

# Zika, dengue and chikungunya prevention school/youth module

RED CROSS/RED CRESCENT



The Netherlands 📥 Red Cross

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# Acknowledgments

This module was made possible by the European Union funded International Consortium on Dengue Risk Assessment, Management and Surveillance (IDAMS), a five and a half research project led by Heidelberg University Hospital. Further we would like to thank the IDAMS partners and, in particular, Leigh Bowman from Liverpool School of Tropical Medicine for their support to the development of this module.

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# Foreword

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 5 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 youth, students and those working with young people 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 school/youth module is for Red Cross or Red Crescent volunteers working with youth or school groups to teach them about prevention methods and responses to Zika, dengue and chikungunya transmission. The anticipated age range for the materials is between 7 years and 16 years of age, but can be adapted for other age groups. For youth aged seventeen and older working in a community setting, volunteers can use the aligned ZDC Prevention community module. If volunteers are working in a school setting with youth aged 15+, we recommend adapting this School Module slightly for an older youth audience.

This module guide is intended to be used with the accompanying ZDC toolkit.

#### 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.

# ZDC prevention module for communities Topic 1

# Learning objectives

At the completion of this topic, students/youth will be able to:

- Describe each of the three diseases (Zika, dengue and chikungunya) spread by Aedes mosquitoes
- List the symptoms associated with Zika, dengue and chikungunya
- Explain how to treat a person who has Zika, dengue and chikungunya

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 lesson, youth and students 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 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.

# $\bigcirc$

90-120 minutes

# **Materials**

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Mosquitoes poster

### Zika, dengue and chikungunya prevention module for school/youth

#### 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)

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Treatment card

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





Pregnant woman card

**Essential questions** 

How does someone get Zika, dengue or chikungunya? What happens when someone gets Zika, dengue and chikungunya? How can you identify when someone has one of these diseases? What are the ways to treat someone with the diseases?

### What are diseases that are spread by mosquitoes?

**Ask:** Ask students/youth if a mosquito has ever bitten them. What happened? What was it like? What happens when a mosquito bites a person?



#### (Show Transmission card)

**Explain:** Some mosquitoes carry diseases that they can pass on to humans. Humans can get these diseases when mosquitoes bite them.

Three of these diseases are the Zika virus, the dengue virus and the chikungunya virus. A virus is an infection that can make a person very sick. A person can get these diseases when an Aedes mosquito that carries the disease bites them. Aedes mosquitoes live in places where the weather is hot, humid and wet all year round.

There is no vaccine to prevent a person from getting Zika and chikungunya. There is no cure for these diseases but they can be treated. When a person has symptoms of the diseases, 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

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

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

Dangue, chikungunya and Zika (all)	Dangue, chikungunya and Zika (all)
Dengue	and chikungunya Zika (only)

(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 problems:

- 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 may not have any of these problems and they may not even feel sick. If someone thinks they might have Zika, they should go to a clinic to get tested.

If someone is sick, has any of the symptoms of Zika and/ or 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)

**Explain:** A person can get the Zika virus when an Aedes Aegypti or Aedes Albopictus mosquito with the virus bites them.

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, it is a good idea that she does not try to get pregnant until the Ministry of Health says that the Zika outbreak is over.









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### What happens when someone gets Zika?

**Ask:** Ask students/youth what happens when they or someone they know gets sick? What kinds of medicine or treatment do they need?

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



**Explain:** Most people who get Zika feel sick for about a week and have no other problems. If someone gets Zika once, they can't get it again, but they can still get sick with dengue or chikungunya. Mosquitoes who bite someone who just got Zika can then bite another person and give them Zika too. When you get sick with Zika for the first week, you should protect your family and friends by not getting any more mosquito bites for the first week.

Zika can also make some people sick with a disease called Guillain-Barré. A person with Guillain-Barré feels weak and their feet, legs and body tingle. They might even become unable to move – if so, they should be taken to the clinic immediately.



When a pregnant woman gets Zika, the virus might hurt the baby by not letting the baby's brain grow properly and the baby's head is much smaller. This is called microcephaly and it means that the baby will not grow and develop like other babies. 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.

