. The date and time of referral

You also can make a simple referral note based on the Sick Child recording form. (An example of a referral note is in the next exercise.)

Tick [✓] each medicine and the dose you gave. It is very important for the health worker to know what medicine you have already given the child, and when. Send the referral note with the caregiver to the health facility.

☐ Arrange transportation, and help solve other difficulties in referral

☐ Follow up the child on return at least once a week until child is well

Exercise: Complete a recording form and write a referral note

You are referring Martha Banda to the health facility.

1. Complete Martha's **recording form** on the next two pages. Based on the signs of illness found:

    a. Decide which signs are Danger Signs or other signs of illness. Tick [✓] any DANGER SIGN and other signs of illness.
    b. Decide: Refer, or treat Martha at home
    c. Act as if you have seen Martha. Tick [✓] treatments given and other actions.
    d. You will refer Martha. Therefore, do not complete item 4 (vaccines), item 6 (follow up), or item 7 (note on follow up).

2. Then, use Martha's recording form to complete a **referral note** for Martha. Again, you are the referring HSA. Refer Martha to the nearest health facility where you live. Put today's date and time, where you are asked for them.

If there is time, the facilitator will give you a sample recording form for another child. Complete the recording form and a referral note for the child.

☐ Child has danger sign—refer **URGENTLY** to health facility.

Sick Child Recording Form

(for community-based treatment of child age 2 months up to 5 years)

Date: 17/5/2015 (Day / Month / Year) **HSA:** Towera Moyo

Child's First Name: Lucy **Surname** Phiri **Age:** __Years 8 Months **Boy** / (Girl)

Caregiver's name: Sophie Mkandawire **Relationship:** Mother / Father / (Other: Aunt)

Physical Address: Near Graveyard **Village /TA:** Kaphaizi /Mwase

1. Identify problems

ASK and LOOK	Any DANGER SIGN to refer?	SICK but NO Danger Sign?
ASK: What are the child's problems? If not reported, then ask to be sure: **YES**, sign present ➔ Tick ☑ **NO** sign ➔ Circle ■		
☑ ■ Cough? If yes, for how long? 2 days	☐ Cough for 14 days or more	
☐ ■ Diarrhoea (loose stools)? IF YES, for how long? 4 days. If yes, Blood in stool? ☐ ■	☐ Diarrhoea for 14 days or more ☐ Blood in stool	☐ Diarrhoea (less than 14 days AND no blood in stool)
☐ ■ Fever (reported or now)? If yes, started 3 days ago.	☐ Fever for last 7 days	☐ Fever (less than 7 days)
☐ ■ Convulsions?	☐ Convulsions	
☐ ■ Difficulty drinking or feeding? IF YES, not able to drink or feed anything? ☐ ■	☐ Not able to drink or feed anything	
☐ ■ Vomiting? If yes, vomits everything? ☐ ■	☐ Vomits everything	
☑ ■ Red eyes? I f yes, for how long 2 days.	☐ Red eye for 4 days or more	☐ Red eye (less than 4 days)
☐ ■ Difficulty in seeing? If Yes for how long _____days	☐ Visual problem	
☐ ■ Any other problem I cannot treat (E.g. problem in breast feeding, injury)? See 5 **If any OTHER PROBLEMS, refer.**	☐ Other problem to refer:	
LOOK:		
☐ ■ Chest in drawing? (FOR ALL CHILDREN)	☐ Chest in drawing	
IF COUGH, count breaths in 1 minute: ___ breaths per minute (bpm) ☐ ■ Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		☐ Fast breathing
☐ ■ Very sleepy or unconscious?	☐ Very sleepy or unconscious	
☑ ■ Palmar pallor	☐ Palmar pallor	
For child 6 months up to 5 years, MUAC tape colour: Red	☐ Red on MUAC tape ☐ Yellow on MUAC tape	
☐ ■ Swelling of both feet?	☐ Swelling of both feet	

Decide: Refer or treat child
(tick decision)

☐ If ANY Danger Sign, refer to health facility

☐ If NO Danger Sign, treat at home and advise careaiver

Child's name: _____ Age:_____

☐ If ANY Danger Sign, refer to health facility

☐ If NO Danger Sign, treat at home and advise caregiver

If any danger sign, **REFER URGENTLY to health facility:**

ASSIST REFERRAL to health facility:

☐Explain why child needs to go to health facility.

