

## PROMOTING MALARIA PREVENTION THROUGH PRIMARY SCHOOLS

Communication Guide for Teachers

March 2016











**Cover photo:** School children from Baba Yara Primary School, Madina Mayehot. 2016 Studio 7 Kat Company Limited

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CHOOLS	<b>ANNING TER</b>
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	HEALTH AC

REMARKS															
FORUM Class Session, PTA Meeting, School Assembly Session, Recreation/Game Session															
NAME OF PERSON RESPONSIBLE															
HEALTH TOPIC															
ENDING															
WEEK	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15

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COMMUNICATION GUIDE FOR TEACHERS

**MARCH 2016** 

This Communication Guide for Teachers is produced by the PMI/VectorWorks Project in collaboration with the National Malaria Control Program of the Ghana Health Service and the Schools Health Program of the Ghana Education Service. This guide is made possible by the generous support of the American people through the US President's Malaria Initiative (PMI)/the United States Agency for International Development (USAID)/Centre for Disease Control (CDC). The contents are the responsibility of VectorWorks and do not necessarily reflect the views of PMI/USAID or the United States Government.

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## SPECIAL NOTE FOR TEACHERS

Teachers in all classes in Ghana's basic schools should note that they can play an important role in keeping their pupils healthy and active in all school activities. Malaria is a leading cause of absenteeism which in the long run affects the performance of the pupils and the school as a whole. Promoting mosquito net use can help keep pupils malaria-free.

Pupils who do not suffer from malaria are less likely to miss school. They will have more energy, allowing them to explore their world and learn better. The families of these healthy malaria-free pupils can save time and money on treatment and this will allow them to invest in the child's development needs. By being part of the net distribution activities of the Ghana Health Service/ National Malaria Control Program and the Ghana Education Service/ School Health Program, you have boldly shown that net use is important.

Keep your momentum; make net use promotion among your class pupils and the school at large a continuous activity. Help your pupils feel that sleeping under treated mosquito nets every night and all through the night is a habit they cannot live without.

Encourage the belief that nets create a cosy place for them to sleep and enjoy their sleep. Urge the pupils and their families to care for the net as if it was part of their own family.

Above all, teachers are to help pupils reach out to their families so that everyone stays protected and healthy. Ensuring pupils assume the role of teachers of malaria prevention at home, is a task every teacher must perform. This guide can help you do the following:

- Give out the right information about malaria, the way it is transmitted and how to prevent it.
- Teach essential skills such as how pupils can stay protected from malaria.
- Answer questions and correct mistaken beliefs about malaria and mosquito nets.
- Build pupils ability to communicate with their families and peers.
- Cultivate pupil's sense of civic duty by promoting their role in making malaria prevention a family and community responsibility.
- Increase self-confidence of pupils and their families by recognizing and celebrating their efforts in practicing malaria prevention behaviours.
- Invigorate and add diversity to everyday school activities.

### FIVE STEPS TO ACHIEVING Malaria-free Schools and Communities

Teachers should lead their pupils through the various behaviour change communication activities to successfully climb the following five critical steps to achieving malaria-free schools and communities.

The instructions at each step should be read from Step1 Knowledge, upwards to Step 2 Approval, Step 3 Intention, Step 4 Practice, and finally to Step5 Advocacy.



**Step 5: ADVOCACY Talk** about malaria prevention with other family members and friends.

#### **Step 4: PRACTICE**

**Take care** of their nets and sleep under them every night and all through the night; and

#### **Step 3: INTENTION**

**Plan** to keep their nets in good condition and sleep under these nets every night and all through the night;

#### **Step 2: APPROVAL**

Like the malaria prevention behaviours and appreciate their importance;

#### Step 1: KNOWLEDGE

The school child and family should: **Know** what to do to protect themselves from malaria;

# SECTION ONE

### The Disease Malaria

#### 1.01 WHAT IS MALARIA AND WHAT CAUSES IT?

Malaria is an infectious disease. It is caused by a parasite called *Plasmodium*, a small parasite that can be seen only with a microscope, not with the naked eye. It infects the red blood cells of the human body. It characteristically presents as a high-grade or acute fever. Anyone who has malaria may complain of headache, muscle pain, joint weakness, fever, chills and trembling. In most cases, one will just feel unwell or tired with loss of appetite.

Malaria can progress from a simple or uncomplicated form to a severe or complicated form.

