



URBAN WORLD ACTIVITY  
MALARIA ACTIVITY 2:  
THE EFFECTS OF MALARIA  
& FUNDRAISING



Jane Goodall's  
roots&shoots



# MALARIA ACTIVITY 3: EFFECTS OF MALARIA AND FUNDRAISING

This is the last activity in a three part series on malaria, each of which is designed to be completed in a single lesson. The activities can be treated as being completely stand-alone or carried out as a series. They can all be downloaded from the Roots & Shoots UAE website at [www.rootsnshoots.ae](http://www.rootsnshoots.ae).

Despite some great advances over the past few years, malaria is still an everyday issue for many with 3.2 billion people across the world classified as at risk of infection by the World Health Organisation (WHO). In this activity your students will learn about the effects that malaria can have on families and communities, and look at ways to raise funds to help in the fight against malaria.

## IN THIS ACTIVITY YOU AND YOUR STUDENTS WILL:

- ▶ Learn about the effects of malaria on individuals, families and communities.
- ▶ *Optional:* Create a wall chart about the effects of malaria to display at school, or add to the wall chart you created in activity 1.
- ▶ *Optional:* Raise funds to help in the fight against malaria.

## OBJECTIVES

Carrying out this activity will help students learn about the effects that malaria has on individuals, families and communities. They will also be encouraged to raise money to help in the fight against malaria.

## WHAT DO I NEED TO MAKE IT WORK?

Access to the internet to do some background research and listen to some short podcasts. Should you choose to create one, you will need pens, paints or other craft supplies to make your wallchart.

## WHAT THINGS WILL MY STUDENTS CREATE?

*Optional:* A wall chart all about malaria.

# WHAT IS MALARIA?

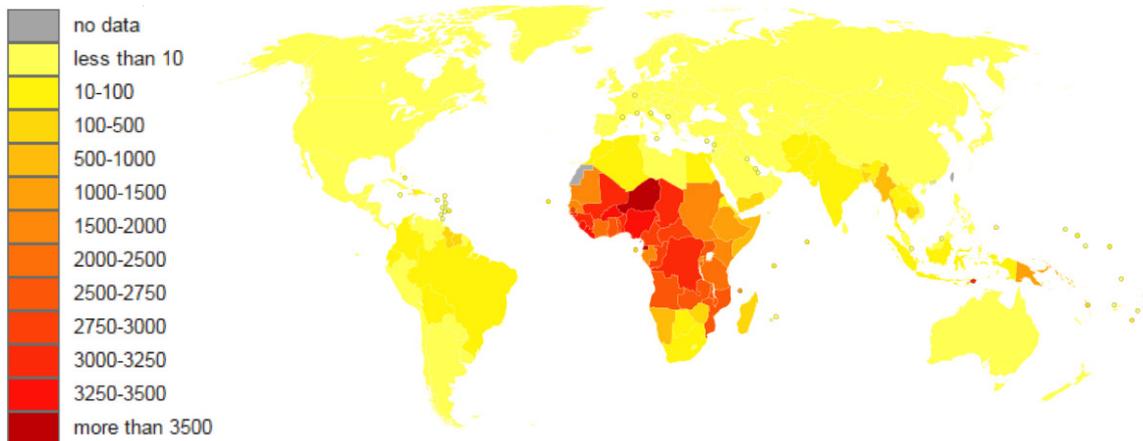
If you have completed the first activity in our malaria series (downloadable from the Roots & Shoots UAE website at [www.rootsnshoots.ae](http://www.rootsnshoots.ae)) then you can skip this step.

These are the key points about malaria that you and your students need to know to complete this activity.

