Zika, dengue and chikungunya prevention
community module
Acknowledgments

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Through the 2016 declared outbreak of Zika, the bite of an infected Aedes Aegypti and Aedes Albopictus mosquito grew even more hazardous. These same Aedes mosquitoes that transmit Zika also transmit dengue, chikungunya and yellow fever, diseases that affect all segments of society but with particular impact on the poorest and most vulnerable. Diseases caused by the Aedes mosquitoes result in hundreds of thousands of deaths each year – deaths which are largely preventable by eliminating mosquito breeding sites and interrupting human-to-mosquito contact.

In the battle against diseases like Zika and dengue, knowledge is power. Climate change is shifting the distribution of mosquitoes and to new areas. Empowering communities is essential in reaching and protecting the most vulnerable individuals and households. Vector control programmes, community empowerment and awareness campaigns are proven strategies to reduce the burden of vector-borne diseases. Red Cross and Red Crescent volunteers can play a key role in community and school outreach activities for Zika, dengue and chikungunya prevention. These community-based activities need to be sustained to ensure long-lasting disease control.

The Zika, dengue and chikungunya prevention modules and toolkit were developed to initiate a long-term engagement with the communities at risk through awareness and health promotion materials. National Societies and organizations at community level can contribute to sustained improvement of sanitation, reduction of mosquito breeding sites and increased level of knowledge on how to protect the community from mosquito-borne diseases such as Zika, dengue and chikungunya.

It is our hope that these materials will start the necessary conversations with communities and school communities to recognise that prevention is the best weapon in the battle against the threats posed by Aedes mosquitoes. We invite all partners within and outside the Movement to adapt and use these materials to empower your communities with the knowledge, skills and behaviour necessary to reduce vector-borne disease transmission for healthier and happier communities.

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Introduction

The Zika, dengue and chikungunya prevention modules and toolkit

Community module

The Zika, dengue and chikungunya prevention community module is intended for volunteers teaching and coaching adults (ages 17+) about the transmission, symptoms, treatment and prevention methods to address Zika, dengue and chikungunya (ZDC). The community module is comprised of 5 topics which we advise teaching in sequential order for maximum effect. The included tools, talking points and activities allows volunteers to teach communities in an interactive way about how ZDC is transmitted, how to prevent mosquito bites and reduce mosquito populations through community action and social and behavior change techniques as well as what to do if a community thinks they may have contracted Zika, dengue or chikungunya. The materials also address stigma associated with ZDC and helps to set a supportive environment for preventing disease as a collective group through ongoing community action.

School/youth module

The Zika, dengue and chikungunya prevention school/youth module is intended for volunteers, educators, and peer educators teaching children from ages 7 - 16 in a school or youth club setting about the transmission, symptoms, treatment and prevention methods to address Zika, dengue and chikungunya (ZDC). The school/youth module is comprised of five topics which should be taught in sequential order. The included tools, talking points and activities allows children to learn in an interactive way about how ZDC is transmitted, how to prevent mosquito bites and reduce mosquito populations through collective school community action and social and behavior change techniques as well as what to do if a child suspects that s/he or a family member thinks they may have contracted Zika, dengue or chikungunya. The materials also address stigma associated with ZDC and help to set a supportive environment for preventing disease as a collective group through ongoing school community action.
The topic outline for both modules is:

**Topic 1** - Let’s learn about diseases spread by Aedes mosquitoes

**Topic 2** - Know the risks of Zika, dengue and chikungunya

**Topic 3** - Know where mosquitoes breed and live in the community

**Topic 4** - Preparing for and preventing Zika, dengue and chikungunya

**Topic 5** - Creating an action plan

**Toolkit**

The Zika, dengue and chikungunya prevention toolkit is intended to be used with the Zika, dengue and chikungunya prevention modules. The toolkit features full-colour imagery, interactive formats and games material to teach all audiences according to the methodology suggested in the module guides. All materials can be printed in colour or black/white and are of high resolution for those national societies wishing to enlarge and print posters and banners for other uses in their Zika, dengue and/or chikungunya prevention activities.

**Purpose**

The purpose of this module is to provide community members and Red Cross and Red Crescent volunteers with information on how the three diseases of Zika, dengue and chikungunya are transmitted and how they can be prevented. The module will help volunteers and communities understand what causes each disease, the symptoms and effects of these diseases on our bodies and how to prevent the spread of all three diseases.

**Audience**

This Zika, dengue and chikungunya (ZDC) prevention community module is for Red Cross and Red Crescent volunteers working with communities of adults to provide knowledge and skills in prevention methods and responses to Zika, dengue and chikungunya transmission. For communities younger than sixteen years of age, volunteers and peer educators can use the aligned ZDC prevention school/youth module.

This module guide is intended for use with the accompanying ZDC toolkit.

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Note:
Both the Aedes Aegypti and the Aedes Albopictus mosquitoes carry the viruses that cause Zika, dengue and chikungunya. Any reference to mosquitoes in this guide imply reference to one or both of these Aedes mosquitoes.
Let’s learn about diseases spread by Aedes mosquitoes
**Topic overview**

Aedes Aegypti and Aedes Albopictus mosquitoes carry diseases that they can pass on to humans. Three of those diseases are Zika, dengue and chikungunya. In this first topic, community members will explore the diseases spread by both the Aedes Aegypti and Aedes Albopictus mosquitoes and we’ll explain how to identify when someone has those diseases.

**Main learning points**

1. There are three viruses that a person can get from being bitten by an Aedes Aegypti or an Aedes Albopictus mosquito. They are the Zika virus, the dengue virus and the chikungunya virus.
2. There is no vaccine to protect yourself from Zika or chikungunya.
3. There is a new vaccine that will soon be released in some places for dengue.
4. When someone develops symptoms of any of the diseases, they should seek medical advice.
5. Resting, drinking fluids and taking paracetamol can reduce pain and help manage symptoms of these diseases.

A volunteer or community member can help to share information about the diseases with others so that all people know when they should seek medical care.

**Materials**

Mosquitoes poster
Transmission card
A healthy/happy person being bitten by two mosquitoes

Symptoms board (two pieces) and color-coded cards.

