Malaria toolkit
A simple net provides protection against the deadliest creature in the world. Where children are at risk of being bitten by mosquitoes carrying malaria, an insecticide-treated bed net saves lives. Even with this simple and inexpensive solution, malaria continues to be one of the leading causes of death in children under five. Efforts to eradicate malaria have reduced the effects of the disease in many countries around the world. Concerted and coordinated efforts can bring the same resolution for millions of children everywhere.
Use the information in this toolkit to:

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**Plan International**
Founded in 1937, Plan International is one of the world’s oldest and largest international development agencies, working in partnership with millions of people around the world to end global poverty. Not for profit, independent, and inclusive of all faiths and cultures, Plan has only one agenda: to improve the lives of children.

**Because I am a Girl** is Plan’s global initiative to end gender inequality, promote girls’ rights, and lift millions of girls – and everyone around them – out of poverty.
Understand the wording used to communicate about malaria

**Anopheles**
The genus of mosquito responsible for the infection of humans with malaria.

**Genus**
A category used in the biological classification of living and fossil organisms.

**Host**
The organism from which a parasite obtains its protection and/or nutrition.

**Immunity**
The ability of an organism to fight off or resist disease by the action of specialized blood cells or antibodies.

**Infectious disease**
An illness caused by organisms such as bacteria, viruses, fungi or parasites. Infectious diseases are passed from person to person, transmitted by the bite of an insect or animal, or contracted from contaminated water or food.

**Insecticide**
A chemical used to kill insects or control the growth of insect populations.

**Insecticide-treated bed net**
A mosquito net that repels, disables or kills mosquitoes when they come in contact with the insecticide on the netting material. Insecticide-treated bed nets are used to protect people, while they sleep, from being bitten by mosquitoes carrying the malaria parasites.

**Malaria**
An infectious disease characterized by cycles of chills, fever and sweating, caused by protozoan parasites of the genus Plasmodium that are transmitted through the bite of Anopheles mosquitoes.

**Parasite**
An organism that lives on or inside another organism (its host) from which it obtains nutrients and protection. A parasite cannot live alone and it provides no benefit to its host.

**Plasmodium**
The large genus of the parasitic organism responsible for malaria infections.

**Symptom**
A change in the body or its function as a result of a particular disease or condition. Symptoms of malaria include convulsive chills, high fever, headache and sweating.

**Vector**
An organism that transmits a parasite or disease from one plant or animal to another. With malaria, the mosquito serves as the vector transmitting the Plasmodium parasite from infected individuals to others through successive bites.

**Vector-borne disease**
Illnesses that rely on insects and animals to spread infectious agents from infected individuals to uninfected individuals. Common vectors are biting insects, such as mosquitoes that carry and transmit malaria.
Get the facts
about malaria and how children are affected

The deadliest creature in the world is...

a. Crocodile  
b. Shark  
c. Grizzly bear  
d. None of the above

The world’s deadliest creature isn’t what you would expect. It is in fact, the mosquito.

As a vector that spreads diseases like West Nile virus, malaria and yellow fever, mosquitoes are responsible for the deaths of two million people a year. That’s more than sharks, snakes, hippopotamuses, grizzly bears and crocodiles combined. Who knew the world’s deadliest creature could be squished with a single finger?

The Anopheles mosquito transmits the parasite that causes malaria to hundreds of millions of people every year, and over half a million of them die as a result. According to the latest estimates there were 584,000 deaths due to malaria in 2013, most of which were children under the age of five.

Myth: Mosquitoes bite

Mosquitoes don’t bite, they suck. They don’t have teeth to bite with. Instead they cut skin using their serrated proboscis (a tube-like mouthpart) and locate a capillary under the skin. Then they proceed to drink up to three times their weight in blood.

Did you know?

It would take about 1.2 million mosquito “bites” to drain you of all your blood.

Malaria is spread by female mosquitoes

Malaria is transmitted solely through the bite of a female Anopheles mosquito. Female mosquitoes need blood for the development of their eggs. They bite mammals by inserting a proboscis into the skin and injecting an anti-coagulating fluid to make the blood flow easily. This is when the transmission happens.