- ▶ Malaria is a parasitic disease. It isn't like a cold or chickenpox (which are viral infections); or like a sore throat or bad stomach (usually bacterial).
- ▶ Malaria is spread by mosquitoes (specifically pregnant female Anopheles mosquitoes).  
 "Anopheles minimus" by Photo: James GathanyContent Provider: CDC – This media comes from the Centers for Disease Control and Prevention’s Public Health Image Library (PHIL), with identification number #7950. Licensed under Public Domain via Wikimedia Commons – [https://commons.wikimedia.org/wiki/File:Anopheles\\_minimus.jpg#/media/File:Anopheles\\_minimus.jpg](https://commons.wikimedia.org/wiki/File:Anopheles_minimus.jpg#/media/File:Anopheles_minimus.jpg)
- ▶ Malaria can cause a number of symptoms. The first symptoms usually appear 10-15 days after infection and include fever, headache, chills and vomiting. More advanced symptoms include severe anaemia and respiratory distress.
- ▶ According to the World Health Organisation, 3.2 billion people – nearly half of the world’s population – are at risk of malaria.
- ▶ According to WHO estimates there were 198 million cases of malaria in 2013 (that’s more than 20 times as many people as live in the UAE) and caused 584,000 deaths (about one third of the number of people living in Abu Dhabi city). Around 90% of the cases and deaths were in sub-Saharan Africa.



"Anopheles minimus" by Photo: James GathanyContent Provider: CDC – This media comes from the Centers for Disease Control and Prevention’s Public Health Image Library (PHIL), with identification number #7950. Licensed under Public Domain via Wikimedia Commons – [goo.gl/oSu6kh](https://commons.wikimedia.org/wiki/File:Anopheles_minimus.jpg#/media/File:Anopheles_minimus.jpg)



"MALARIA WORLD MAP – DALY – WHO2004" BY LOKAL\_PROFIL.

Licensed under CC BY-SA 2.5 via Wikimedia Commons – [https://commons.wikimedia.org/wiki/File:Malaria\\_world\\_map\\_-\\_DALY\\_-\\_WHO2004.svg#/media/File:Malaria\\_world\\_map\\_-\\_DALY\\_-\\_WHO2004.svg](https://commons.wikimedia.org/wiki/File:Malaria_world_map_-_DALY_-_WHO2004.svg#/media/File:Malaria_world_map_-_DALY_-_WHO2004.svg)

Darker colours indicate a greater number of people affected by malaria. The figures shown on the map and key are the disability-adjusted life year (DALY), which is a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death.

- ▶ Children under the age of 5 are most at risk.
- ▶ You can prevent malaria by preventing mosquito bites. One of the most effective ways to do this is to sleep under a special net that has been treated with insecticide. Net use by itself is by no means a guarantee of avoiding malaria. Proper use of pesticides to kill mosquitoes in the home is also very important. If you travel from the UAE or other non-infected area to a place with lots of malaria then it is extremely important to also take anti-malaria medication.
- ▶ Malaria can be effectively treated if caught early. The current best treatment is artemisinin-based combination therapy (known as ACT).

Find out more using these links:

- ▶ The WHO's malaria website: [goo.gl/3x4W7V](http://goo.gl/3x4W7V)
- ▶ The WHO malaria factsheet: [goo.gl/OjnbFq](http://goo.gl/OjnbFq)
- ▶ Malaria.com: [goo.gl/vnCKuY](http://goo.gl/vnCKuY)
- ▶ Malaria facts video: [goo.gl/syAjd6](http://goo.gl/syAjd6)



By தகவலுழவன் (Own work) [GFDL (<http://www.gnu.org/copyleft/fdl.html>) or CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0/>)], via Wikimedia Commons

## EFFECTS OF MALARIA

The immediate problems of malaria on an individual include fever, headache, chills and vomiting. More advanced symptoms include severe anaemia and respiratory distress. The majority of people who are infected with malaria do survive, and the disease itself does not usually cause any long term symptoms. However, it can still have a devastating effect not just on individuals, but also on their families and communities.

According to WHO estimates there were 198 million cases of malaria in 2013 which caused 584,000 deaths. Around 90% of the cases and deaths were in sub-Saharan Africa, which is a very poor part of the world.