# Reflection

### How can a person get the Zika virus?

Invite 6 students/youth to come up and each should act out, without talking, one symptom or way in which they can know that someone is sick with Zika. (The symptoms of Zika are: a mild fever, skin rashes, pain the muscles or joints, headache, a feeling of being sick without knowing why, red eyes and swelling or infection in the whites of the eyes).

After each person finishes, ask the rest of the group to identify which symptom was being acted out.



**Explain:** Just like Zika, the dengue virus can make people very sick. It affects the body of an infected person in many different ways.

There are four different types of dengue virus and you can get dengue more than once. Dengue can be dangerous and some types of dengue can even make a person so sick that they could die, especially if they have already been sick with dengue before. If someone is sick and has symptoms of dengue, they should seek medical care. If someone in your family or your friends have any of the symptoms, tell someone to help them get to a doctor right away.

### 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)

**Explain:** 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
- Nausea 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. If anyone feels like they might have dengue, they should go for medical care right away.

### How can someone get the dengue virus?



(Show Transmission card)

**Ask:** Ask students/youth to explain how someone can get the Zika virus.

**Explain:** 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 has had dengue before can still become infected with a different type of dengue. Each time they become infected, it makes it harder for them to get better.
- An unborn or newborn baby can get dengue from their dengue-infected mother during pregnancy or childbirth.

### How is dengue different from Zika?

Like Zika, many people who get the dengue virus may either feel sick OR they may not feel sick at all. In people who do feel sick and have dengue, they may have one or more of the following symptoms which dengue symptoms but are NOT Zika symptoms:

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

International Federation of Red Cross and Red Crescent Societies Topic 1

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 when someone gets dengue?

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

**Explain:** 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.

If the person has serious or dangerous symptoms of dengue because they are not getting treated by a medical person, the person can experience heavy bleeding, go into shock or may even die.

## Reflection

### How can a person get the dengue virus?

Invite 7 students/youth to come up and each should act out, without talking, one symptom or way in which they can know that someone is sick with dengue IF someone also has a high fever. (The symptoms of dengue are: High fever PLUS Headache, Pain behind their eyes, Pain in their joints/muscles, Skin rash, Swollen glands, and Nausea/Vomiting).

After each person finishes, ask the rest of the group to identify which symptom was being acted out.

Invite another 7 students/youth to come up and each should act out, without talking, one symptom or way in which they know that someone is sick with severe dengue IF a person's fever lowers after a few days. (The symptoms of severe dengue are: Pain in stomach, Vomiting that doesn't stop, Bleeding gums, Vomiting blood, Difficult or fast breathing, Extremely tired, OR Nausea or feeling like they want to vomit).

After each person finishes, ask the rest of the group to identify which symptom was being acted out.

Dengue	
Feeling very sick	
Possible death	

# Chikungunya virus

**Ask:** Ask students/youth the names of the two diseases that they just learned about that are caused by the Aedes Aegypti or Aedes Albopictus mosquito.

**Explain:** Just like Zika and dengue, the chikungunya virus can upset the body in many ways. Someone who has chikungunya can get a fever very quickly 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 can have pain in their joints for a long time.

# 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 or someone in your family feels any of these symptoms, go to a clinic or medical facility to get tested for chikungunya or to make sure you don't have Zika or dengue as well.

### How can someone get the chikungunya virus?



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(Show Transmission card)

**Explain:** A person can get the chikungunya virus when the Aedes Aegypti or Aedes Albopictus mosquito bites them. Once a person has chikungunya, they cannot get it again. It is not possible to get chikungunya more than once but a person can still get dengue and/or Zika from mosquitoes, even if they have already had chikungunya.

 Image: Answer of the second second

# What can happen when someone gets the chikungunya virus?

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

**Explain:** When someone has chikungunya, they get a high fever and pains in their joints and/or muscles. They may also have rashes on their skin and headaches. 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.

# Reflection

### How can a person get the chikungunya virus?

Invite 7 students/youth to come up and each should act out, without talking, one way in they can know that someone is sick with chikungunya. (The symptoms of chikungunya are: Fever, Severe joint pain, Muscle pain, Headache, Nausea, Extremely tired, Skin rash).