☐FOR SICK CHILD WHO CAN DRINK, BEGIN TREATMENT:

☐ If **Diarrhoea**	**☐Begin giving ORS solution** immediately.
☐ If **Fever AND** **☐Convulsions or** ☐Very sleepy or unconscious or ☐Not able to drink or feed anything ☐Vomits everything ☐Palmar pallor --- If Fever AND danger signs other than the 5 above	**☐Give Rectal Artesunate suppository (100mg)** ☐Age 2months up to 3 years—1 suppository ☐Age 3 year up to 5 years— - 2 suppositories --- ☐Give first dose of oral antimalarial LA ☐Age up to 5 months – not recommended ☐Age 5 months up to 3 years— 1 tablet ☐Age 3 years up to 5 years – 2 tablets
☐ If **Chest in drawing**, or ☐ **Fast breathing and danger sign**	**☐Give first dose of oral antibiotic** (Amoxicillin adult tablet—250 mg) ☐Age 2 months up to 12 months— 1 tablet ☐Age 12 months up to 5 years— 2 tablet
If red eye for 4 days or more	☐ **Apply antibiotic eye ointment**

☐For any sick child who can drink, advise to give fluids and continue feeding.

☐Advise to keep child warm, if child is NOT hot with fever.

☐Write a referral note.

☐Arrange transportation, and help solve other difficulties in referral. FOLLOW UP child on return at least once a week until child is well.

If no danger sign,

TREAT at home and ADVISE on home care:

☐ If **Diarrhoea**	**☐Give ORS.** Help caregiver give child ORS solution in front of you until child is no longer thirsty. **☐Give caregiver 2 ORS packets to take home.** Advise to give as much as child wants, but at least ½ cup ORS solution after each loose stool. **☐Give zinc supplement.** Give 1 dose daily for 10 days: ☐Age 2 months up to 6 months – ½ tablet (total 5 tabs) ☐Age 6 months up to 5 years—1 tablet (total 10 tabs) Help caregiver to give first dose now.
☐ If **Fever**	**☐Do rapid diagnostic test (RDT).** **___Positive ___Negative** ☐If RDT is positive, give oral antimalarial LA Give twice daily for 3 days ☐Age up to 5 months —not recommended ☐Age 5 months up to 3 years—1 tablet (6 tablets) ☐Age 3 years up to 5 years—2 tablets (total 12 tabs) Help caregiver give first dose now and 2nd dose after 8 hours. Then give dose twice daily for 2 more days. **☐Advise caregiver on use of an ITN** **☐Give Paracetamol**. Give 4 times a day ☐ Age 5 months up to 3 years - ¼ tablet (total 3 tabs) ☐ Age 3 years up to 5 years – ½ tablet (total 6 tabs)
☐ If **Fast breathing**	**☐Give oral antibiotic** (Amoxicillin adult tablet—250 mg). Give twice daily for 5 days: ☐Age 2 months up to 12 months— 1 tablet (total 10 tabs) ☐Age 12 months up to 5 years—2 tablet (total 20 tabs) Help caregiver give first dose now.
☐ If red eye	**☐ Apply antibiotic eye ointment.** Squeeze the size of a grain of rice on each of the inner lower eyelids, 3 times a day for 3 days.
☐ For **ALL children treated at home, advise on home care**	**☐Advise caregiver to give more fluids and continue feeding.** **☐Advise on when to return.** Go to nearest health facility or, if not possible, return immediately if child ☐ Cannot drink or feed ☐ Becomes sicker ☐ Has blood in the stool **☐Follow up child in 3 days** (schedule appointment in item 6 below).

4. CHECK VACCINES RECEIVED (tick ☐ vaccines completed, circle ■ vaccines missed)

:ks between DPT-Hib + HepB and OPV doses. Do not give OPV 0 if the child is 14 days old or more

Age	Vaccine		➔ **Advise caregiver, if needed:**
Birth	☐ ■ BCG	☐ ■ OPV-0	**WHEN is the next vaccine to be given?**
6 weeks*	☐ ■ DPT—Hib + HepB1 ☐ ■PCV1 ☐ ■Rota1	☐ ■ OPV-1	
10 weeks*	☐ ■ DPT—Hib + HepB 2 ☐ ■PCV2 ☐ ■Rota2	☐ ■ OPV-2	**WHERE?**
14 weeks*	☐ ■ DPT—Hib + HepB 3 ☐ ■PCV3	☐ ■ OPV-3	
9 months 15 months	☐ ■ Measles 1 ☐ ■ Measles 2		