The tiny Plasmodium parasite is the microbe that causes malaria. This microbe resides in the saliva of the mosquito and enters the bloodstream of humans when they are bitten by carrier mosquitoes. The parasite goes into the liver where it incubates for 7 to 30 days. Then it re-enters the bloodstream and bursts red blood cells resulting in deadly symptoms like high fever, headache, convulsive chills and vomiting. If not treated within 24 hours, the deadliest strain of malaria, P. falciparum, can progress to severe illness often leading to death.

Image from Spread the Net  plancanada.ca/the-worlds-deadliest-creature
1 child dies every 60 seconds from malaria

The majority of people who die from malaria each year are young children and pregnant women. In fact, every sixty seconds another child dies of malaria. In high transmission areas, newborn babies are often protected during the first few months of life by the antibodies transferred to them from their mother during pregnancy. As the antibodies decrease with time, these young children become vulnerable to disease and death by malaria. If they survive multiple bouts with malaria up to an older age, they will develop partial immunity. This is why many malaria control interventions target young children in this ‘in-between’ stage (six months to five years) before immunity is developed.

Pregnancy decreases immunity against many infectious diseases. Research shows that when women become pregnant their immunity towards malaria decreases. Pregnant women with malaria have an increased stillbirth, premature delivery and low-birth weight infants. Therefore, malaria control interventions target pregnant women in order to protect both the fetus and the mother.

One half of the world’s population lives in areas at risk of malaria

Malaria is no longer a major threat in North America or most of Europe due to large-scale anti-malaria interventions implemented after World War II. Yet, every year, 3.4 billion people – approximately one half the world’s population – lives at risk of contracting this disease.

Africa, Asia, Latin America, and to a lesser-extent the Middle East and parts of Europe, are affected. In 2014, malaria was transmitted in 97 countries. Yet, nowhere is the problem as severe as in sub-Saharan Africa, where 90 per cent of all deaths due to malaria occur, and malaria accounts for one in six childhood deaths.

Malaria doesn’t just cause illness. It feeds upon and furthers the cycle of poverty. Malaria alone costs African countries approximately USD$12 billion each year in lost productivity, foreign investment, tourism and trade. These affected countries and communities are then more vulnerable to the ripple effects of poverty and declining economic growth.

The gap between the rich and the poor in malaria-endemic countries is widened by the effects of the disease. Families of low economic status are disproportionately affected as they tend to live in malaria-prone areas in poorly-constructed homes that offer little protection from mosquitoes. They also often have poor access to treatment if they contract the disease, and are burdened financially when they can’t work because they are sick. For those who do have access to treatment, the costs associated with travelling to health centres and paying for medicines often strain family finances further.

Malaria also puts a serious strain on the public health systems. Malaria continues to account for more than 30% of public healthcare spending in the most affected endemic countries.

Did you know?

Malaria keeps more kids out of school than any other disease? Malaria accounts for half of all preventable absenteeism, causing up to 10 million missed days each year. Malaria can also cause lasting learning disabilities.
One bed net can protect two children for up to three years

Malaria is both preventable and treatable. It is possible to stop the spread of malaria with concerted and coordinated efforts.

One way to reduce the spread of malaria is through vector control. A vector is an organism that passes disease from infected individuals to uninfected individuals. With malaria, vector control involves reducing the number and effectiveness of mosquitoes. The World Health Organization advocates for an Integrated Vector Management approach, which involves the use of several methods to control mosquitoes.

One such method is the use of insecticide-treated bed nets (ITNs). Since most malaria-carrying mosquitoes bite humans at night, sleeping under a bed net is an effective and inexpensive way to prevent the transfer of malaria. An insecticide-treated bed net provides not only a physical barrier to mosquitoes, but also a chemical one. The insecticide applied to the netting is toxic to mosquitoes and other insects, but is safe for humans. A long-lasting ITN will remain effective at deterring and killing mosquitoes for up to three years.11 One bed net can protect two children for up to three years. At about $10 per bed net, that’s a good investment!

Other methods to prevent the spread of malaria include indoor spraying of insecticides (chemicals that kill insects) which reduces the number of mosquitoes entering houses or sleeping areas; wearing insect repellent and wearing long clothing; disrupting mosquitoes ability to breed by eliminating standing water and draining wetlands; and taking antimalarial medicines (particularly for people travelling to malaria-endemic areas who likely have no natural immunity to the disease).