**Cut into individual cards.**
- Fever (all)
- Skin rash (all)
- Joint / muscle pain (all)
- Headache (all)
- Red swollen eyes / pinkeye (Zika)
- Extremely tired (dengue or chikungunya)
- Swollen glands (dengue)
- Nauseous or feel like you want to vomit (dengue or chikungunya)
- Some bleeding from the nose, gums (dengue)
- Stomach pain (dengue)
- Vomiting (dengue)
- Difficulty breathing (dengue)
- Pain behind the eyes (dengue)

Symptoms cards

Use sticky-tape to tape the two pieces of the board together into the Symptoms cards on the spot underneath the symptoms from which the symptoms belong to.

**Fever**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Skin rash**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Joint/muscle pain**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Headache**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Red swollen eyes / pinkeye (Zika)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Extremely tired (dengue or chikungunya)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Swollen glands (dengue)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Nauseous or feel like you want to vomit (dengue or chikungunya)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Some bleeding from the nose, gums (dengue)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Stomach pain (dengue)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Vomiting (dengue)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Difficulty breathing (dengue)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)

**Pain behind the eyes (dengue)**

- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
- Dengue, chikungunya and Zika (all)
Treatment card

A sad person looking sick and in bed – being treated with rest, water, paracetamol

Untreated disease board and cards

Cut into individual cards

Zika:
- Microcephaly
- Guillain-Barré

Dengue:
- Feel very sick
- Possible death

Chikungunya:
- Feel very sick
- Very painful

Microcephaly card

Pregnant woman card
Diseases spread by mosquitoes

Some mosquitoes carry diseases that they can pass on to humans. Humans can get these diseases when they are bitten by an infected mosquito.

Zika, dengue and chikungunya are all spread by female Aedes Aegypti and Aedes Albopictus mosquitoes. These mosquitoes mostly live in the tropics but if a person is bitten in a part of the world where there is Zika and then the person travels somewhere else, they carry the virus with them.

There is no vaccine to prevent a person from getting Zika or chikungunya. There is no cure for these diseases but they can be treated. To cure someone of a disease means that by giving them medical treatment, that person no longer has the disease anymore. Some diseases can be cured. Other diseases like Zika, dengue and chikungunya have no cure. The person must rely on their immune system to fight the infection, but treatment can help to manage the symptoms.

When a person has symptoms of Zika, dengue or chikungunya, they should seek medical care. A person may have Zika, dengue or chikungunya if they have two or more symptoms of the disease.
Zika virus

The Zika virus is not new but recently many people have been infected with Zika. Zika is now affecting people in new and potentially dangerous ways.

How can you tell if someone has the Zika virus?

(Show the Symptoms board and cards. As you explain each symptom, place the cards on the board in the appropriate spot. The cards for Fever, Skin rash, Headache; Joint/muscle pain should be placed under the “Dengue, chikungunya and Zika (all)” heading. The additional Zika symptom of Red swollen eyes should go under the “Zika (only)” heading on the board.)

(Show and place the orange-coded Zika cards)

A person may have Zika and may not feel much different than normal. But some people infected with Zika may have one or more of the following symptoms:

- Fever
- Skin rash
- Joint / muscle pain
- Headache
- Red swollen eyes

If a person feels symptoms, they usually are mild and last between 2-7 days. Many people with Zika do not show symptoms and may not even feel sick. Most Zika-infected people who are in good health and not pregnant may not need special treatment, but should still go to a clinic to get tested.

If someone is sick, has symptoms of Zika and is pregnant, they should seek immediate medical care and get tested. The only way to know for sure if you have been infected with Zika is to get tested at a clinic or medical facility.
How can someone get the Zika virus?

(Show Transmission card)

- A person can get the Zika virus when an Aedes Aegypti or Aedes Albopictus mosquito with the virus bites them.
- A Zika-infected person can pass the Zika virus to another person through sex. Since many people do not even know that they have been infected with Zika, all people living in areas where Zika virus can be found should practice safer sex or abstain from sexual activity.
- An unborn baby can get the Zika virus if its mother is infected with Zika. If a woman lives in an area affected by Zika and wants to become pregnant, it is recommended that she follows the Ministry of Health guidelines to make the most informed decision for the safety of her family. Pregnant women’s sex partners living in or returning from places where Zika virus can be found should practice safer sex, wear condoms, or not have sex for the full pregnancy.

It is always best that you learn about the risks of a pregnancy in your area, what your options are, what support you can receive, etc. While delaying pregnancy is an option, refer to local Ministry of Health guidance for information about whether and when to become pregnant based on current information and your available access to affordable, quality health services.

What happens when someone gets Zika?

(Show Untreated Zika disease board and place 2 orange-coded Zika cards)

- Most people infected with Zika generally feel ill for about a week and experience no further problems. Zika-infected people can develop immunity to future Zika infections, but can still become infected with dengue and chikungunya. Mosquitoes who feed on a person newly infected with Zika can spread the virus when they bite/feed on other people.
- Women who are pregnant are at special risk if they get the Zika virus. If a woman is pregnant or trying to get pregnant and lives in a Zika-affected area, she should take extra caution to avoid mosquito bites or seriously consider delaying any attempted pregnancy. Medical professionals at a clinic may screen men and women with a history of illness to see if they have been infected by the Zika virus. Clinics can track the number of infection cases in your area to ensure that the local governments are doing what is necessary to stop the outbreak.
- When a pregnant woman becomes infected with Zika, her baby might be born with a condition where the baby’s brain does not develop properly and its head and brain are much smaller than normal. This is called microcephaly and it greatly affects the baby’s development. There is no treatment or cure for microcephaly.
• If a woman is pregnant, it is important that she is even more careful to make sure that mosquitoes do not bite her. Everyone, but especially pregnant women, who feels sick should go to the clinic to see if they have been infected by the Zika virus.

• Zika infection can also cause a sickness called Guillain-Barré. Guillain-Barré is a condition where your body’s system of protecting itself from disease (called the immune system) begins to attack the nerves in your body. If you have Guillain-Barré, you will feel weak and feel a tingling feeling in your feet and legs that spreads throughout your body. If the tingling feeling becomes so severe that you have a difficult time moving, go to hospital or seek medical care immediately.

Once you have recovered from Zika, you have immunity to further infections. In men, however, Zika remains in your semen and can infect a sexual partner for up to six months. If men have Zika symptoms, they should get tested and practice safe sex or consider abstinence for at least six months to avoid infecting their partner.
Dengue virus

There are four different types of dengue. Because of this, you can be infected with dengue more than once. Dengue can be dangerous and sometimes can cause death for the infected person, especially if they have been infected with dengue before. If someone is sick and has symptoms of dengue, they should seek medical care.