#### **1.02 HOW IS MALARIA TRANSMITTED?**

Malaria is transmitted when an infective female anopheles mosquito bites a person and injects the malaria parasite *(sporozoites)* into the person's blood. The *sporozoites* travel through the blood stream to the liver, mature and eventually infect the human red blood cells. While in the red blood cells, the parasites develop and break up the red blood cells. This is when the fever begins as a major symptom of malaria.

When a female anopheles mosquito takes a blood meal from an infected human and ingests blood containing the parasites, the parasites travel to the anopheles mosquito's stomach and eventually invade the mosquito's salivary glands. When this female anopheles mosquito then bites a human, it transmits the parasites and sets another cycle of transmission in motion. The malaria-carrying anopheles mosquito usually bites at night and is the only one that can transmit malaria. One can get malaria only by being bitten by an infective

female anopheles mosquito and not by working in the sun, eating oily foods or eating unripe mangoes.

Unfortunately, the environmental conditions in most parts of Ghana favour the breeding of the anopheles mosquito all year round, resulting in transmission of malaria throughout the year.

These environmental conditions include stagnant waters around houses and other temporal waters that collect in ponds, potholes, dugout pits, hoof prints, puddles, rice fields, construction sites along roads and new settlements.

## SECTION TWO

### Symptoms of Malaria

## 2.01 WHAT ARE THE SYMPTOMS OF SIMPLE OR UNCOMPLICATED MALARIA?

Anyone with simple or uncomplicated malaria may exhibit the following symptoms:

- Fever
- Chills (feeling cold and rigor, i. e. shaking of the body)
- Headache, joint and muscle pains
- Tiredness
- Bitter taste and loss of appetite
- Some children may present with decreased activity, abdominal pain, vomiting and refusal to eat.

Malaria symptoms usually appear between 9 and 14 days after the bite of an infective female anopheles mosquito.

If simple or uncomplicated malaria is not treated promptly and correctly, it can progress to a severe or complicated form, which could result in death.

#### 2.02 WHAT ARE THE SYMPTOMS OF SEVERE MALARIA?

In children, the general danger signs indicating severe malaria are inability to eat or drink, excessive vomiting, convulsion, and loss of consciousness. The general symptoms of severe malaria include the following:

- Repeated vomiting and inability to retain oral medication
- Inability to eat or drink
- Failure to respond to initial treatment

- Difficulty in talking, sitting, upstanding or walking (i.e., severe weakness)
- Others have dark-coloured urine, convulsions, confusion or altered consciousness, yellow eyes and difficulty in breathing or rapid breathing.

## SECTION THREE

### **Impact of Malaria**

#### 3.01 HOW DOES MALARIA AFFECT US?

- In Ghana, malaria is a leading cause of death for children, especially those under 5 years of age. Most children who die of convulsions and anaemia (lack of blood) actually die of malaria.
- Malaria is the most common cause of convulsions and loss of consciousness among children, not bad spirits or witchcraft as some people believe.
- Malaria is a cause of children's absenteeism at school and affects children's intelligence.
- Seven percent of children who recover from cerebral malaria suffer disabling neurological or nerve damage, including mental disability, attention deficits, speech problems and epilepsy.
- Families lose a lot of money not only on treatment of the sick, but also on transport to health facilities. They also lose a lot of time meant for gainful work.
- Pregnant women and children under 5 years of age are most vulnerable to malaria. Malaria is most dangerous in these groups of people and can result in death.
- In pregnant women, malaria is a leading cause of anaemia, miscarriages, stillbirths, underweight babies and maternal deaths.

# SECTION FOUR

### **Prevention of Malaria –ITN Use**

#### 4.01 IS MALARIA PREVENTABLE?

Malaria is a preventable disease and we have the tools to prevent it and even treat it. The World Health Organisation asserts that insecticide-treated nets (ITNs), including the long-lasting type called long-lasting insecticidal nets (LLINs), are the most effective, efficient and cost-effective tool in preventing malaria.

#### 4.01 WHAT ARE ITNS?

ITNs are mosquito nets manufactured with insecticide incorporated in the fibre. The net can remain protective against mosquitoes after more than 20 washes.

#### 4.02 HOW DO ITNS PREVENT MALARIA?

ITNs provide a physical and chemical barrier between humans and the anopheles mosquito, thereby preventing the malaria parasite from being transmitted through the mosquito bite.

Any mosquito that comes into contact with the ITN are repelled, disabled or killed by the insecticide.

When ITNs are used by the majority of people in a community, they provide protection for all people in the community including those who do not sleep under the nets.