Once diagnosed, malaria can be treated with medicines that act quickly to eliminate the Plasmodium parasite from the blood, thus preventing death. This is the main objective of treatment, however treatment also serves the public health objective of preventing the patient of being a reservoir of infection, and spreading the illness should they be bitten by another mosquito.

Gender can influence malaria transmission and treatment

Understanding gender roles, norms and values is important to building a complex response for malaria prevention and control.

If girls and boys, and women and men, are equally exposed to malaria, then evidence suggests that all are equally vulnerable to malaria infection, with one exception. Pregnant women and girls are at greater risk of severe malaria in most endemic areas because of their decreased immunity.12

In many areas though, girls and boys, and women and men, are not equally exposed to malaria, nor do they have equal access to treatment. Gender norms and values in families can influence who has the most exposure to malaria, who has access to prevention measures like insecticide-treated bed nets at night, and who gets treatment and care when they become sick.

Where family members work and where they sleep can affect their exposure to malaria. In some areas where men work in mines, forests or fields at peak biting times, they may be more at risk of contracting malaria.13 And where women and girls rise before dawn to perform household chores, they too can be at greater risk of contracting the disease.14

In some households with only one bed net, priority is given to men because their health is seen as more important to protect when they are the main income earner. While in other households, children and women sleep together under the only bed net inside because it is common practice for men to sleep outside.15

Gender norms and values can limit access to treatment for women. In some areas women access treatment for malaria less frequently than men because they need permission from their husband to seek medical treatment for themselves and/or their children. Sometimes, they are also reluctant to see male health workers because of cultural beliefs.16

Early diagnosis and treatment of malaria reduces disease and prevents deaths

Malaria is treatable when caught early enough. Sometimes the first symptoms – fever, headache, chills and vomiting – may be mild and difficult to recognize as malaria. However, the deadliest of the strains of malaria – Plasmodia Falciparum – if not treated within 24 hours, can progress to severe illness often leading to death.
How is Plan helping?

Fighting malaria is a big priority for Plan. Efforts to combat malaria focus on key priorities to bring about the greatest impact.

Prevention is key

Prevention is important in winning the battle against malaria. Plan distributes long-lasting insecticide-treated bed nets to families in malaria-endemic areas to prevent mosquitoes from transmitting the disease at night. In Liberia, Plan distributed over one million anti-malaria bed nets within five different counties. While in Guinea, Plan conducted household assessments in over one million homes to prepare for the distribution of anti-malaria bed nets.

Other preventative measures include training community health workers in malaria prevention, detection and treatment. And providing educational programming in schools to teach children how to protect themselves against the disease. In Zimbabwe, student-led clubs from 870 schools received training on malaria prevention and awareness.

Treatment is also important

Plan Canada works with country offices, the Ministry of Health, UN agencies, and international and local NGOs to bring treatment to people suffering from malaria. Medical equipment is provided to aid in the timely diagnosis of malaria – a very important step in getting the right treatment for those infected by the Plasmodium parasite. Programs also provide pregnant women with access to anti-malarial medicines, as they are particularly vulnerable to the transmission of malaria while they are pregnant.

$10 protects a family!

An anti-malaria bed net is big enough to shelter families of five children and their parents. They are locally made, last up to five years, and help stop malaria in its tracks. Plan also conducts training on how to use the nets properly and keep the children safe. Text NETS to 30333 to make a $10 bed net donation that will be added to your monthly mobile phone bill.
Example of youth taking action:
Canadian students spread a net of hope

Across Canada, students of all ages have taken up the challenge to ‘Spread the Net’ on malaria.

Plan’s Spread the Net Student Challenge is a friendly, nationwide competition between schools to raise funds and awareness. It was co-founded in 2006 by the Honourable Belinda Stronach, P.C., and Rick Mercer, comedian and host of the Rick Mercer Report, before being acquired by Plan Canada in July 2013.

The money raised is used to purchase and distribute insecticide-treated bed nets, along with training on their use, to children and their families at risk of malaria. Since 2007, Spread the Net has protected the lives of more than 7.2 million people including children and pregnant women by delivering over 2.5 million bed nets to families in Africa.