After each person finishes, ask the rest of the group to identify which symptom was being acted out.

# Treating Zika, dengue and chikungunya

### How do you treat Zika, dengue and chikungunya?

### (Show Treatment card)

**Explain:** There is currently no medicine to cure Zika, dengue or chikungunya. If a person has Zika, dengue or chikungunya they should avoid getting any more mosquito bites, especially in the first week that they are bit with a virus. In the first weeks when a person gets Zika, dengue or chikungunya, the virus is in the person's blood and when a mosquito bites them, the virus gets passed from the infected person back to the mosquito. The mosquito can then bite someone else and infect that person with the virus.

There is no cure for Zika, dengue or chikungunya which mean that a person will always have a little bit of the virus even if they get better. But there are





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ways to treat or take care of a person with any of these diseases to help the person feel better and for dengue – keep 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.

### Check your understanding

- 1. How can a person can get the dengue virus?
- 2. How can a person can get the chikungunya virus?
- 3. Can a person get dengue more than once?
- 4. Can a person get chikungunya more than once?
- 5. Can a person get Zika more than once?

### **Correct answers**

- **1.** A person can get the dengue virus when an Aedes mosquito with the virus bites them.
- **2.** A person can get the chikungunya virus when an Aedes mosquito with the virus bites them.
- **3.** Yes, a person can have dengue more than once.
- **4.** No, a person cannot get chikungunya more than once but they can get dengue and/or Zika, even if they have already had chikungunya.
- No, a person cannot get Zika more than once but they can get dengue and/ or chikungunya, even if they have already had Zika.

# ZDC prevention module for communities Topic 2

### Learning objectives

At the completion of this topic, students/youth will be able to:

- Explain how females Aedes aegypti an Aedes albopictus mosquitoes eat and lay their eggs
- Explain how people get Zika, dengue and chikungunya
- Say ways to prevent Zika, dengue and chikungunya



# Know the risks of Zika, dengue and chikungunya



45-60 minutes

### **Topic overview**

Now that students/youth know what Zika, dengue and chikungunya are, its time to learn how they are caused and how to prevent them.

## Main learning points

- **1.** Zika, dengue and chikungunya are all spread 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 both indoors and outdoors and bite during the day from dawn until dusk.
- **4.** The best way to prevent Zika, dengue and chikungunya is to do as many of these 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, that are light-coloured.
  - **d.** If asleep during the day, sleep under a bednet. Fix any holes in the net.
  - **e.** Dump any clean or dirty standing water where mosquitoes may lay their eggs. Do it every week.
  - **f.** Scrub the inside of pots where you keep water, then empty and refill if you like. 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	Use sticky-tape to tape the two pieces of the board together. Now stick the Breeding sites cards on the spot underseath the appropriate location you think if balange to.
Indoors	Outdoors
Commentation Advancement Advancem	ZDC prevention taskit



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

Breeding sites board

Tape board pieces

and cards

Prevention board	Use sticky-tape to tape the two pieces of the board together. Now stick the Prevention cards on the board.
Prevention methods	Prevention methods
International Redunation of Rec1 Cross and Rec1 Owners Sociation	ZDC prevention toolist

Prevention board and cards

Tape board pieces together to make an A3 sized board.

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#### International Federation of Red Cross and Red Crescent Societies Zika, dengue and chikungunya prevention module for school/youth



# Cut Prevention cards into individual cards

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

Ask your parents, teachers or Red Cross or Red Crescent volunteers to ask for fogging and larvacide for bigger bodies of water that can't be cleaned like wells or water cisterns

Breeding site posters for discussion

Mosquito and eggs poster

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International Federation of Red Cross and Red Crescent Societies Topic 2

### **Essential questions**

How are Zika, dengue and chikungunya caused? Where does the Aedes mosquito live and lay its eggs? How can a person prevent Zika, dengue and chikungunya?

# Where do the Aedes Aegypti and Aedes Albopictus mosquitoes live and what do they eat?

**Ask:** Ask students/youth to list the names of some of the insects they know. Where do they live? What do mosquitoes like to eat?