5. **If any OTHER PROBLEM or condition I cannot treat, refer child to health facility, write referral note. (If diarrhoea, give ORS. Do not give antibiotic or antimalarial.) Describe problem:**

_____

6. **When to return for FOLLOW UP** (circle):
Monday Tuesday Wednesday Thursday
Friday Weekend

7. **Note on follow up:**
☐ Child better—continue to treat at home. Day of next follow up: _____.
☐ Child is not better—refer **URGENTLY** to health facility.
☐ Child has danger sign—refer **URGENTLY** to health facility.

Referral note from Health Surveillance Assistant: Sick Child

Child's First Name: _____ **Surname** _____ **Age:** __Years/__Months **Boy / Girl**

Caregiver's name: _____**Relationship:** Mother / Father / Other: _____

Physical Address:_____**Village / TA**_____

	The child has (tick ☐ sign, circle ■ no sign):	**Reason for referral:**	**Treatment given:**
☐	■ Cough? If yes, for how long? __ days	☐ Cough for 14 days or more	☐ Oral Rehydration Salts (ORS) solution for diarrhoea ☐ LA for fever ☐ Rectal Artesunate ☐ Antibiotic eye ointment ☐ Oral antibiotic Amoxicillin for chest in drawing or fast breathing
☐	■ Diarrhoea (loose stools)? ____days.	☐ Diarrhoea for 14 days or more	
☐	■ If diarrhoea with blood in stool?	☐ Blood in stool	
☐	■ Fever (reported or now)? ____ days.	☐ Fever for last 7 days	
☐	■ Convulsions?	☐ Convulsions	
☐	■ Difficulty drinking or feeding? If yes, not able to drink or feed anything? ☐ ■	☐ Not able to drink or feed anything	
☐	■ Vomiting? If yes, vomits everything? ☐ ■	☐ Vomits everything	
☐	■ Red eyes? If yes, for how long _____days. ■Difficulty in seeing? If Yes for how long __days	☐ Red eye for 4 days or more ☐ Visual problem	
☐	■ Chest in drawing?	☐ Chest In drawing	
☐	**IF COUGH, breaths in 1 minute:** _____bpm ■ Fast breathing: ☐ Age 2 months up to 12 months: 50 bpm or more ☐ Age 12 months up to 5 years: 40 bpm or more		
☐	■ Very sleepy or unconscious?	☐ Very sleepy or unconscious	
☐	■ Palmar pallor	☐ Palmar pallor	
	For child 6 months up to 5 years, MUAC Tape colour: _____	☐ Red on MUAC Tape ☐ Yellow on MUAC tape	
☐	■ Swelling of both feet?	☐ Swelling of both feet	

Any OTHER PROBLEM or reason referred:_____

Referred to (name of health facility): _____

Referred by (name of HSA):_____Date: _____ Time: _____

✂ ----------**Cut Here**----------

FEEDBACK FROM HEALTH FACILITY (Please give feedback)

Date : ……..……..……..……..…….

Name of the Child :……..**Age**……

Child's identified problem(s) : ……..……..……..……..…….

Treatments given and actions taken : ……..……..……..……..…….

Advice given and to be followed : ……..……..……..…….

Name of attending clinician : ……..……..……..…….

Signature : ……..……..……..…….

Name of Health Facility :……..

Take-home messages for this section:

- A very sick child needs to start treatment right away, thus in many cases you will give one dose before the child goes for referral.
- You cannot give oral medication to a child who cannot drink.
- You may need to help arrange transportation for referral, and to help solve other difficulties the caregiver may have.