Each year, the top fundraising elementary, secondary and post-secondary schools are visited by Rick Mercer to appear on an episode of the Rick Mercer Report!

The efforts of Canadian children and youth are not only touching the lives of people who now sleep protected from malaria, but they are also building awareness across Canada about the preventable nature of this disease that still claims a child’s life every 60 seconds.

Rick visits the winners
Watch Rick Mercer, a Plan Ambassador, and the Rick Mercer Report visit winning schools of Spread the Net:
https://www.youtube.com/watch?v=9GSinhERySA

Plan project spotlight:
Promoting African Grassroots Economic Security (PAGES)

Promoting African Grassroots Economic Security (PAGES) is a five-year project in seven African countries: Ghana, Ethiopia, Rwanda, Tanzania, Mali, Senegal and Sierra Leone. The project uses financial programs to bring stability to the lives of girls and boys in some of the poorest regions and communities within these countries.

Without financial security, families are not able to access fee-for-service health care centres and medical treatment when family members contract malaria. PAGES programs like Village Savings and Loan Associations (VSLAs) provide women with greater economic decision-making power within the family household. Increasing a mother’s economic security has been shown to trickle down to her children, as women who are economically empowered are more likely to reinvest their money into their children’s well-being (healthcare, education, etc).

To form a VSLA, members each contribute a small amount of their own money to create a group savings fund. They then hold regular meetings to take out low-interest loans from this fund in order to support their income-generating activities, like farming or running a small business.

In Rwanda, where the infection rate of malaria is about 8 per cent (more than 80 cases per 1,000 people) and the entire population of the country is at risk to malaria, community members have reported that VSLAs have helped them cover their health and education expenses. Rwanda was the first country in sub-Saharan Africa to achieve universal access to insecticide-treated bed nets, and has seen remarkable improvements over the last decade in access to malaria treatments. Ensuring families have financial security means that they can better participate and take advantage of the gains being made in access to malaria treatment and prevention programming.
Go deeper
through focused activities that unpack the issues in more depth

Activity 1 – Deadliest creature in the world

Introduction
No one likes the sound of a buzzing mosquito at night. Worse still is when one of them successfully takes a bite. Mosquitoes are the deadliest creatures in the world spreading vector-borne illnesses to millions of people. This activity explores how mosquitoes act as vectors – or hosts – of the parasite that causes malaria.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Understand how malaria is a vector-borne disease and how it is transmitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Number of participants</td>
<td>Larger groups work best, 15+ participants</td>
</tr>
<tr>
<td>Materials</td>
<td>Bowl of popped popcorn, one paper cup for each participant</td>
</tr>
<tr>
<td>Prep</td>
<td>Prepare the materials and review the ‘Get the facts’ section of this toolkit</td>
</tr>
</tbody>
</table>

Instructions
1. Write the words “Deadliest Creature in the World” on the board. Ask participants to guess the identity of the mystery creature. Take an informal poll or show of hands if you wish.
2. Explain that the deadliest creature is in fact – the mosquito. From malaria to yellow fever to West Nile virus, mosquitoes act as the dangerous go-between for these deadly vector-borne diseases. In fact, mosquitoes transmit the majority of new diseases that have surfaced in the past 25 years.
3. Ask if anyone knows what a vector is. Explain what vectors are using the information in the box. Then ensure the participants understand what an organism is and what a host is.
4. Review why mosquitoes bite humans. Female mosquitoes bite mammals because they need blood in order to help their eggs develop. When they bite, they insert a proboscis (elongated tubular mouthpart) into the skin and inject a fluid (anticoagulant) to help the blood flow easily. This transfer of fluids is how disease-causing microbes enter a host from the mosquito.
5. Use the following role-play to demonstrate how a mosquito transmits malaria to humans:
   - Designate one participant as the vector (the mosquito) and give her or him the bowl of popcorn. Explain that the popcorn represents the disease-causing microbes in the mosquito’s stomach. In the case of malaria, the microbes are small Plasmodia parasites.