(Show Transmission card poster)

**Explain:** 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 grow up to be an adult. The Aedes Aegypti and Aedes Albopictus mosquitoes only live from one and a half to three weeks.

After the female Aedes Aegypti and Aedes Albopictus mosquito feeds on blood, she can make up to 100 to 200 eggs at a time and she can lay up to 1000 eggs in her short lifetime! How many eggs she lays depends on how much blood she can get from biting us.

# 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)

**Explain:** Eggs are laid on quiet, wet surfaces and you can find many of them that in places that often flood, like containers, barrels, drums, pots, buckets, flower vases, plant storage basins, discarded bottles, tires and other places where rain water is collected and stored like in water tanks or wells where no water is flowing. The mosquito does not lay her eggs all at once or even in the same place. She spreads out her eggs in different places at different times and days.

### 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)

**Explain:** 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. When the











weather is warm, the eggs can grow and hatch in as little as two days. When the weather is cool, the eggs can take a week to grow and hatch. If they are in a place that is dry, eggs can still hatch soon after they are covered by water, even if it months later.

The Aedes Aegypti and Aedes Albopictus mosquitoes live and hatch mostly indoors such as in our houses, schools, playground equipment, but also in our gardens and outside spaces where they can find water. They usually bite people when the sun is up or during the day.

Take a look at these posters of different places in our school and home communities. Let's go through each one and you tell me where you think mosquitos might like to live and lay their eggs.



### Reflection

- **1.** What are some of the places where the Aedes aegypti and Aedes Albopictus mosquitoes like to live?
- 2. What do they like to eat?
- 3. Where do they lay its eggs?
- **4.** If you get rid of the water in a pot where a mosquito laid her eggs, can the mosquito eggs survive if they hang on to the inside of the pot until water is available?
- 5. When do Aedes Aegypti and Aedes Albopictus mosquitoes like to bite?

# How can I prevent getting Zika, dengue and chikungunya?

**Explain:** There is no medicine to prevent Zika, dengue or chikungunya. A dengue vaccine is soon coming, but until you can get it, the best way to prevent Zika, dengue and chikungunya is to get rid of places where a mosquito can lay her eggs AND to do what you can to NOT get a mosquito bite.

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

International Federation of Red Cross and Red Crescent Societies Topic 2

(Show Prevention board and cards. As you present each Prevention card, place it on the Prevention board)

Cleaning the places where mosquitoes grow:

- Dump standing water that is not needed inside and outside of your house, school or other place where you work, live or play. Do this every week.
- 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.
- Ask an adult to use safe chemicals as directed to kill mosquito eggs and new mosquitoes in large water containers or wells that are hard to cover or empty and refill to keep mosquitoes out.

Preventing Mosquito Bites:

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

### Reporting the Diseases:

- Tell your parents to 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.
- Talk to your teachers, parents and leaders in your school community to clean up and cover water that does not flow from an inside source and throw away garbage that is in the street, classrooms, and playground.

# **Check your understanding**

- **1.** List three ways to prevent Zika, dengue and chikungunya.
- **2.** Let's look again at the pictures of places where people live, work, learn or play. Can someone come up and show me all the places inside and outside where you can prevent a mosquito from laying her eggs?
- 3. Can you think of other places where a mosquito might lay her eggs?

Prevention methods		Prevention methods
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# ZDC prevention module for communities Topic 3

# Learning objectives

At the completion of this topic, students/youth will be able to:

- Identify and map breeding sites in the school community
- Decide which sites can be eliminated or reduced
- Explain whether the school community can clean up the site or whether the government has to clean up the site

Know where mosquitoes grow and live in the school community

International Federation of Red Cross and Red Crescent Societies Topic  $\ensuremath{3}$ 

# **Topic overview**

Once students/youth understand the risks of Zika, dengue and chikungunya and how to prevent them, they can play a part in working with the school community to identify the risks of Zika, dengue and chikungunya.

# Main learning points

- **1.** Children and adults in the school community can play an important role in telling their family and friends about the risks for Zika, dengue and chi-kungunya.
- **2.** Together, the school community can find where mosquito breeding sites are in the school area and get rid of mosquito eggs that are growing there.
- **3.** If a place where mosquito eggs are growing is too big to empty and clean like a water tank the school community should work together to ask the government or Red Cross/ Red Crescent to help clean these areas.
- **4.** Red Cross/Red Crescent volunteers can help school community members to start a clean up drive to keep the community healthier with less Zika, dengue and chikungunya infections.