TOOLS FOR REPORTING OF CASES AND DRUGS

FORM 1A

VILLAGE CLINICS MONTHLY REPORT FORM FOR UNDER FIVES

Village clinic_____ **Month**_____ **Year**_____

GVH_____ **HSA name**_____ **Date of reporting**_____

TA_____ **Do you stay in the catchment area**_____

District_____ **Nearest Health facility**_____

Village clinic catchment population_____

CM Cases report summary

Condition	New cases				Referrals with danger signs				Referrals made bacause of Drug stockout				Deaths (within 7 days of receiving treatment at a village clinic)			
	2-4 months	5 - 35 months	36-59 months	TOTAL	2-4 months	5 - 35 months	36-59 months	TOTAL	2-4 months	5 - 35 months	36-59 months	TOTAL	2-4 months	5 - 35 months	36-59 months	TOTAL
Fever Cases																
Confirmed Malaria cases with m RDT test (m RDT Positive)																
m RDT negative																
	2- 11 months		12- 59 months	TOTAL	2- 11 months		12- 59 months	TOTAL	2- 11 months		12- 59 months	TOTAL	2- 11 months		12- 59 months	TOTAL
Diarrhoea																
Fast Breathing																
Red eye																
Malnutrition (Red MUAC and Swelling of both feet)																
Palmar pallor																
Other conditions																
TOTALS																
Grand total (Total Fever + Total other cases					New Cases by gender	Males		Females			Invalid m RDT					

Supplies management Table

Name of Drug/ Supply	Unit of Issue	(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)
		Quantity on Hand at the beginning of the month	Quantity Dispensed	Losses	Adjustment		Quantity received	New stock on Hand	No. of days out of stock in the month	Did the Stock out last 7 continuous days or more (Y or N)
					(+)	(-)				
LA 6X1	Tablet									
LA 6X2	Tablet									
Rectal Artesunate	Supp									
RDT	Kits									
paracetamol	Tablets									
ORS	Sachet									
Zinc	Tablet									
Cotrimoxazole	Tablet									
Amoxicillin	Tablet									
Eye ointment	Tube									
Dispoasable gloves	Pairs									

How many times were you supervised in the month ____ How many times were you mentored in the month ____

Name of Approving officer_____ Signature_____

* Report should be sent to the H/Facility by 2nd of each month

* To be completed in duplicate, copy for the village clinic and another to the health facility

FORM 1B

VILLAGE CLINICS MONTHLY CONSOLIDATED REPORT - Health facility Level

Health Facility_____ **Month**_____ **Year**_____

District_____ **Total number of CCM HSAs staying in their catchment area**_____

Number of village clinics that have reported this months_____ **Total population in Hard to reach areas** _____

Total number of functional village clinics within the catchment area_____

CCM Cases report summary

Condition	New cases				Referrals with danger signs				Referrals made bacause of Drug stockout				Deaths (within 7 days of receiving treatment at a village clinic)			
	2-4 months	5 - 35 months	36-59 months	TOTAL	2-4 months	5 - 35 months	36-59 months	TOTAL	2-4 months	5 - 35 months	36-59 months	TOTAL	2-4 months	5 - 35 months	36-59 months	TOTAL
Fever Cases																
Confirmed Malaria cases with mRDT test (m RDT positive)																
m RDT negative																
	2- 11 months		12- 59 months	TOTAL	2- 11 months		12- 59 months	TOTAL	2- 11 months		12- 59 months	TOTAL	2- 11 months		12- 59 months	TOTAL
Diarrhoea																
Fast Breathing																
Red eye																
Malnutrition (Red MUAC or Swelling of both feet)																
Palmar pallor																
Other conditions																
TOTAL																

Grand total (Total Fever + Total other cases _____ **New cases by gender** **males** _____ **females** _____ **Invalid mRDT** _____

Supervision schedule for the month

n HSAs with Village clinics		**n village clinics planned visits**		**n village clinic visits done**		**n Hsas supervised in CCM**		**n HSAs who had their skills reinforced by case observation, case scenarios during supervision**

Supervision summary

Theme	Case management	Information-Decision-Treatment Consistency	Data quality	Logistics	Availability of drugs	Availability of supplies	Community involvement	Water and sanitation
HSAs who got correct scores on the following per checklist								

Supplies management Table

Name of Drug/ Supply	Unit of Issue	(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)	(I)
		Quantity on Hand at the beginning of the month	Quantity Dispensed	Losses	Adjustment		Quantity received	New stock on Hand	number of HSAs reporting any stockout	number of HSAs reporting a stockout lasting for 7 continuous days or more	number of HSA days stockout(addition of days stock out)
					(+)	(-)					
LA 6X1	Tablet										
LA 6X2	Tablet										
Rectal Artesunate	Supp										
RDT	Kits										
Paracetamol	Tablets										
ORS	Sachet										
Zinc	Tablet										
Cotrimoxazole	Tablet										
Amoxicillin	Tablet										
Eye ointment	Tube										
Disposable gloves	Pair										