Discussion
Debrief the activity using these discussion points:
- Explain that the rest of the participants represent the humans at risk of contracting malaria. Give each of them a paper cup. Have them spread out around the room.
- Give the vector 30 seconds to 1 minute (depending on your group size) to put popcorn into as many empty cups as possible – one piece at a time.
- Explain that not all mosquitoes carry the microbes that cause malaria, so infecting a participant requires five pieces of popcorn. A person’s risk of contracting malaria is greater with increased exposure to the bite of Anopheles mosquitoes. Explain that a person who is bitten by a disease-carrying mosquito now becomes a new host for the Plasmodia parasite. Within 7 to 30 days, the parasite will reproduce and be present in the infected person’s blood. If bitten at that point, the parasite goes into the vector (mosquito) and can be transmitted to someone else.
- After the vector has finished the round, count how many participants became infected.

Note to teachers and facilitators
The activities in this section are designed to be used in a classroom, youth group or after school/club setting. The For teachers section at the end of each activity has curriculum expectations and learning outcomes.

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- After the vector has finished the round, count how many participants became infected.

Did you know?
- An organism is an individual plant, animal or single-celled life form.
- A host is an organism on or in which another organism lives.
- A vector is an organism, such as a mosquito, that spreads infection by carrying disease-causing microbes (bacteria, viruses, plasmodia) from one host to another. Vector is the Latin word for a “bearer.”
- The female Anopheles mosquito is the vector that transmits malaria.

For teachers
This activity meets the following learning objectives and curriculum expectations:
- To examine malaria as an example of a vector-borne disease
- To understand how vectors transmit malaria and spread disease
Activity 2 – Breaking the cycle

Introduction
Malaria strains communities and countries where infection rates are high. The disease slows economic growth due to absenteeism and lost productivity. It burdens health systems and deters tourism. Ultimately it widens the gap between the rich and poor, marginalizing the most vulnerable members of society.

What if the cycle could be broken? This activity will explore some of the interventions needed to halt the spread of malaria and its devastating effects.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Understand how malaria contributes to the cycle of poverty and what interventions are needed to break it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1 hour</td>
</tr>
<tr>
<td><strong>Number of participants</strong></td>
<td>2 – 30+</td>
</tr>
<tr>
<td>Materials</td>
<td>For each group: chart paper, markers, tape/glue, Handout 1 cards cut out, access to computers and the Internet</td>
</tr>
<tr>
<td>Prep</td>
<td>Cut out one set of Handout 1 cards for each group and gather materials</td>
</tr>
</tbody>
</table>

Instructions
1. Organize the large group into small groups of three to six participants.
2. Hand out the paper, markers, glue and cards to each group. Explain that participants review the cards together and then arrange them in a circle (representing a cycle) with the Malaria Infection card at the top. The other cards should follow in a clockwise order. The arrangement illustrates how each condition is created or influenced by the one before it.
3. When the group has deliberated and agreed on the order of the cards, they glue/tape each onto the chart paper and draw arrows from the Malaria Infection card to the next card in the cycle, and so on until they return to the initial card.
4. Next groups brainstorm and discuss interventions that could be used to break the cycle of infection and poverty. See the Interventions Cards on Handout 1 for some of the possible interventions. Give an example or two to get them thinking.
5. Groups then write their interventions beside the points in the cycle where they will likely have the greatest impact. See an example on Facilitator Reference 1 (page 13).
6. When a group reaches this point, give them a copy of the Interventions Cards. Have them explore the cards and determine if there are new ideas in the cards they hadn’t considered. If so, they add the cards to their cycle at the points where they will have the most impact.
7. Then have each member of the group choose one of the interventions to learn more about by spending 10 to 15 minutes researching their chosen intervention on the Internet. Have them focus on understanding what the intervention does, and the pros and cons of using it.
8. When the research is complete, groups reconvene and discuss what they learned. They add interesting facts and points to their paper in jotted form. Then they hang their papers around the room and designate a representative to remain with their paper while the other members circulate and interact with other groups. The representative explains the group’s thinking and rationale for the ordering of their cycle and the interventions they chose.
9. After about 15 minutes, bring the large group back together and facilitate the discussion using the questions below.