ITNs can also provide protection against other diseases such as elephantiasis, and they can kill lice, bed bugs and cockroaches.

## SECTION FIVE

### **Benefits of Preventing Malaria**

#### 5.01 BENEFITS FOR SCHOOL PUPILS

- Pupils will be healthy most of the time since malaria is the commonest cause of ill-health among them.
- Pupils will have sound sleep devoid of nuisance of mosquitoes.
- Pupils will be regular in school attendance and be attentive in class.
- Pupils will actively participate in school activities; learning in the classroom and outdoor games.

#### **5.02 BENEFITS FOR TEACHERS**

- Regular attendance at school by teachers and pupils will result in better performances.
- Active and continued participation of children in school activities makes teaching enjoyable and the results satisfying.
- Children will not sleep in class when no mosquitoes disturb their sleep at night. An active class is a joy to every teacher.

#### 5.03 BENEFITS FOR PARENTS/FAMILIES

- Sleeping under ITNs is more economical in the long run than daily buying of mosquito repellents.
- Families will save money on treatment of children who become sick of malaria hospital bills covering medication and other costs will be avoided.
- Parents will have peace of mind when their children remain healthy most of the time.
- The time families will spend caring for sick children could be spent on productive work.

- Parents will be happy with better school attendance and better performance of their children in school.
- Parents as well as their children will enjoy restful sleep devoid of disturbance of mosquitoes.

# SECTION SIX

### Malaria Prevention Key Messages for Key Audiences

#### 6.01 MESSAGES FOR SCHOOL PUPILS

- Malaria can be prevented. Take that important step of preventing it. Sleep under treated mosquito nets every night and all through the night.
- Only mosquitoes spread malaria. Avoid their bites and be free from malaria. Your treated mosquito net is your protector.
- Lower your net and sleep under it every night and all through the night to be free from malaria.
- Malaria is the cause of frequent absenteeism from school. Sleep under a treated mosquito net and be free from malaria.
- Malaria can make you miss your favourite lessons and games at school. Don't let the mosquito block your chances. The treated mosquito net is your weapon, sleep under it every night.
- School days lost to malaria can affect your examination results. Don't let it happen. The treated mosquito net is your effective protection against malaria.
- Your net must be washed when it is dirty and only with mild soap.
- Hang washed net in shade NOT in the sun since sunlight reduces effect of the insecticide.
- Have your net washed in a basin or a bucket and not in streams, ponds or rivers around you.
- The holes in your treated mosquito net must be sewn as soon as they appear. Don't allow them to multiply or increase in size. You will lose the
- power to protect yourself from mosquitoes.

#### 6.02 MESSAGES FOR TEACHERS

- Make yourself a model for your class pupils and fellow teachers by sleeping under an ITN every night and give testimony of its usefulness in preventing malaria to others.
- Your class should not forget about malaria prevention. Remind them at least once a week of the right steps to take: 1. Sleep under treated nets every night; 2. Wash the net with mild soap only when it's dirty; and 3. Sew up the holes when it gets torn.
- Be a staunch supporter of the school health club and use the club's activities to promote malaria prevention.
- Parent Teacher Association meetings are wonderful opportunities to share malaria prevention information with your pupil's parents. Be sure to be part of it any time it happens.
- Constantly remind your pupils and their parents to sleep under treated mosquito nets every night. Healthy and active children make teaching interesting, purposeful and fruitful.

#### 6.03 MESSAGES FOR PARENTS/FAMILIES

- You and your children will remain healthy if you sleep under treated mosquito nets every night.
- A net brought home by your child must be slept in to be effective in preventing malaria. It is not for the storage box.
- Be a model for all members of your household. Sleep under treated mosquito net every night and remain free of malaria.
- Remember to tuck the net under the bed for your children every night and also teach them how to do it for themselves.
- Prevent mosquitoes from giving you restless nights. Your treated mosquito net guarantees a restful night and a healthy productive day.
- Spread the new treated mosquito net in a shady place for 24 hours or more before hanging it the first time. This is an important rule.

- Wash the treated mosquito net only when it is dirty. Use mild soap such as key soap or sunlight soap.
- Hang washed net in shade NOT in the sun since sunlight reduces effect of the insecticide.
- Handle the net gently. Fold it up after using it.
- Protect your environment. Always remember to wash your treated mosquito net in a basin or a bucket, not in a stream, river or pond.
- Remember, when your family is free from malaria, you spend less time and money on ill health and you have more time and energy to work and earn more money.