How can you tell if someone has the dengue virus?

(Show Symptoms board and cards. As you explain each symptom, place the cards on the board in the appropriate spot. Point to the cards you have already placed for Zika under the "all" heading. Explain that Zika and dengue have these symptoms in common. Explain that the additional symptoms of Swollen glands; Some bleeding from the nose and gums; Stomach pain; Vomiting blood or vomiting that doesn’t stop; Difficulty or fast breathing; Extremely tired; Nauseous or feel like you want to vomit; and Pain behind the eyes should go on the appropriate spot under the "Dengue and chikungunya" heading on the board.)

(Show and place the purple-coded dengue cards)

A person may be sick with dengue if they have:

A high fever PLUS two or more of the following symptoms:

- Headache
- Pain behind their eyes
- Pain in their joints, muscles and/or bones
- Skin rash
- Swollen glands
- Nauseous or feel like you want to vomit

A person might have a severe dengue after they have 2-7 days of high fever, and when their fever goes down, they then have any of the following symptoms:

- Pain in stomach
- Vomiting that doesn’t stop
- Bleeding gums or nose
- Vomiting blood or vomiting that doesn’t stop
- Difficult or fast breathing
- Extremely tired

Doctors and nurses can test a person’s body to see if they have dengue. Red Cross and Red Crescent strongly suggests that people who experience any symptom of dengue go for medical care and testing.
How can someone get the dengue virus?

(Show Transmission card)

A person can get the dengue virus in different ways:

- A person can get dengue when an Aedes Aegypti or an Aedes Albopictus mosquito with the virus bites them. A person who had dengue before can still become infected with a different type of dengue.
- A person can get dengue if they receive dengue-infected blood at a clinic or hospital.
- An unborn or new-born baby can get dengue from their dengue-infected mother during pregnancy or childbirth.

How is dengue different from Zika?

Similar to Zika, many people who become infected with the dengue virus may either feel sick OR may have no symptoms at all. However, in those people who do show symptoms, dengue-infected people may have one or more of the following symptoms which are NOT Zika symptoms:

- Severe abdominal pain
- Persistent vomiting
- Bleeding gums
- Vomiting blood
- Rapid breathing
- Fatigue / restlessness

The biggest difference is that people with Zika often have swollen red eyes or pinkeye. People with dengue may have pain behind their eye, but will not develop pinkeye or redeye.

What happens if a person with dengue doesn’t go for medical care?

(Show Untreated dengue disease board and place 2 purple-coded dengue cards)

When someone has dengue, they get a very high fever that can last several days or a week. They may also have a headache or other pains in their body. They may feel very tired, have skin rashes, bleeding from their nose or gums or may be vomiting. When young children and people who have never had dengue before get sick with the virus, they may not feel as sick as older children and adults who have dengue, but they should still go to a clinic for testing.
If the person has the most severe symptoms of dengue because they are not being treated, it can become very serious and a person can experience heavy bleeding, go into shock or may even die. People with dengue symptoms should seek medical care as soon as possible.

### Chikungunya virus

The chikungunya virus can affect the body of an infected person in many ways. Someone who has chikungunya can quite suddenly get a fever and feel pain in their joints. Most people who get sick from chikungunya get better and make a full recovery. However, sometimes a person with chikungunya may feel pain in their joints for a long period of time that can last months or even years.

### How can you tell if someone has the chikungunya virus?

(Show Symptoms board and cards. As you explain each symptom, place the cards on the board in the appropriate spot. Point to the cards you have already placed for Zika and dengue – Fever; Skin rash; Headache; Joint/muscle pain under the "all" heading. Explain that Zika, dengue and chikungunya have all four of these symptoms in common. Explain that the additional symptoms of Nauseous or feel like you want to vomit; and Extremely tired should on the appropriate spot under the "Dengue and chikungunya" heading on the board.)

(Show and place the brown-coded chikungunya cards)

A person may be sick with chikungunya virus if they have:

- Fever
- Severe joint pain
- Muscle pain
- Headache
- Nausea or feel like you want to vomit
- Extremely tired
- Skin rash

If you feel any of these symptoms, go to a clinic or medical facility to get tested for chikungunya or to ensure you don’t have Zika or dengue as well.
How can someone get the chikungunya virus?

(Show Transmission card)

A person can get the chikungunya virus when an Aedes Aegypti or Aedes Albopictus mosquito with the virus bites them. Once a person has chikungunya, they become immune to any future infections. This means they cannot get it again. It is not possible to get chikungunya more than once but a person can still contract dengue and/or Zika from the same type of mosquito, even if they have already had chikungunya.

What can happen when someone gets the chikungunya virus?

(Show Untreated chikungunya disease board and place the 2 brown-coded Chickungunya cards)

When someone has chikungunya, they suddenly get a high fever and feel pains in their joints and/or muscles. They may also have headaches and see or feel rashes on their skin. Most people who get chikungunya feel a lot of pain but get better in a few days or weeks. Sometimes a person who has had chikungunya can feel pain in their joints for months or even years after they have had the virus.

Treating Zika, dengue and chikungunya

How do you treat Zika, dengue and chikungunya?

(Show Treatment card)

There is currently no medicine to cure Zika, dengue or chikungunya. If a person has Zika, dengue or chikungunya they should avoid getting additional mosquito bites, especially in the first week that they are infected. In the first weeks when a person is infected with Zika, dengue or chikungunya, the virus can be found in their blood and can be passed from an infected person back to a mosquito that bites them. The mosquito can then bite someone else and infect that person with the virus.

While there is no cure for Zika, dengue or chikungunya, there are ways to treat the symptoms of each disease to help the person feel better and in the case of dengue, to prevent the disease from getting worse.
Zika, dengue and chikungunya can be treated with:

- Getting plenty of rest
- Drinking water, juice or other liquids to prevent dehydration
- Only if your doctor or nurse says it’s okay - take medicine like acetaminophen (Tylenol) or paracetamol to reduce fever and pain. It is important that you only take what your doctor or nurse tell you is okay because taking the wrong medication might make you even sicker.

It is important that a sick person not take aspirin or other drugs to reduce swelling or fever if they possibly have dengue since aspirin can make people much sicker.
Know the risks of Zika, dengue and chikungunya
**Topic overview**

Now that community members know what Zika, dengue and chikungunya are, it’s time to learn how they are caused and how to prevent them.