Number of HSAs reported to have been supervised in the month _____ Number of HSAs reported to have been mentored in the month _____

Name of village clinics not reported

Name of Approving officer_____ Signature_____

* Report should be sent to the DHO by 5th of each month

* To be completed in duplicate, copy for the health facility and another copy should be sent to DHO

GUIDELINES FOR USE mRDT AND RECTAL ARTESUNATE AT COMMUNITY LEVEL

Learning Objectives

By the end of this session, the participants should be able to:

- Perform malaria RDT procedure correctly
- Practice blood-safety procedures
- Interpret RDT results correctly

Procedure for performing an RDT

I. Read product instructions carefully.

II. Prepare the materials needed.

- RDT (new unopened test device, alcohol swab, buffer)
- New, unopened lancet
- Cotton, alcohol (if swab not supplied with the RDT)
- Disposable gloves
- Timer or watch
- Box / container for used lancets / sharps and other infectious waste
- Pencil or marker for labelling the RDT
- Record book and pen for results

III. Preparations before doing the malaria test

- Take time to explain briefly to the patient what you are going to do.
- Check expiry date of the RDT(color of desiccant)
- DO NOT use expired or damaged RDT or if there is a sign of exposure to humidity!

IV. Steps for performing a malaria rapid diagnostic tests

- Wear disposable gloves.
- Open the RDT packet and take out cassette or device
- Label RDT with patient's name or ID before doing the test
- Clean the patient's finger with an alcohol swab (or cotton and alcohol) and let it dry before doing a finger prick.
- Discard used lancet immediately in the sharps box / container. DO NOT set down lancet before discarding it.
- Touch the surface of the blood with the collecting tube / device to get 5μL of blood (or any prescribed volume by manufacturer).
- DO NOT collect too much blood as this may affect the test result.
- Slowly deliver the blood from the collecting tube / device on to the sample well.
- Discard the used blood collecting tube / device immediately in the sharps box / container.
- Invert the buffer bottle vertically and slowly dispense the required number of drops into the buffer well.
- After doing the test, discard used gloves, swab / cotton, desiccant in a non-sharp waste container
- Note: If RDT was stored in the refrigerator, allow test to reach room temperature before opening and using it.

5. Waiting Time

- Wait for 20 minutes before reading the results.
- DO NOT read test before the prescribed time as this may give FALSE results.

6. **Reading the test results**

- **Negative result**
  - ✓ Only one line in the control window "C" AND no line in the test window.
- **Positive results**
  - ✓ Line in the control window "C" AND one or two line(s) in the test window.
  - ✓ Test is positive even if the line in the test window is faint.
- **Invalid results**
  - ✓ No line in the control window OR no lines at all.

7. Interpretation of results

Antigen may be detected even when the infecting parasites have died after treatment or due to persistence of gametocyte forms of the parasites which do not cause illness. Presence of other factors in the blood may occasionally produce false-positive result.

There may be few parasites to register a positive result. The RDT may have been damaged by heat, moisture and freezing that can reduce its sensitivity. Malaria may be due to another parasite species for which the RDT is not designed to.

Positive results

Line in the control window "C" AND one or two line(s) in the test window.
Test is positive even if the line in the test window is faint.

Negative results

Line in the control window "C" AND no line(s) in the test window

Invalid results

No line in the control window OR no lines at all.

8. Points to remember

- Record results in the register.
- Discard used RDTs in the non-sharp waste container.
- Malaria RDT is a common test with common expected limitations …
- Antigen may be detected even when the infecting parasites have died after treatment or due to persistence of gametocyte forms of the parasites which do not cause illness.
- Presence of other factors in the blood may occasionally produce false-positive result.
- There may be few parasites to register a positive result.
- The mRDT may have been damaged by heat, moisture and freezing that can reduce its sensitivity.
- Malaria may be due to another parasite species for which the mRDT is not designed to detect.

9. Blood safety practices

- Never re-use lancets or needles.
- Discard used lancets, blood collecting tubes / devices and other infectious wastes in specially labelled puncture-free containers with covers.
- Disinfectant or antibacterial liquid should always be available. Always wash hands with soap and clean water after handling infectious materials.
- If hand has a cut or open wound, cover it with a bandage or adhesive tape before doing the test.
- If accidentally punctured or injured by a used lancet –
  - ✓ Wash the affected part thoroughly with water and disinfectant.
  - ✓ Immediately report incident to the designated infection control officer or supervisor.