45 minutes

# **Materials**



Community poster

International Federation of Red Cross and Red Crescent Societies Zika, dengue and chikungunya prevention module for school/youth



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International Federation of Red Cross and Red Crescent Societies Topic 3  $\ensuremath{\mathsf{Topic}}$ 

### **Essential questions**

How can the school community work together to understand where mosquitoes grow and live in the community? Who can clean up the places where mosquitoes grow? Where can members of the school community get help to clean up mosquito sites?

### How can our school community find out where mosquitoes lay their eggs and grow?

**Ask:** Ask students/youth what it means to work with the school community. What are some examples when they have seen the school community work together to accomplish a goal or task? How did they help?

**Explain:** School communities are made up of all the people in our school who learn and teach and help us. These might be parents, students, teachers, head-masters and headmistresses and other people who make school a safe place for children to learn. Altogether we can work together to keep ourselves safe from diseases like Zika, dengue and chikungunya. When people in our school community come together to talk about things that may hurt us and identify where mosquitoes live and grow in the school community, we can all work to eliminate or reduce the chance we will get these diseases.



Zika, dengue and chikungunya are more likely to get us sick when it rains or during the rainy season. More rain means there are more possible places for mosquitoes to lay their eggs and more Aedes mosquito eggs to hatch and make us sick. Zika, dengue and chikungunya also become more likely to get us sick when there is not enough rain, which means that we store more water or rivers stop flowing, making it a better chance for mosquitoes to lay their eggs.

We should make sure that we discuss as a school community before and during the rainy seasons AND before and during dry periods about how we can 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 happen more.

# School community mapping

One of the ways that school communities can work together to reduce Zika, dengue and chikungunya is to understand where mosquitoes grow and live in the school community. Children, parents and teachers can make a map of the school that shows the different places in the school and the surrounding area. Once all the areas of the school are on the map, we will work together to mark places on our map where we have to take care to get rid of mosquitoes and their eggs. All school community members should be invited to identify the places where they learn, live and play on the map and to show where mosquitoes grow and live in their homes and school, near their classrooms and playgrounds.

Remember that mosquitoes usually just hang around within 400 meters of where they were born, so if we map our whole school, we can keep ourselves pretty safe. Let's see an example first.

### (Show School map with no flags)

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

- Children, teachers, parents
- The classrooms and buildings of the school
- The playing area of the school
- The toilets and outside sinks
- The handwashing areas
- An old fountain that does not work in the school yard

The person 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 school where mosquitoes might lay their eggs.

Once they developed their map, then they looked at their map and thought about the areas where mosquitoes might be laying their eggs.

**Ask:** Think about where mosquitoes like to lay their eggs. Do you see any areas on this map where mosquitoes might want to lay their eggs? Come up and point to some areas.



**Say:** Now this school community labelled those areas where they felt that they - as a school community - could work to get rid of mosquitoes that might hurt them. They labelled these areas with little green flags to show places and actions they could do regularly to get rid of mosquitoes. The green areas are places where the students don't need too much adult help to keep mosquito eggs from growing and hatching.

Green flag sites are the areas that can be easily cleaned and can be cleaned right away. These are things like: dumping a pot of standing water or discarded bottle or a tire with water in it in or near the classroom. School community members can clean green sites themselves and do not need help from the government.

The children in this school looked at this map and thought about the areas where they as children could get rid of standing water where mosquitoes like to lay their eggs.

**Ask:** 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 students can easily clean and keep mosquito-free? Come up and point to some areas.

(After the children have identified areas, show School map with the green flags. Did they get them all? )

For each green flag are, ask:

- Why is this labelled with a green 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?

**Say:** Now the kids at this school labelled the areas where students would need adult help to get rid of mosquitoes that might hurt them. These are areas where children cannot clean these sites themselves and need help from adults and the government to get rid of the mosquitoes.