**Main learning points**

1. Zika, dengue and chikungunya are all transmitted by Aedes Aegypti and Aedes Albopictus mosquitoes.
2. The Aedes Aegypti and Aedes Albopictus mosquitoes lay their eggs in still water or even on damp surfaces.
3. Aedes Aegypti and Aedes Albopictus mosquitoes breed mostly indoors and bite during the day from dawn until dusk.
4. The best way to prevent Zika, dengue and chikungunya is to practise as many of these preventive actions as you can:
   a. Wear insect/mosquito repellent.
   b. Put screens on your house windows.
   c. Cover up your body with long sleeves and trousers, preferably light in colour
   d. If sleeping during the day, sleep under a bednet. Fix any holes in the net.
   e. Regularly empty or dump any clean or dirty standing water where mosquitoes may breed.
   f. Scrub the inside of pots where you keep water, then empty the water and refill if necessary. Do this every week.
   g. Report cases of Zika, dengue and chikungunya to the Red Cross/Red Crescent or to your local clinic.

**Materials**

Transmission card
Breeding sites board and cards

Tape board pieces together to make an A3 sized board.

Cut Breeding site cards into individual cards to place on the Breeding sites board

Rain barrels
Drum
Pot
Bucket
Flower vase
Plant storage bin
Empty bottle
Tire
Bathtub
Outdoor water cistern
Outdoor well
Standing pool of water
Creek or still water

Prevention board and cards

Tape board pieces together to make an A3 sized board.
Cut Prevention cards into individual cards to place on the Prevention board.

- Empty standing water
- Scrub inside of containers every week
- Use insect repellent
- Wear long sleeves and pants
- Sleep under a bednet between dawn and dusk
- Demand larvicide or fogging at school and community

Breeding site posters for discussion

Mosquito and eggs poster
Where do the Aedes Aegypti and Aedes Albopictus mosquitoes live and what do they eat?

(Show Transmission card poster)

The female Aedes Aegypti and Aedes Albopictus mosquitoes feed on our blood, which they need to grow their eggs. Most female Aedes Aegypti and Aedes Albopictus mosquitoes live in or around the same place where they hatched and where they grow to adulthood. They can fly an average of 250 metres. The life spans of the Aedes Aegypti and Aedes Albopictus mosquitoes are between one and a half to three weeks.

After the female Aedes Aegypti and Aedes Albopictus feed on our blood, she produces between 100 to 200 eggs per batch. She can produce up to five batches of eggs during her lifetime. She produces as many eggs as she can depending on how much blood she can get from people.

What do a mosquito’s eggs look like?

(Show Mosquito and eggs poster. Show in the corner what the mosquito eggs look like. Ensure that everyone can see the image)

The eggs of the Aedes Aegypti and Aedes Albopictus mosquitoes are smooth, long and shaped like an oval. When they are first laid, they look white but within a few minutes they turn a shiny black or brownish colour. In places with warm weather, the eggs can develop in as little as two days. In places with cooler weather, the eggs can take a week to develop. Eggs can survive for very long periods of time even when they are dry, sometimes for more than a year. Eggs hatch quickly when they are covered by water.

Where do the Aedes Aegypti and Aedes Albopictus mosquitoes lay her eggs?

(Show Breeding sites board and Breeding sites cards)

(Place each Breeding sites card on the board as you discuss)

Eggs are laid on still, wet surfaces and in places likely to flood, like holes in tree trunks and containers such as barrels, drums, pots, buckets, flower vases, plant storage basins, discarded bottles, tires and other places where rain water is collected and stored like in pools or wells where there no water is flowing. The mosquito eggs are not laid all at once at the same site but are spread out over sites and over a period of hours or days.

Aedes Aegypti and Aedes Albopictus mosquitoes breed mostly indoors. This means that Aedes Aegypti and Aedes Albopictus mosquitoes seek breeding sites in your garden, in your homes, worksites, schools and workplaces. They usually bite people when the sun is up or during the day.
Take a look at these posters of different places in our home communities. Let’s go through each one and discuss where you think mosquitoes might like to live and lay their eggs.

How can I prevent getting Zika, dengue and/or chikungunya?

There is no vaccine or medicine to prevent Zika or chikungunya. While a dengue vaccine is soon coming, the best method of preventing infection of all mosquito-borne diseases is to consistently eliminate mosquito-breeding sites and to prevent getting bitten.

Aedes Aegypti and Aedes Albopictus mosquitoes can carry Zika, dengue or chikungunya. The prevention for all of these viruses is the same:

ELIMINATE - PROTECT - REPORT
• ELIMINATE breeding sites in mosquito-infected areas
• PROTECT yourself from mosquito bites
• REPORT any infections to the local health service.

Here are the specific things you can do to prevent Zika, dengue and chikungunya

(Show Prevention board and cards)

(As you present each Prevention card, place it on the Prevention board)

Eliminate mosquito breeding sites:

• Every week, dump standing water that is not needed inside and outside of your house, school or other place where you work, live or play.
• Scrub the inside of water containers every week to get rid of mosquito eggs that are trying to hang on to the insides.
• Cover or protect all water. If you need to store water, use small water containers to make sure you use up the water rather than just be a place where mosquitoes can live.
• Use safe chemicals as directed to kill mosquito eggs and larvae in large water containers or wells that are difficult to cover or empty and refill.

Prevent mosquito bites:

• Wear insect/mosquito repellent.
• Wear light-coloured clothing and wear long sleeves and long pants and be sure to cover up.
• Sleep under a bednet if sleeping during the daytime.

Report the diseases:

• Report any possible sickness to a clinic or doctor so the person can get the help they need.
• Talk to Red Cross/Red Crescent volunteers to tell you where you can go for more help.
• Advocate to leaders in your community and government to clean up and cover water that does not flow from an inside source and throw away garbage that is in the street, courtyard and streets near your home.
Know where mosquitoes grow and live in the community
**Topic overview**

Once community members understand the risks of Zika, dengue and chikungunya and how to prevent them, they can play a part in working together to identify the risks of Zika, dengue and chikungunya.

**Main learning points**

1. The community plays a critical role in communicating the risks for Zika, dengue and chikungunya to other community members.
2. Together, the community can determine where mosquito-breeding sites are and decide which sites can be reduced or eliminated.
3. If a breeding site needs to be cleaned up or addressed by the government, the community has an obligation to report it so the breeding site can be properly cleaned.
4. Red Cross and Red Crescent volunteers can facilitate community clean up campaigns to reduce the number of Zika, dengue and chikungunya infections.