10. Points to remember when using a mRDT

- Read the product instruction carefully before performing the mRDT. Keep a copy of the product insert handy.
- Follow manufacturer / product instructions strictly.
- Do not use expired mRDTs.
- Do not use the RDT if the pouch / packet is punctured or damaged or if desiccant has changed colour.
- Do not mix up components of various products / lots.
- Open the RDT pouch just before using it. Avoid prolonged exposure to humidity during RDT preparation
- Store RDTs in shady, cool storage locations.
- If stored in refrigerator, let RDT reach room / ambient temperature before opening and using it.
- Read and interpret test results after or within the time specified by the manufacturer.
- Do not re-use RDTs.
- Always observe blood safety practices.

11. Storing, Transporting and Handling Malaria RDTs

a. Storage

- Ideally at 25 degrees C or below. For most RDTs the storing temperature varies between +2 and +30 degrees C
- Alternative: Simple storage and transport measure combined with good planning and practice of "good storage guidelines" can help maintain the quality of RDT.
- Clean, dry and disinfect storeroom regularly. Take precautions to prevent harmful insects and rodents from entering the storage area
- Store health commodities in a dry, well lit, well-ventilated storeroom—out of direct sunlight.
- Protect storeroom from water penetration
- Limit storage area access to authorized personnel. Lock up controlled substances.
- Keep fire safety equipment available, accessible, and functional. Train employees

b. Dispatching

- Always think First Expiry First Out(FEFO)
- Minimum 6 months shelf life for tests sent to HC

- Always notify the facility receiving the RDTs before sending, ensure that someone is available to receive
- Avoid sending RDTs to facilities on closure days (Friday, weekend, holyday…)
- Do not issue damaged or expired RDT

c. Transporting

- Avoid exposure to high temperature by:
  - ✓ Minimizing extended delays en route
  - ✓ Indicate on the carton that RDT are temperature sensitive
  - ✓ Load vehicle in the shade and park always out of sun
  - ✓ Protect from theft, loss, damage during transport
- If by foot, bicycle, or motorbike:
  - ✓ Leave early in the morning or evening
  - ✓ Always keep the box out of direct sunlight

Biomedical Waste management at Community level

Standard Operating Procedures for handling waste management at the village Clinic.

What are biomedical wastes?

These are solid or liquid wastes generated from medical activities suspected to contain infectious materials or which because of their physical or biological nature may be harmful to humans, animals, plants or the environment. These products may pose or present a threat of infection to humans, animals, crops, or natural ecosystem.

Solid or liquid waste which may present a threat of infection to humans include discarded sharps (medical items intended to cut or puncture skin, e.g. needles, lancets, scalpel blades), Blood, blood products (e.g. serum, plasma) and others.

Most of biomedical wastes are believed to be infectious by nature.

What are Infectious wastes?

These are wastes that contain microorganisms in sufficient quantity which could result in the multiplication and growth of those microorganisms in a host.

Handling of Biomedical wastes that will be used at community level in relation to use of malaria rapid diagnostic tests

- Wear appropriate personal protective equipment -PPE (gloves, disposable apron) when handling waste
- Always assume all Bio Medical Wastes are infectious

Sharps

- Only sharps and used test kits should go into sharps containers.
- Reusable Plastic Sharps container should be **located where the sharps are used**:
- Sharps containers should be replaced when necessary
- Empty sharps container before its ¾ full.
- Discard the lancet directly into a **puncture resistant container**
- The sharps container should only be opened when disposing off the sharps
- Dispose the sharps into a pit latrine
- After emptying the sharps container disinfect the container with 0.5% chlorine
- Keep the sharps container out of reach of children

Soft Items

- Used soft waste materials such as gloves, soaked cotton wool, swabs, aprons, tests pouch should be disposed in a bin with bin liner
- Burn soft items on daily basis in a rubbish pit.

Administration of Rectal Artesunate for treatment of severe malaria at community level

What is rectal Artesunate

Rectal Artesunate are antimalarial medicines prepared specifically for insertion into the rectum. They usually take a bullet-shaped form and they dissolve after insertion into the rectum. Rectal Artesunate medications are administered when a patient is vomiting everything, unable to swallow, or unconscious and or palmar pallor. Rectal Artesunate is therefore ideal at community level as they can be given to a sick child with danger signs (as pre-referral treatment) on the way to the health facility.