#### 6.04 MESSAGES FOR COMMUNITY LEADERS

- Kill the mosquitoes before they attack your community. They are the cause of malaria. The treated mosquito net is your potent weapon to defeat malaria.
- A healthy community is a happy and productive community. Mosquitoes and the malaria they transmit is a threat to a healthy community. Use your net and stop the mosquitoes.
- Sleeping under a treated mosquito net every night and all through the night is the easiest and most potent way of fighting mosquitoes and preventing malaria.
- Ensure your community members respect the environment all the time by washing their treated mosquito nets in basins, bowls and buckets and NOT in your community stream or river.
- Be each other's keeper. Remind your neighbour to ensure all members of his/her household sleep under treated mosquito nets every night and all through the night to be safe from malaria.
- Patronize your community schools malaria prevention drama and other such public performances. They help to promote treated bed net use and care for improved malaria prevention.

# SECTION SEVEN

### **Activities for School Assembly Sessions**

Primary schools in Ghana hold various sessions when all pupils come together. These include the following:

- a) Morning school opening assembly;
- b) Evening school closing assembly;
- c) A school worship prayer assembly;
- d) An assembly session for special announcement from the District Assembly or any other state institution;
- e) Assembly sessions for health information dissemination.

Take advantage of these assembly sessions to promote malaria prevention and net use.

Things to do:

#### 1. Show of hands – Net use action

You can ask one or more questions such as;

- How many pupils slept under a net last night?
- How many pupils rolled up their nets this morning?
- How many pupils checked their nets for holes over the weekend?

Re-emphasize the benefits of preventing malaria.

Go to the section on benefits and reemphasize the benefits of preventing malaria to the pupils.

This can give you a sense of how many pupils claim to be using nets and caring for

them properly. It also helps pupils understanding of the importance the school puts on net use and care as well as the benefit to children, families and community at large for preventing malaria.

#### 2. Invite a guest

This person can be a health care provider CHN or CHO or the District Malaria Focal Person. Invite him or her to share the latest information on malaria with examples from the local area. Prepare relevant questions to pose to the guest and encourage pupils to ask questions as well.

#### 3. Perform a skit, dance or song

Teachers can encourage pupils to create a skit, dance or song and share it with class. Teachers and pupils can also perform together for the school. Pupils enjoy seeing their peers and teachers in a less serious role, making the activity and messages interesting and memorable.

Skit, song and dance contests are usually very popular and simple to organize. Teachers merely need to list the messages that the skit, dance or song should contain. These could be drawn from Section Six, on malaria prevention key messages for pupils, teachers, parents/families, and community leaders. Potential themes for these contests include:

- a) I love my bed net.
- b) I keep it neat and in good repair.
- c) When we all sleep under nets, we free our community from malaria.
- d) Malaria is bad news, prevent it by sleeping under your bed net every night.
- e) Insecticides in the net makes mosquitoes dance to their death.

Pupils can create skits, dances and songs individually or in groups and perform them to the whole class. The best one or two performances can compete against other classes. Songs, skits and dances should be chosen for their entertainment value and having the correct information about malaria.

# SECTION EIGHT

### **Activities for Classroom Sessions**

#### 1. Pick a Pupil to tell a Story

In class, invite a pupil to share how his or her family is preventing malaria. Ideally, the child's family uses nets every night or has repaired holes in their net recently. Ask the child to describe what the parents do to prevent malaria and the benefits they now experience. The idea is to recognize families for healthy behaviours and provide pupils with real-life examples of success in this area.

#### 2. Pick and Talk/Act Contest

Prepare a series of simple questions on malaria, net use, net care and repair, common misconceptions about malaria and mosquito nets etc. Have the questions written on pieces of paper and placed in a basket in front of the class. Pupils step out to pick a question, read it out and provide the answer. This can be done as a contest in which pupils who give correct responses win points for their groups or rows.

#### 3. Debates

Pupils in senior classes in the primary school will be asked to think deeply about what malaria could do to their community if not prevented and develop their exposition skills. Sample debate topics can include the following:

- a) Malaria is a serious challenge to development in our community.
- b) Net use should be made compulsory for all citizens.
- c) Those who fail to sleep under ITNs and as a result have malaria should be fined by the District Assembly.

#### 4. Compositions Writing

Encourage pupils to practice new grammar, vocabulary and writing techniques through essays about malaria. Some possible topics to consider are:

- a) Me and my bed net.
- b) How I can help my community become malaria free.
- c) Why I do not ever want to suffer from malaria.
- d) Malaria-free children will make our school a great one.