**Materials**

- Community poster

[Image of community poster]
How can our community find out where mosquitoes breed and grow?

Red Cross or Red Crescent volunteers can support in helping communities to conduct an assessment of their risk for Zika, dengue and chikungunya. This assessment can identify where the existing and potential breeding sites are in the community, and how people are can prevent mosquito bites that might transmit disease.

It is important for the full community to be involved in this assessment and discussion. For every breeding site that is not eliminated, many more new Aedes mosquitoes are introduced into the community as more eggs hatch, adding to the risk of disease.

Zika, dengue and chikungunya can become more of a risk when it rains and during the rainy season. More rain means more possible places for mosquitoes to lay their eggs and more Aedes mosquitoes to hatch and infect us.

Zika, dengue and chikungunya also become more of a risk when there is too little rain. Dry conditions mean that we store more water or that rivers stop flowing, making more opportunities for mosquitoes to lay their eggs.
We should make sure that we work on community action plans before and during the rainy seasons AND before and during dry periods to reduce the number of places where mosquitoes can lay their eggs.

When the rains come when we don’t expect them or when rains don’t come when we do expect them, diseases like Zika, dengue and chikungunya usually follow. It is helpful to reduce your risk of disease based on what is actually happening, rather than relying on what the weather has been in recent years. It is always best to adapt your plans to what is happening right now and make sure we, as a community, be on the look out for symptoms that diseases like Zika, dengue and Chiukungunya that pose a risk to our community’s health. When community members inform local authorities about symptoms and diseases in their communities, organisations and government can work together to better protect the health of its citizens.

Community mapping

One of the ways that communities can work together to reduce Zika, dengue and chikungunya is to understand where mosquitoes breed in the community. Community members can make a map of their community that shows the different places in the community and surrounding areas. Recognising that mosquitoes only travel 400 meters from where they were hatched, for many communities, you may have a series of maps to ensure all areas are accounted for.

Once the community makes a map detailing all the areas of the community, community members can work together to mark places on the map where we have to work together to eliminate mosquito-breeding sites. All community members should be invited to identify the places where their families work, live and play on the map and identify where mosquitoes breed in their homes and common areas.

Remember that mosquitoes usually live their whole lives within 400 meters of where they were hatched, so if we map our whole community, we can keep ourselves pretty safe. Let’s see an example first.

(Show Community map with no flags)

Here is a map of a community that wants to identify their risk of Zika, dengue and chikungunya mosquito breeding sites. The first thing they do is draw a map of their community. We can see on this map all sorts of things like:

- Roads, farmland, rivers and sea
- The community spread out over rural, industrial and commercial areas
- Wetlands at the centre of the community
- Open water sources and stored water
- Still water areas and running water sources (river, sea, waterfall)
- An old well that does not work near the local religious building
The volunteer and community who made this map put in a LOT of detail. When we make our map, we can include as much detail as we like, but we want to make sure we have enough detail to be able to identify all the different places in our community where mosquitoes might lay their eggs – even tiny places like bottlecaps in a field or at the dump.

Once the community developed their map, they looked at their map and thought about the areas where mosquitoes might breed. The community indicated three different types of breeding sites where mosquitoes are likely to lay their eggs, or any still water or wet surfaces where water sits or is collected and stored.

**Green flags**

Green flag sites are areas that can be easily cleaned by one or more community members and if they were cleaned right away, the breeding site would be eliminated. These are things like a pot of standing water or discarded bottle or tire with water in it in or near someone’s home. Community members can clean these green flag sites themselves and do not need assistance from the government. This community started by labelling these areas with little green flags to show places where they felt that they - as a community - could work easily and immediately to get rid of mosquito breeding sites.

The people in this community looked at their map and thought about the areas where they could get rid of standing water where mosquitoes like to lay their eggs and this is their result.

(Show Community map with the green flags.)

For each green flag are, ask:

- Why is this labelled with a green flag?
- How can they clean that area?
- What do they need to do to clean this area?
- What tools do they need to do this?
- How much time do they need to clean this?

**Yellow flags**

Yellow flag sites are areas that can be cleaned right away but would need to be cleaned regularly. These are areas such as standing water in a concrete basin near a community latrine, or a well. Community members can clean yellow flag sites themselves and do not need special equipment or assistance from the government, but they will need to clean these sites every week or so to eliminate mosquito eggs.
This community started by labelling these areas with little yellow flags to show places where they felt that they - as a community - could work without assistance to get rid of mosquito breeding sites on a regular basis.

The people in this community looked at their map and thought about the areas where they could get rid of wet places and standing water on a regular basis. This is their result.

(Show Community map with the green and yellow flags.)

For each yellow flag area, ask:

- Why is this labelled with a yellow flag?
- How can they clean that area?
- How can they keep that area clean?
- How will they make sure they clean it every week?
- What do they need to do to clean this area?
- What tools do they need to do this?
- How much time do they need to clean this?

Red flags

Red flag sites are areas that need chemicals or special equipment to eliminate or address the breeding site. These are areas like water cisterns and wells – water which cannot be easily emptied and cleaned regularly. They require a process like fogging, where the government or Red Cross or Red Crescent comes to the area and sprays special chemicals to kill the mosquito eggs. Community members often cannot clean these sites themselves and need assistance from the government to eliminate the eggs.

The people in this community labelled these areas with little red flags to show places and actions where they must advocate to government and Red Cross or Red Crescent to clean up and eliminate larger breeding sites.

(Show Community map with the green, yellow and red flags.)

For each red flag area, ask:

- Why is this labelled with a red flag?
- How can they get government to clean that area?
- How can they make sure that government keeps that area clean?
- What kinds of things can they do to clean this area?
- How can they help to ensure that they do the cleaning?
If one area of a community does not have mosquitoes growing or living there, but another one does, the entire community is at risk. Therefore, it is important that everyone take a role in helping to eliminate the places where mosquito breed and lay eggs.

Let’s make our own community risk map

(You may use Google Maps to print a large copy of an aerial map of your community. If this is not possible or feasible, a handmade map works just fine.)