Precautions

Rectal medicines should not be taken orally. Only medications labelled as rectal preparations should be placed in the rectum. Rectal medication should not be given to children with rectal bleeding or with rectal prolapsed i.e. where rectal tissue is protruding from the rectal opening/anus.

How to prepare Rectal Artesunate

Before administering rectal artesunate ensure the following are observed;

- Ensure patient privacy.
- Explain the procedure to the guardian and ask her to support positioning the child.
- Ask the guardian if she has any questions.
- Ask the guarding to remove lower garments and underwear of the child.
- Position the patient on a couch on his or her left side, with the top knee bent and pulled slightly upward.
- If available, place a waterproof pad under the patient's hips to protect the beddings.
- Use a sheet (or Mothers wrapper) to cover all of the patients' body except the buttocks.

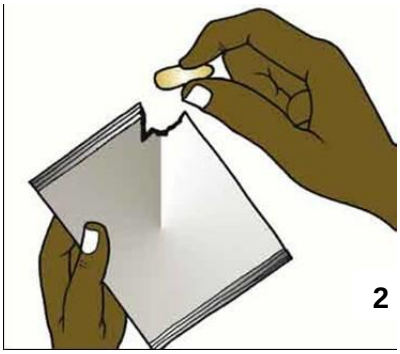
Procedures for administration of rectal artesunate

- Explain the procedure to the caregiver
- Caregiver should clean the anal area
- Wash your hands thoroughly with soap and water.
- Put on disposable gloves.
- If the suppository is soft, hold it under cool water for a few minutes to harden it before removing the wrapper
- Remove the suppository wrapper, if present
- Moist the anal and area with cotton swab soaked in clean cool water and cotton.
- Lay the child on his /her side with its lower leg straightened out and the upper leg bent forward toward his / her abdomen.

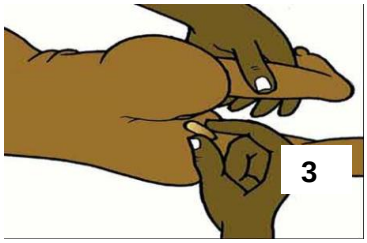
- Gently insert the suppository, pointed end first, with your finger until it passes the muscular sphincter of the rectum, about 1/2 to 1 inch in infants (If not inserted past this sphincter, the suppository may pop out.)
- Ask the caregiver or mother to hold buttocks of the child together for at least 30-60 seconds.
- The child should remain lying down for about 5 minutes to avoid having the suppository come out
- Discard used materials and wash your hands thoroughly with soap.

Pictures to demonstrate each step

1



2



3

4

List of CCM commodities

Type	Item	#	Comment
Medicines	Amoxicillin tablets	1000	
	LA 1X6 tablets	180	
	LA 2X6 tablets	360	
	ORS sachets	100	
	Zinc tablets	500	= 50 blister packets
	Paracetamol tablets	1000	
	Eye ointment tubes	50	
	Rectal artesunate	1	10 suppositories
Supplies	Drug box	1	
	Timer	1	
	Monthly Reports	2	
	Village Clinic Register	1	
	Sick Child Recording Form	1	Color, laminated
	Referral Slips	10	
	MUAC tape	1	
	Plastic pail	1	
	Basin	1	
	Cup	2	
	Spoon	2	
	mRDTs	2 boxes	50
	Gloves	1 box	
	Plastic Sharp container	1	
	Cotton	1 roll	Small
	Bin liners	30	
	Bin	1	
	Soap	1	
	Pail for hand washing	1	
	Macintosh	1	Half metre
	Disinfectant		For any spirages
	Aprons	20	
	Icepack	1	

How To Do the Rapid Test for Malaria

Collect:

a. **NEW unopened** test packet
b. **NEW unopened** spirit swab
c. **NEW unopened** lancet
d. **NEW** pair of disposable gloves
e. Buffer
f. Timer


Disposable gloves

Spirit swab

Lancet

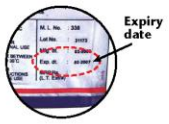

Timer


Buffer

Test packet

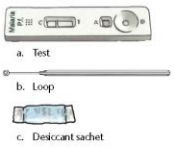
READ THESE INSTRUCTIONS CAREFULLY BEFORE YOU BEGIN.