Chose the best compositions and have the writers present them to the class.

#### 5. Drawing Contests

In the upper primary classes pupils should be led during the World Malaria Day month of April or the rainy season when the breeding of mosquitoes is at its peak, to draw scenes that give meaning to their understanding of malaria and its prevention. Samples of scenes to be drawn are as follows:

- a) If malaria is a monster, how will it look like at work?
- b) What a family would look like if all members are suffering from malaria.
- c) How mosquitoes plan to attack and how they attack humans who fail to sleep under ITNs.
- d) A community or family engaged in activities that contribute to stopping the breeding of the anopheles mosquito.

Pupils should present their drawings to the class and also to their parents. The best drawings should be posted in the classroom or the head teacher's office. These can also be presented to parents and teachers at the Parent Teacher Association (PTA) meeting.

#### 6. "Avoid the Mosquito" Game

Draw three or four circles on the ground about five meters apart. The circles represent ITNs and are safe havens. Chose two pupils to be

"mosquitoes" to chase the other pupils. Every few minutes say, "its night time, avoid the mosquito!" The pupils have to run to a different circle, if pupils are inside the circle, they are safe from mosquitoes. Each pupil caught outside a net becomes a mosquito.

7. "The Fight Against Malaria. What Can We Do" Video show All schools will be supplied with a CD or Pen drive of the four and a half minutes video documentary on malaria with the above tittle. Teachers at a convenient time should screen this video to their classes. After children had watched the video, the following questions should be asked to promote discussion among them about malaria. This will help improve the children's knowledge about malaria, how to prevent it and what to do when one suspects he or she has malaria.

- a) What is Baraka's dream about his achievement in life?
- b) What happened to Baraka one night when he was asleep?
- c) Two weeks after the mosquito bite, what happened to Baraka?
- d) Where did Baraka's mum take him?
- e) What is the name of the medicine given to Baraka?
- f) How was Baraka advised to take the medicine?
- g) What can one tiny bite of mosquito do to many people?
- h) If Baraka did not go to hospital, what would have happened to him?
- i) What should Baraka and all other children do every night to avoid malaria?

# SECTION NINE

### **Activities for Community Level Events**

#### **Schools Drama Performances**

Dramas are a very entertaining and memorable way to share messages on health promotion especially malaria prevention among school pupils and the community at large. They also serve as a channel for involving community members in malaria prevention messages dissemination.

Drama scripts developed in 2014 have been distributed to all primary schools and teachers are expected to guide their pupils to rehearse and perform these dramas presented under the following titles:

- a) What causes malaria and how the disease is spread
- b) Signs and symptoms of malaria
- c) Effects of malaria
- d) LLIN Use and care
- e) Long lasting solution Prevention of malaria

Teachers working with school-based SHEP officers, cultural officers and head teachers should lead pupils in rehearsing and putting up performances during PTA meetings, school assembly, community festivals and other public events.

#### Malaria Images Stencil Tracing

This activity involves using the element of suspense to draw out community members, including parents and school children to participate in public discussion of malaria. A set of stencils prepared in advance with various malaria related images and figures are used in carrying out this activity. Peace Corps Volunteers stationed in various communities throughout the regions will take the lead in introducing this activity to schools and carrying it out in the communities.

As the stencil tracer (a teacher, school prefect or community member) gets on with the tracing of the figures, the community begins to gather to observe, guessing and chatting about what the final figure would look like. Finally, when that figure emerges, the assembled crowd cheers with fascination. This is then followed with discussion of the malaria related figure and the positive actions to take to avoid malaria. Parent Teacher Association leadership and community leaders should be involved in organising and carrying out this activity.

Sample questions to ask after the stencil image appears on the wall are as follows:

- a) What image do you see on the wall?
- b) Does this image represent anything about malaria?
- c) Mention and describe what the image reminds you of about malaria?
- d) Why is malaria not a friend to anyone of us?
- e) What should every school pupil do to prevent malaria?
- f) What should parents and other family members do to prevent malaria?
- g) What should our chief and or queen mother do to prevent malaria in our community?
- h) What are the typical signs of malaria?
- i) What should you do if you experience any sign of malaria?

Always remember sleeping under ITNs every night, and all through the night, provides the opportunity to enjoy peaceful sleep, free from the nuisance of mosquitoes and most importantly, free from malaria!