(Hold up a large sheet of paper or point to a wall that you can write on with chalk. You may also lay out 49 numbered individual blank A4 sized paper sheets on the floor (7 x 7) to create a giant square with a very small space between the pages where YOU can walk and draw a brief outline of buildings that the community members can call out. As the community members list buildings/fixtures in their community, you simply identify the individual sheet where the building/fixture belongs and draw a quick outline or write a word to indicate the named building/fixture. Continue until all places in the community are identified. Then distribute one to two sheets to each community member to draw the building/fixture (ideally they will draw their own house) in more detail. Once all are finished, use the numbering to place them back in order. Fill in any gaps or details that are missing.)

Refer to the community map example they saw earlier to allow them to see the scale of the map to be drawn. The sample poster contains a lot of detail – it is important though to include the inside and outside of homes, play areas, courtyards, toilets or latrines, cooking and washing areas, areas prone to flooding, etc. – all the physical parts in their community.

Prompt the community to look at their compiled map and think about the areas where mosquitoes might be breeding.

As a community we can label those areas where we as a community can work to get rid of mosquito breeding sites.

Green flags

We can label the areas with little green flags to show places and actions we can do right now to get rid of mosquito breeding sites.

Remember that green sites are the areas that can be easily cleaned and can be cleaned right away. These are things like: a pot of standing water or discarded bottle or tire with water in it in or near a home. Community members can clean green sites themselves and do not need help from the government.
Let’s look at our community map and think about the areas where we as community members can get rid of the places where mosquitoes like to breed.

Prompt the community: Think about where mosquitoes like to lay their eggs that we can easily get rid of. Do you see any areas on this map where mosquitoes might want to lay their eggs AND which you as community members can easily clean and keep mosquito-free? Where are they? Let’s tag them by placing a green flag on that place on the map.

For each green flag area, ask:

- Why is this labelled with a green flag?
- How can we clean that area?
- What do we need to do to clean this area?
- What tools do we need to do this?
- How much time do we need to clean this?

Yellow flags

We can label the areas with little yellow flags to show places and actions we can do often to get rid of mosquito breeding sites.

Remember that yellow sites are the areas that can be easily cleaned but that need to be cleaned regularly or every week. Community members can clean yellow sites themselves but need to do so regularly. They do not need help from the government.

Let’s look at our community map and think about the areas where we as community members can routinely get rid of the places where mosquitoes like to breed.

Prompt the community: Think about where mosquitoes like to lay their eggs that we can easily get rid of and will promise to do every week. Do you see any areas on this map where mosquitoes might want to lay their eggs AND which you as community members can easily clean and keep mosquito-free regularly? Where are they? Let’s tag them by placing a yellow flag on that place on the map.

For each yellow flag area, ask:

- Why is this labelled with a yellow flag?
- How can they clean that area?
- How can they keep that area clean?
- How will they make sure they clean it every week?
- What do they need to do to clean this area?
- What tools do they need to do this?
- How much time do they need to clean this?
Red flags

Now we want to label those areas where we need Red Cross or Red Crescent or government assistance to eliminate mosquito-breeding sites. These red sites are the big areas that need chemicals to clean the area. These are areas like water cisterns and wells in or near the community which are difficult to empty and clean regularly. At red sites, the government needs to come to the area and spray chemicals to kill the mosquito eggs.

We can label these areas with little red flags to show places and actions we must advocate to our leaders and government to clean up and get rid of mosquito breeding sites. We can’t clean these areas without help.

Let’s look at this map and think about the areas where we need government to get rid of the places where mosquitoes like breed.

Prompt the community: Think about where mosquitoes like to lay their eggs that are large and that we cannot easily eliminate. Do you see any areas on this map where mosquitoes might want to lay their eggs AND where we need help to clean and keep us mosquito-free? Let’s tag them by placing a red flag on that place on the map.

For each red flag area, ask:

- Why is this labelled with a red flag?
- How can we get government to clean that area?
- How can we make sure that government keeps that area clean?
- What kinds of things can they do to clean this area?
- How can we help to ensure that they do the cleaning/fogging?
ZDC prevention module for communities

Topic 4

Preparing for and preventing Zika, dengue and chikungunya
**Topic overview**

It’s time to practice keeping the community safe! Community members can be prepared for diseases and help the community reduce the risk for diseases when they know the behaviours that help prevent Zika, dengue and chikungunya.

**Main learning points**

1. There are five stages of behaviour change: knowledge, approval, intention, practice and advocacy. We want to do more than just know what causes Zika, dengue and chikungunya. We want to approve of, intend to and practice healthier behaviours to keep ourselves and our communities healthy and disease-free.

2. Behaviour change can be difficult as it involves modifying our habits.

3. Red Cross/Red Crescent volunteers and community members can support community-wide behaviour change by:
   a. Providing a supportive environment for each other by reminding fellow community members of our goal and motivation to get rid of mosquito breeding sites;
   b. Reminding our community members of our goal to stay Zika, dengue and chikungunya-free;
   c. Reminding our community of our motivation for continuing the new habits of breeding site elimination, avoiding mosquito bites, covering up our bodies as well as standing water and reporting suspected cases. Motivation may be different for different people, but it may include keeping our babies and our bodies healthy and virus-free;
   d. Helping our community to identify barriers or things that keep us from keeping up our new behaviours.

5. There are games and activities to help communities to learn the behaviours necessary to prevent Zika, dengue and chikungunya. The game, “A buzz about dengue”, is one such example – Red Cross or Red Crescent volunteers can help communities to get a copy of games and activities to learn new behaviours and habits in a fun way.

6. People infected with Zika, dengue or chikungunya cannot directly infect someone just by being near them. People infected with Zika, dengue or chikungunya can increase risk for others by being bitten by another Aedes mosquito. Men infected with Zika can also infect their sexual partner through their sperm.

7. People who are not infected with Zika, dengue or chikungunya do not need to be afraid of those who are infected.
A buzz about dengue game cards

Note that these should be printed double sided over the long edge to create five sheets of cards which are then cut out to make eight cards per sheet (total of 34 double-sided cards). These cards are also used in the ‘Risky behaviour relay’ game.

A buzz about dengue game instructions

Charades clues cards

Cut into individual cards for the game.
Zap that mosquito game cards

The green cards are also used in the ‘Risky behaviour relay’ game.

Zap that mosquito game board

Zap that mosquito game die

Cut out the cards on the dotted lines.

Use sticky-tape to tape the two pieces of the game board together.

Are you mosquito-free?
Helping people to change behaviours to prevent Zika, dengue and chikungunya

While there is no vaccine or cure for the Zika, dengue or chikungunya viruses, when communities work together to get rid of the places where mosquitoes live and lay their eggs, prevent mosquito bites and report disease outbreaks, they can save lives.