1. Check the expiry date on the test packet.



2. Put on the gloves. Use new gloves for each patient

3. Open the packet and remove:



4. Write the patient's name on the test.

5. Open the alcohol swab. Grasp the 4th finger on the patient's left hand. Clean the finger with the spirit swab. Allow the finger to dry before pricking.

6. Open the lancet. Prick patient's finger to get a drop of blood.

7. Discard the lancet in the Sharps Box immediately after pricking finger. **Do not set the lancet down before discarding it.**

8. Use the loop to collect the drop of blood.

9. Use the loop to put the drop of blood into the square hole marked **"A."**

10. Discard the loop in the Sharps Box.

11. Put six (6) drops of buffer into the round hole marked **"B."**

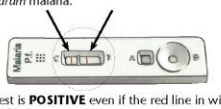
12. Wait **15 minutes** after adding buffer.

13. Read test results.
(**NOTE: Do Not** read the test sooner than **15 minutes** after adding the buffer. You may get **FALSE** results.)

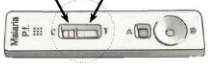
14. How to read the test results:

POSITIVE

One red line in window **"C" AND** one red line in window **"T"** means the patient **DOES** have *falciparum* malaria.

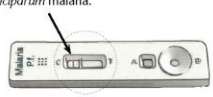


The test is **POSITIVE** even if the red line in window **"T"** is faint.



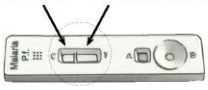
NEGATIVE

One red line in window **"C"** and **NO LINE** in window **"T"** means the patient **DOES NOT** have *falciparum* malaria.

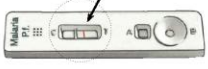


INVALID RESULT

NO LINE in window **"C"** means the test is damaged.



A line in window **"T"** and **NO LINE** in window **"C"** also means the test is damaged. Results are **INVALID**.



If no line appears in window "C," repeat the test using a **NEW unopened** test packet and a **NEW unopened** lancet.

15. Dispose of the gloves, spirit swab, desiccant sachet and packaging in a non-sharps waste container.

16. Record the test results in your CHW register. Dispose of cassette in non-sharps waste container

NOTE: Each test can be used **ONLY ONE TIME**. Do not try to use the test more than once.

TDR WORLD HEALTH ORGANIZATION USAID FROM THE AMERICAN PEOPLE QA QUALITY ASSURANCE PROJECT

iCCM REFRESHER TRAINING SCHEDULE

Day 1

08:00-08:15am Registration/Introductions
08:15-8:45am Pre Test
08:45:9:00am SituationAnalysis, Course objectives and Materials
9:00-9:30am Welcoming caregiver and child
9: 30-10:30amIdentifying problems
10:30am-11:00am Tea break
11:00-12:30pm look for signs of illness
12:30pm-1:30pm Lunch Break
1:30pm-2:30pm Refer or treat the child
2:30pm-3:00pm sick but no danger sign
3:00pm-3:15pm Break
3:15pm: 4:30pm Treat or refer children in the community
4:30pm: 5:00pm Facilitators Meeting

DAY 2

08:00-8:30am Recap
8:30-10am Give Oral medicine and advice the caregiver
10:00am 10-30am Break
10:30am- 12:00pmGive Oral medicine and advice the caregiver
12:00-1:00pm Lunch break
1:00pm-3:00pmMRDT Theory and Practice
3:0pm0-3:15pm Break
3:15pm-4:30pmMRDT Theory and Practice
4:30: 5:00pm Facilitators Meeting

Day 3

8:00-8:30am Recap
8:30am-11am Clinical Practice
11am 12:00noon Plenary
12:00 1:00pm Lunch break
1pm- 3:0pm0 if danger signs refer
3:00pm 3:15pm Break
3:15pm-4:30pm if danger signs refer
4:30: 5:00pm Facilitators Meeting

Day 4

8-00am-8:15am Recap
8:15am-8:45am Post test
8:45am_11:30amClinical Practices
11:30am-12:00am Plenary
12:00-1:00pm Lunch
1:00pm-2:00pm Form1A
2:00pm- 3:00pm Register
3:00pm -4:00pm Way forward