Discussion
- What are some of the ways that malaria and poverty are interrelated? Are there other factors that weren’t included on the cards?
- How do malaria and poverty feed into each other in a cycle?
- What interventions did your group propose to break the cycle of malaria and poverty?
- Can the cycle be broken with just one intervention? Or are multiple interventions needed?
- What were the interesting pros and cons for the use of the interventions you studied?
- Are there some interventions that you would put more emphasis on? Why or why not?
- What happens to the cycle when interventions are applied?

Further exploration
There is ongoing debate about the use of the insecticide Dichlorodiphenyltrichloroethane (DDT), a chemical that has been banned in Canada for many years. When used properly, DDT is an effective tool for fighting malaria by controlling mosquito populations. It has literally saved millions of lives. However, DDT is a persistent chemical that exists in the environment for many years after its initial use. It finds its way into ecosystems and food chains, where it persists and breaks down into products that are dangerous to wildlife. Regardless of a worldwide ban on the use of DDT, the World Health Organization allows its use for controlled indoor spraying to rid homes and sleeping areas of mosquitoes in areas where malaria is endemic. Have participants research the history of DDT, and the positive and negative aspects of its use.

Share
Consider educating your school about the ways to break the cycle of malaria and poverty. Do a presentation at a school-wide assembly. Make placard-sized versions of the cycle and intervention cards (Handout 1), and have participants from the audience hold the signs and place themselves in a cycle formation with the interventions at the appropriate places in the cycle. Challenge your school to participate in Plan’s Beats for Bed Nets (page 14) campaign, and raise money to provide insecticide-treated bed for children around the world. Take photos and share the results of your assembly on social media using #PlanforChange to broaden the reach of your education efforts.

For teachers
This activity meets the following learning objectives and curriculum expectations:
- To understand how malaria and poverty feed into one another in a cyclical relationship.
- To examine interventions that can break the cycle of malaria and poverty.
Handout 1 - Breaking the cycle cards

Cut out the cards below and keep them separated into two groups: *Malaria* and *Poverty Cycle*, and *Interventions*. Follow the instructions in the activity *Breaking the Cycle* (page 14).

<table>
<thead>
<tr>
<th><strong>Malaria infection</strong></th>
<th><strong>No work or school</strong></th>
<th><strong>Family finances strained</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria is contracted from the bite of a malaria-carrying mosquito. The disease incubates in the liver before re-entering the bloodstream and causing severe symptoms.</td>
<td>The symptoms of malaria are debilitating, which prevents adults from working and children from attending school.</td>
<td>Money becomes tight as parents miss work and wages due to illness, and spend a significant portion of the budget on treatment and travel to health care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Economy suffers</strong></th>
<th><strong>Poverty gap widens</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The economy suffers from lower productivity as workers miss work, tourists become afraid of infection and don’t visit, and the costs of treatment, control and education overwhelm the local economy.</td>
<td>As the local economy suffers, jobs are lost and families then can’t afford appropriate housing materials or bed nets to protect against mosquitoes. They become vulnerable to infection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Affordable medicines</strong></th>
<th><strong>Bolster health systems</strong></th>
<th><strong>Distribute bed nets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiate and advocate for lower prices on medicines needed to treat malaria, so that they are more accessible for families in developing countries.</td>
<td>Strengthen local health clinics and medical services, so that families can access timely diagnosis and treatment of malaria.</td>
<td>Make insecticide-treated bed nets widely available to families living in malaria-endemic regions and communities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Better buildings</strong></th>
<th><strong>Indoor spraying</strong></th>
<th><strong>Disrupt breeding areas</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Put in place building codes and policies that support the building standards that incorporate measures to allow for better protection from mosquitoes.</td>
<td>Implement indoor spraying programs where surfaces in homes are sprayed with long-lasting insecticides to kill mosquitoes in places where families sleep.</td>
<td>Remove ideal breeding conditions for mosquitoes, by eliminating standing water and draining wetlands.</td>
</tr>
</tbody>
</table>
Facilitator reference 1 - Breaking the cycle

Use the diagram below as a reference for how the participants should arrange the Malaria and Poverty Cards in a cycle. The interventions can be applied at different points in the cycle. There are multiple ways to arrange them. See the suggested orientation below for where the participants could place the Interventions Cards.

**Cycle of malaria and poverty**

- **Poverty gap widens**
  - Families then can’t afford appropriate housing materials or bed nets.