Community members can prevent disease in their communities by everyone working together towards solution. We can help each other to practice healthier behaviours in Zika, dengue and chikungunya prevention. To support each other in changing behaviours and eliminating all mosquito breeding sites, we can help other community members by:

- Reminding each often of the goal to become Zika-free, dengue-free and chikungunya-free.
- Reminding each other often of how disease prevention helps to ensure that we have fewer babies born with birth defects, fewer people becoming sick with Zika, dengue, or chikungunya, fewer people dying of severe dengue, and a healthier community for all.
- Giving each other guidance on how to eliminate mosquito-breeding sites and prevent mosquito bites.
- Giving each other frequent reminders of how to successfully respond to challenges or triggers in our environment that might make us forget healthier practices.
- Providing support through Red Cross or Red Crescent meetings.
- Providing support to those community members affected by Zika, dengue and chikungunya.

By meeting regularly to address green and red flag sites and discuss ways to become Zika-free dengue-free and chikungunya-free, community members can get on track towards healthier behaviours and thus a healthier community.

The key to helping make behaviour change stick is frequent check-ins with a support network such as the community health meetings. Regular meetings like with Red Cross or Red Crescent can often be the key to allowing people to have a place to share their successes, their failures, and support each other as they learn new behaviours like keeping their homes and communities mosquito-free.

When we meet as a community, we can realize that we are all part of a group struggling with the same issues and that the group often has answers to questions they may have. The community can discuss what to do when you are just too tired to empty the water containers even though you know that there are probably mosquito eggs there. Support from others going through the same struggles is essential in the first critical month when new behaviours are beginning to form.
Finally, remember that practice stage is just that – practice. No one is perfect. All we can expect is continued practice of healthy behaviours. Soon, they will become habit.

Remember that sometimes when we think we are too tired to clean that water tub or to sleep just once without a mosquito net, when we do what is the right choice - our bodies will thank us later for our healthy choices!

Behaviour change is difficult. There is no single perfect solution for everyone to be able to do a specific behaviour. The path to making healthy behaviour change is slow. There will be days that someone will do all the things they set out to do to eliminate breeding sites, while others will struggle to remember or clean a water pot correctly. As long as a person is trying to change their behaviours, it is important that they receive support from their community and family members so that they can keep moving forward and keep the community safer.

How can community members help each other to understand that there is no reason to fear people with Zika, dengue or chikungunya?

Community members can help each other by making sure that family, friends and other community members have the correct information about how Zika, dengue and chikungunya are spread. There is no need for anyone to be afraid of someone with Zika, dengue or chikungunya. By working together to get rid of mosquito breeding sites, preventing mosquito bites and telling your doctor when you don’t feel so well, we can work together to keep all people in our community safe.

Let’s practice!

We will do some activities and games to help us remember how Zika, dengue and chikungunya can be prevented and how we can help ourselves and our community stay healthy. We can do more than just gain knowledge about these diseases and prevention methods, we can make a commitment and take action through simulation to make those changes. Let’s get started on how we can learn new behaviours through Zika, dengue and chikungunya games and activities to stay healthy.

A buzz about dengue game

See "A Buzz About dengue" game instructions and cards.
Charades

*Share the game instructions with the group. Cut these cards up and place in a hat or container for game play.*

Everyone will be divided into two teams. They will have clue cards in a hat or container in the middle of the floor where everyone can see.

One person from each team will get a card with a word or phrase on it. They cannot tell anyone what is on their card when they get it. Instead, they must act out the word or phrase, without words or sounds. The object of the game is for the players on their team to guess the word or phrase.

The first team to go will have one person from their team to choose one card from the hat or container. They then have to act out the word or phrase on the card. Their team members must try to guess what the word or phrase is. If the team guesses correctly, they get one point. Then the next team goes. The first team to reach 5 points wins.

Risky behaviour relay

*Share the game instructions with the group. Each team gets a set of green cards of the “Zap that mosquito” game while one set of cards of the "A buzz about dengue" game is used and put into a hat or container.*

A relay race is a game that is played in teams. Each team competes against the other. Each person in the team must complete a certain task, in the fastest amount of time, in order for a team to complete the task and to win.

Divide community members into two teams. Designate a start line for this game where the green cards of “Zap that mosquito” are located and a finish line where the cards of “A buzz about dengue” are in a hat or container. Each team starts with its members lined up behind the start line, one behind the other. When it is time for the teams to begin the game, the team with the youngest player sends a team member up to the finish line who, in turn, takes a “A buzz about dengue” card from the hat or container and reads it out loud. The first person of any team to pick a correct “Zap that mosquito” (green) card that relates to the “A buzz about dengue” card and run that card over to the finish line wins a point. That person then takes the next “A buzz about dengue” card while the previous person returns to his/her team at the start line. This keeps going until all members on a team have had a chance to hold up a “risky behaviour” card. The team team to do that first wins.

Green “Zap that mosquito” game cards used:

- Using insect repellent (two cards)
- Emptying or dumping standing water that is not needed
- Scrubbing water containers every week to remove mosquito eggs
- Sleeping in bed under a bednet during the day (two cards)
Zap that mosquito game

**Teacher instructions:** This is a board game for 1-4 players PER game kit. For every FOUR community members, make a separate game kit with game board, die, and cards.

**Community members preparing to play:** Four community members open and assemble their game kit by:

- Taping the two pieces of their game board together
- Cutting out, folding and taping their die
- Cutting out the game cards (orange and green cards)
- Mixing up the cards and placing face down on the game board.
- Finding a player pawn (rock, bean or coin) for each player

**How to play:**

The goal of the game is to be the first player to reach the finish line with NO mosquito cards (orange cards) in your hand. When you pick up a mosquito card during the game, you can only get rid of it if you have a green card in your hand. Match one green card to a mosquito card to get rid of the mosquito card and place both in the used card pile.

1. Each player places their pawn on the start space. The youngest player rolls the die first and moves their pawn the number shown.

2. If you land on a ‘safe’ space, you do nothing. You are protected. The next person rolls.

3. If you land on any other space, pick up a card.
   - If you pick up a green card, keep it to use in case you pick up a mosquito card in your next turns.
   - If you pick up a mosquito card, you must keep it unless you have a green card to ‘cancel’ it out. If you have, place the mosquito card and your green card on the used card pile.