The school labelled these areas with little red flags to show places and actions they must tell government and their school administration to clean up and get rid of mosquitoes. Children and teachers can't clean these areas without help.

These red sites are the big areas that need chemicals to clean the area. These are areas like: water tanks, wells, and other large containers of water in or near the school. At red sites, the government needs to come to the area and spray chemicals to kill the mosquito eggs.



### Zika, dengue and chikungunya prevention module for school/youth

Let's look at this map and think about the areas where this school needs government to get rid of the places where mosquitoes like to lay their eggs.

**Ask:** Think about where mosquitoes like to lay their eggs that area large and that students cannot easily get rid of. Do you see any areas on this map where mosquitoes might want to lay their eggs AND where they need help to clean and keep the school mosquito-free? Come up and point to some areas.

# (After the children have identified areas, show School map 3 with the green and red flags. Did they get all the red areas?)

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 to keep us safe?

**Say:** If one area does not have mosquitoes growing or living there, but another one does, the entire school community is at risk. Therefore, it is important that everyone take a role in helping to eliminate the places where they grow.

### Let's make our own school risk map!

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

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(Hold up a large sheet of paper or point to a wall which you can write on with chalk. You may also lay out 49 numbered individual blank A4 sheets on the floor  $(7 \times 7)$  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 children call out. As the students list buildings/fixtures in their school 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 school community are identified. Then distribute 1-2 sheets to each student or youth to draw the building/fixture 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.)

**Ask:** Can we list the buildings and areas of our school community? Help me draw these buildings and other areas on our map. We will all work together to draw those places on a map for all to see.

Refer to the school map example shown earlier to allow students 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 classrooms, play areas,


## International Federation of Red Cross and Red Crescent Societies Topic 3

toilet areas, handwashing stations, old fountains on school grounds, etc. – all the physical parts that make this school their school community.

Now we want to look at our map and think about the areas where mosquitoes might be living and laying their eggs.

**Ask:** Think about where mosquitoes like to lay their eggs. Do you see any areas on our map where mosquitoes might want to lay their eggs? Where are they?

**Say:** Now we want to label those areas where we as a school community can work to get rid of mosquitoes that might hurt us. We can label the areas with little green flags to show places and actions we can do often to get rid of mosquitoes. We don't need too much adult help to do these to keep safe.

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 the classroom. School community members can clean green sites themselves and do not need help from the government.

Let's look at our school map and think about the areas where we as children can get rid of the places where mosquitoes like to live and lay their eggs.

**Ask:** 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 students 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?
- 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?

**Say:** Now we want to label those areas where students will need adult help to get rid of mosquitoes that might hurt us. These are areas where children cannot clean these sites themselves and need help from adults and the government to get rid of the mosquitoes.

We can label these areas with little red flags to show places and actions we must tell government and our school administration to clean up and get rid of mosquitoes. We can't clean these areas without help.

These red sites are the big areas that need chemicals to clean the area. These are areas like: swamps, marshes, rivers and other bodies of water in or near



the school. At red sites, the government needs to come to the area and spray chemicals to kill the mosquito eggs.

Let's look at this map and think about the areas where we need government to get rid of the places where mosquitoes like to live and lay their eggs.

**Ask:** Think about where mosquitoes like to lay their eggs that area large and that we cannot easily get rid of. 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? Come up and point to some areas.

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 to keep us safe?

## Check your understanding

- **1.** What is a school community map?
- **2.** What are the colours for a school community map that show where mosquitoes live and grow?
- **3.** How does our map make sure that everyone is doing their part to keep us safe?

## **Correct answers**

- **1.** A school community map is a drawing of the different places in the school community.
- 2. Green and red.
- **3.** It reminds us of the regular work we have to do to get rid of mosquito eggs and reminds others how they need to support us in this important work



# ZDC prevention module for communities Topic 4

# Learning objectives

At the completion of this topic, students/youth will be able to:

- Practice activities that help individuals and communities learn behaviours to prevent Zika, dengue and chikungunya
- Describe the reasons why people who are not infected should not be afraid of those who have Zika, dengue and chikungunya



# Preparing for and preventing Zika, dengue and chikungunya



45-90 minutes

# **Topic overview**

It's time to practice keeping the community safe! Students and youth 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. Youth are the most effective people to help their families and friends stay healthy and free of disease. This is called behaviour change!