- **No work or school**
  - The symptoms of malaria prevent adults from working and children from attending school.

- **Economy suffers**
  - The economy suffers from lower productivity as workers miss work.

- **Family finances strained**
  - Money is tight as parents miss work and wages.

- **Better buildings**

- **Economy suffers**

- **Disrupt breeding areas**

- **Indoor spraying**

- **Malaria infection**
  - Malaria is contracted from the bite of a malaria-carrying mosquito.

- **Affordable medicines**

- **Bolster health systems**

- **Distribute bed nets**
Plan for Change
and take action in meaningful ways to protect children from malaria

Malaria is both preventable and treatable. There is great potential to dramatically reduce the impact of this disease. What’s your plan to change malaria?

Have a measurable impact

One anti-malaria bed net can protect two children for up to three years. At $10 per bed net, the potential to impact many lives is real. Consider raising funds to purchase as many bed nets as possible for families in malaria-endemic regions of the world.

Challenge accepted?

Will you accept Plan Canada’s challenge to Spread the Net? Join this friendly national competition to raise funds for bed nets. Be the top fundraising school in Canada and receive a visit from Rick Mercer and have your school appear on the Rick Mercer Report! Go to plancanada.ca/studentchallenge for helpful resources.

Plan a campaign. Try Beats for Bed Nets!

If the student challenge isn’t your thing – join us in the fight against malaria and help us Spread the Net by hosting a Beats for Bed Nets event.

Beats for Bed Nets is about coming together to celebrate and enjoy local musical talent, and harness it to fight back against malaria. Get a group of friends or classmates together to help you organize this event. It could be an open mic night, a friendly battle of the bands or lip sync competition, a concert, or even a musical talent show. You can raise awareness and funds by having someone speak about the issue, and either asking for donations or having people purchase tickets to attend.

You can host this event at any time throughout the year, but it can be especially meaningful on World Malaria Day which takes place on April 25 each year.

Don’t forget to check out our website for great advice on everything you need to know about organizing your event – you can find it online at plancanada.ca/spreadthenet!

Here are some steps in organizing your Beats for Bed Nets!

Step 1: Understand the issue
Before fundraising, learn about malaria and bed nets.

Step 2: Get organized
Set up an online fundraising page, form a team of dedicated individuals, get brainstorming and make a game plan.

Step 3: Spread the word
Put up posters, use social media and share your progress using #PlanforChange. Make your event newsworthy with a catchy news announcement!

Step 4: Start fundraising
Set a fundraising goal and publicize it. Challenge your team to do their best and most importantly of all – make it fun!

Step 5: Wrap it up and remember to say “thank you!”
Congratulate everyone for their efforts and recognize your team’s commitment with public acknowledgement.

Want more ideas?

Get Plan’s Spread the Net Fundraising toolkit
http://plancanada.ca/studentchallenge
Other event ideas

- Art exhibit
- Auction
- BBQ
- Benefit concert
- Board games tournament
- Can/bottle drive
- Car or dog wash
- Carnival
- Craft sale
- Charity Coffee-house
- Charity dinner
- Cook off
- Dance-a-thon
- Eating contest
- Fashion show
- Food or bake sale
- Gala event
- Garage sale
- Golf tournament
- Karaoke competition

“Think globally, act locally.” Rene Dubos

We appreciate inputs and ideas from Plan Canada’s 2014/2015 Youth Advisory Council Team members who provided input and review of this educational toolkit.

Toolkit references


Note to readers: All the images used in this toolkit belong to Plan International. If you would like to reference this resource, please refer to the following format. Plan International Canada. “Malaria toolkit.” 2015.
Other ways to take action

1. Visit planforchange.ca

Explore all there is to offer at planforchange.ca – connect with others and learn about the issues.

2. Post and share on social media using #PlanforChange

Advocate online and boost your efforts by including #PlanforChange in your posts, tweets and shares. Linking to Plan’s social media channels will boost the platform and profile. Share your efforts and send your calls to action on your social media channels using #PlanforChange.

3. Participate in international days of action!

Mark these important dates on your calendar and check to see what Plan is up to!

- April 7: World Health Day
- April 25: World Malaria Day
- August 20: World Mosquito Day

To learn more about Plan for Change, visit planforchange.ca