4. Keep playing until the first person with NO mosquito cards reaches the finish space. If you still have a mosquito card and land on the finish space, you have to go to the space right before it instead and pick up a card.
ZDC prevention module for communities

Topic 5

Creating an action plan
Topic overview

Community members can work together to take steps to prevent diseases once the community has identified the risks for Zika, dengue and chikungunya.

Main learning points

1. Once the community has identified breeding sites on the map in Topic 3, they can develop an action plan to eliminate or reduce those sites.
2. An action plan consists of discussing the steps that the community will take to eliminate or reduce breeding sites, who will be responsible for specific tasks and when they will complete the tasks.
3. Once the action plan is developed, the members of the community should have access to it.
4. Red Cross/Red Crescent volunteers can provide information and support to community members as they develop an action plan and as they work to eliminate or reduce breeding sites.
5. Community members can do community mapping often, as new breeding sites will develop in the community when there is rain.
6. The community should repeat the community mapping exercise every 2 weeks or if it has recently rained since mosquitoes will continue to try and find new places where they can lay their eggs.

Materials

Community map designed by the community with green, yellow and red flags

50 waterproof flags of each colour - green, yellow and red – to place around the community
Let’s do this!

Show the group the community map with the green, yellow and red flags they identified.

Hand out a stack of green, yellow and red flags and explain that the whole group will take an observational walk in their community to physically identify the mosquito-risk areas with actual colour-coded flags at the actual sites we discussed earlier and placed on the map. We will also identify any missed places and record them on the map when we return to the map.

Take your community map and place horizontal strings or lines on the map to draw a route for your observational walk. Explain that this pattern allows us to cover the full community and identify any possible mosquito breeding sites and place a flag to identify the frequency that these areas should be cleaned and checked. Talk to community members you encounter along the way about the shared goal to identify potential mosquito breeding sites and why it is important. Solicit help from more community people as appropriate. Conduct an observational transect walk, placing physical flags within the community with the appropriate colour code. Make sure that someone writes down all these areas for later recording on the map created earlier.

When you finish conducting the transect walk and placing flags, come back to the community meeting area. Discuss as a group:

**Green flags**

- Let’s review each green flag and come up with a plan. Do we need to add any green flags to our map based on our transect walk just now? For each flag:
  - How can we clean that area?
  - What do we need to do to clean this area?
  - What tools do we need to do this?
  - How much time do we need to clean this?
  - Who will volunteer to clean this area and keep it clean for the next week?
  - Who will check on their work and help them if needed or let me know if the area has not been cleaned?

Once everyone in the community has agreed on how they will address each green flag, discuss with the group to create provide a timeline for:

- When clean-up of the green flag areas should be completed.
- When people can check in with the volunteers to see if they need help with clean-up.
• Letting the Red Cross or Red Crescent volunteer(s) know when the task has been completed.
• Letting the Red Cross or Red Crescent volunteer(s) know if they see eggs in these areas that need to be cleaned up immediately.
• When we will all meet again to discuss how clean-up is going.
• When we will re-review the map to identify new problem areas or remove places where it is no longer possible for mosquitoes to breed.

Yellow flags

• Let’s review each yellow flag and come up with a plan. Do we need to add any yellow flags to our map based on our transect walk just now? For each flag:
  • How can we clean that area?
  • How can we keep that area clean?
  • How will we make sure we clean it every week?
  • What do we need to do to clean this area?
  • What tools do we need to do this?
  • How much time do we need to clean this?
  • Who will volunteer to clean this area and keep it clean for the next week?
  • Who will check on their work and help them if needed or let Red Cross or Red Crescent volunteer(s) know if the area has not been cleaned?
  • How can we help to support our volunteers every week in their cleaning and checking jobs?

Once everyone in the community has agreed on how they will address each yellow flag, discuss with the group to create provide a timeline for:

• When clean-up of the yellow flag areas should be completed each week.
• When people can check in with the volunteers to see if they need help with clean-up.
• Letting Red Cross or Red Crescent volunteer(s) know when the task has been completed each week.
• When Red Cross or Red Crescent volunteer(s) will all meet again to discuss how clean-up is going.
• When we will re-review the map to identify new problem areas or remove places where it is no longer possible for mosquitoes to live or lay their eggs.
Red flags

The community can also work together to discuss how they can make sure that the red flag sites are addressed. Discuss:

- Do we need to add any red flags to our map based on our transect walk just now?
- What ideas do we have to get the government to help clean these sites?
- How can the Red Cross/Red Crescent help or support the clean-up of those sites?
- Who in our community would make a good team to work with the government to regularly clean up the red flag mosquito sites.

Let’s Do it! Provide materials, time and support to empowering community members to clean up their community with teacher and parent guidance as appropriate. Re-visit your plan every week.

Supporting families of children with microcephaly or other conditions associated with Zika

Pregnant mothers and parents of infants with microcephaly or Guillain Barré are under a tremendous amount of stress. Concerns about the disease and how they will manage this condition is a frightening prospect. People whose families are negatively affected by Zika may suffer discrimination or even abandonment by those they care about.

We can pull together as a community to support each other and provide the care that we all need to be a stronger, more resilient community. We can work together to help Zika-affected families by:

- Providing psychological first aid to those parents and families in need;
- Educating community members about how Zika is actually transmitted and how further infections can be avoided;
- Discourage tobacco, alcohol and drugs as coping mechanisms by providing community support and kindness;
- Encourage positive coping strategies such as getting enough sleep, taking a healthy diet, being physically active, doing activities to relax you such as praying, talking, etc;
- Practice stress management such as relaxation exercises and meditation; and,
- Referring people with greater needs to the proper agency or to the Red Cross or Red Crescent for follow-up support.
End of Module
The fundamental principles of the international Red Cross and Red Crescent movement

**Humanity**

The international Red Cross and Red Crescent movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

**Impartiality**

It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

**Neutrality**

In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

**Independence**

The movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

**Voluntary service**

It is a voluntary relief movement not prompted in any manner by desire for gain.

**Unity**

There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

**Universality**

The international Red Cross and Red Crescent movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.
Zika, dengue and chikungunya prevention
community module

The purpose of this module is to provide community members and Red Cross and Red Crescent volunteers with information on how the three diseases of Zika, dengue and chikungunya are transmitted and how they can be prevented. The module will help volunteers and communities understand what causes each disease, the symptoms and effects of these diseases on our bodies and how to prevent the spread of all three diseases.