# Main learning points

- **1.** Behaviour change can be hard because we have to do something different than what we are used to.
- **2.** There are games and activities to help people to learn how we can do things differently to prevent Zika, dengue and chikungunya.
- **3.** People who have Zika, dengue or chikungunya cannot make someone else sick just by being near them. But they do need to avoid getting bitten by another mosquito.
- **4.** People who do not have Zika, dengue or chikungunya do not need to be afraid of people who are sick.



**Materials** 



Charades clues cards

Cut into individual cards for the game.



Zap that mosquit	o game cards	Cut out the cards on the dotted lines.
Rain barrel	Drum	Garbage in bin
Pot	Bucket	Insect repellent
Flower vase	Plant storage bin	Bednet
Empty bottle	Insect repellent	Cover water container
Bathtub	Empty containers	Long sleeves / pants
Standing water	Scrub inside containers	Fogging/larvicide
Tire ♀★	Bednet	Long sleeves / pants
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Zap that mosquito game die

Zap that mosquito game cards

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



Zap that mosquito game board

International Federation of Red Cross and Red Crescent Societies Zika, dengue and chikungunya prevention module for school/youth



## **Essential questions**

What helps us to do those things that will keep us safe from disease? Is changing the way we do things difficult? What are the activities that can help keep us safe and prevent Zika, dengue and chikungunya?

## How do we keep ourselves safe?

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**Ask:** Ask students to describe a time when they tried to do something new. What did they try to do? What was it like? Was it hard to try to do something new? What was hard about it?

**Explain:** While there is no vaccine or cure for the Zika, dengue or chikungunya viruses, when students and 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.

Remembering to do the things that will prevent you from getting mosquito bites can be hard. It may take a while to remember to always do those things to keep safe.

We know that to prevent Zika, dengue and chikungunya, we have to get rid of mosquitoes and their eggs and we need to protect ourselves from mosquito bites. We have to always remember to:

• Use small water storage containers will help eliminate environments that help mosquitoes to grow.

International Federation of Red Cross and Red Crescent Societies Topic  $4\,$ 

- Scrub the inside of water containers every week to get rid of mosquito eggs.
- Cover or protect all water.
- Dump any water that does not flow from an inside source that is not needed.
- Wear insect/mosquito repellent
- Wear long sleeves, long pants- be sure to cover up.
- Sleep under a bednet if sleeping between dawn and dusk.

## How can youth help the community to understand that there is no reason to fear people with Zika, dengue or chikungunya?

You can help by making sure that family, friends and members of their school and home communities have the correct information about how these viruses 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 places where mosquitoes might lay their eggs, preventing from getting a mosquito bite and telling your doctor when you don't feel so well, we can work together to keep people 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 school 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.

## Dengue game



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 students/youth groups 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 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 to do that first wins.

Green "Zap that mosquito" game cards used:

- Using insect repellent (two cards)
- 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)
- Wearing long sleeves/long pants or use (two cards)
- Throwing garbage in a bin
- Covering and protecting all standing water in the household
- Regularly treat standing water with fogging or larvicide



Zap that mosquito game cards www.winetermine			
Rain batNi	trum	Garbege in bin	
	Ruther	Insect repellent	
Flower vans	Plant storage bin	Bedret	
Empty bottle	Insect repellent		
Bathub	Empty containers	Long skeeves./parts	
Standing water	Scrub inside containen	Fogging davidde	
	Bednet	Long sleeves / parts	
	-	Al quantum de E	

International Federation of Red Cross and Red Crescent Societies Topic 4

## Zap that mosquito game

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

Students preparing to play: Four students 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.

## Role play – Addressing Stigma

Instructions: This is a role play for groups of three to act out a scene where one student is teaching another student about the Zika or dengue virus. Each person in the game has a role and has to act like their character. In this role-play, a student is teaching his/her friend why they should not be afraid of someone who has the Zika or dengue virus.

Teacher guidance: In their groups of three, they will prepare and perform the role play to perform to another group. Give half of the groups the pale pink slips to do Role Play





Zap that mosquito game cards terretering			
Ran barw	Drum	Garberge in bin	
Pot 🔶	Rudat	Insect repellent	
Rover vase	Plant storage bin	Bednet	
Empty bottle	Insect repellent		
Cathub	Empty containers	Long sleeves / parts	
Standing water	Scub inside containers	Fogging larvicide	
9*	Bednet	Long sleeves / parts	
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# Zika, dengue and chikungunya prevention module for school/youth



A and give the other half of the groups the pale green slips to perform Role Play B. They have ten minutes to prepare their role play.

After ten minutes, have each Group A find a Group B. The paired groups should find a place in the classroom to present their role plays to the one other group of three. All the Group As go first in presenting to the other group they are paired with – they have 5-7 minutes to present their role play. After 5-7 minutes, Group B should now present their role play to their Group A pair.

# **Check your understanding**

- Why were Jose and Hector so afraid? Have you ever felt like this about someone who was sick? What did you do?
- What did Fatima and DeeDee do to help the situation? How did they do in making Juan and Esmeralda feel better and get the help they needed? Have you ever been in a situation where you could help someone in a situation like this?
- Have you ever felt like Juan or Esmeralda and needed someone to support you or protect you or your family? What did you do?
- What is the only way you can 'get' Zika, dengue or chikungunya?
- What are some of the ways we can protect ourselves from Zika, dengue and chikungunya?

# ZDC prevention module for communities Topic 5

## Learning objectives

At the completion of this topic, students/youth will be able to:

- Discuss places in their school community where mosquitoes can lay their eggs and identify these areas on a community map
- Discuss with the school community how they can plan to clean green and red sites
- Develop an action plan for getting rid of places where mosquitoes can lay their eggs



# **Creating an action plan**



45-60 minutes

# **Topic overview**

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

# Main learning points

- 1. Once the school community has identified places where Aedes aegypti and Aedes albopictus mosquitoes like to lay their eggs, students and teachers can develop an action plan to make it more difficult for mosquitoes to find places for laying eggs and get rid of any mosquito eggs already there.
- 2. Making an action plan helps everyone to do their part in getting rid of places where mosquitoes can lay their eggs. The action plan tells who will be responsible for specific tasks and when they will complete the tasks.
- **3.** Once the action plan is developed and everyone in the school community agrees, the action plan and map should be in a place where everyone can see it easily.
- **4.** The school community should repeat the school 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**

School map designed by the school community with green and red flags (from topic 3)



# **Essential questions**

What can the community do when the places where mosquitoes grow have been mapped? How can the community take action? Who is responsible for cleaning up and making sure everyone plays a role in changing the community for the better?

**Ask:** Ask students how they identified the places where mosquitoes live and lay their eggs in their school community? How many green flags were there? How many red flags were there?

**Explain:** Once the school community has completed its mapping, we as a school community members will discuss the ways that they can clean up the green flag sites.

Let's talk about how we can work as a school community to clean up our community to keep ourselves safe. Let's discuss what each school community member's role is.

**Explain:** You can encourage and support your families and friends and neighbours in cleaning up the green flag sites in their own homes, in our schools, workplaces and communities. For people who might be unable to do their own clean-up, how can we as students and volunteers help them to clean up or cover up any risky areas in their homes or at school?

# Let's do this!

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

Discuss as a group:

- How can we start the address the areas with green flags?
- Let's review each green flag and come up with a plan. 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 me 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 class or school has agreed on how they will address each green flag, discuss with the group to create provide a timeline for:

- When cleanup of the green 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 me know when the task has been completed.
- Letting me 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 live or lay their eggs.

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

#### Discuss:

- 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 school would be make a good team to work with the government to regularly clean up the red flag mosquito sites.

Provide materials, time and support to empowering youth to clean up their school community with teacher and parent guidance as appropriate. Re-visit your plan every week to see how you are progressing.

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End of Module

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# 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

school/youth module

The purpose of this toolkit is to provide youth, students and those working with young people with information on how the three diseases of Zika, dengue and chikungunya are transmitted and how they can be prevented. The toolkit 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.

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