- ▶ Poor people often cannot afford mosquito nets and pesticides, which are an effective way of avoiding malaria.
- ▶ Because of this, many people in this position suffer from malaria many times over.
- ▶ Malaria mainly affects children.
- ▶ Because they are affected by malaria, these children miss a lot of school. Listen to this podcast from UNICEF about the impact this has on schools in Liberia: [goo.gl/St6lBH](http://goo.gl/St6lBH)
- ▶ Although malaria treatments are relatively cheap compared to many medicines, they are still too expensive for many people. This podcast from the charity Christian Aid talks about the high cost of treatment: [goo.gl/iLpOFO](http://goo.gl/iLpOFO)
- ▶ Because the cost of medicine is too high for some people, they do not seek treatment. As well as greatly increasing the chance of dying, this also means that each bout of malaria lasts much longer than it needs to. This keeps children away from school and adults away from work for long periods. As well as the malaria patient themselves this also ties up other family members (especially women) at home caring for the patient, meaning that they also cannot go out to learn or earn.
- ▶ Back in the year 2000, research suggested that if malaria had been eliminated in the 1960's the gross domestic product (GDP) of sub-Saharan Africa would be over 30% higher than it is today. This would amount to 5 times the value of all the development aid provided to Africa by other countries. See [goo.gl/uiSnoc](http://goo.gl/uiSnoc) for details.
- ▶ The reduced economic output due to malaria leads to a vicious circle whereby more people are too poor to seek treatment, leading to further losses for the economy.

You can find some short, easy to read real life stories of how malaria has affected people here:

[goo.gl/aWuvYM](http://goo.gl/aWuvYM) and here: [goo.gl/NW6kzC](http://goo.gl/NW6kzC)

## OPTIONAL: MAKE/EXTEND YOUR WALL CHART

Use what your students have learned about the effects of malaria on individuals, families and communities to create a wall chart to share with the rest of the school, or if you have already completed the first of our malaria activities then extend your existing wall chart.

## OPTIONAL: RAISE FUNDS TO HELP IN THE FIGHT AGAINST MALARIA

Highlight to your students that raising even small amounts of money can be helpful in the global fight against malaria.

First, you should choose which charity you are going to raise money for. Some possible charities are:

- ▶ The Against Malaria Foundation: [goo.gl/5HFx6N](http://goo.gl/5HFx6N) – you might want to organise a fundraising activity around their ‘World Swim Against Malaria’ – see [goo.gl/1AVM0w](http://goo.gl/1AVM0w)
- ▶ Malaria Foundation International: [goo.gl/o61Zmz](http://goo.gl/o61Zmz)
- ▶ Malaria No More: [goo.gl/uVoMk8](http://goo.gl/uVoMk8)

Next, divide your students into small groups and ask each group to think up a fundraising idea. Ask them to design the fundraising activity, including ideas for how they would publicise it and how they would raise money from it. There are many traditional and popular ways that they might like to do this – a selection of suggestions can be found in the ‘Fundraising Activity A-to-Z’ on the Roots & shoots UK website: [goo.gl/6kQfIO](http://goo.gl/6kQfIO) but there are plenty more. You may wish to give your students examples of previous fundraising activities organised in the school, or by other schools, groups, communities etc.

Why not tie in the fundraising activity to an existing school event such as a concert, or prize giving event. That way you can raise more funds and spread the word about helping in the fight against malaria to even more people.

## LEARN MORE

This activity is the first of three on the topic of malaria – the others can be downloaded from the Roots & Shoots UAE website at [www.rootsnshoots.ae](http://www.rootsnshoots.ae). In the next activity we will look at the life cycle of the malaria parasite and see how knowing this can help us beat the disease. In the third activity we will look at the effects that malaria has on communities in sub-Saharan Africa and show you some ways that you can raise money to help!

## TELL US HOW YOU GOT ON

When your wall chart is finished, we'd love to see photos of it! If you already have an account you can upload a story with images to Roots & Shoots UAE ([www.rootsnshoots.ae](http://www.rootsnshoots.ae)) and create an online gallery on the website. If you don't already have an account then just send us an email to [MrH@rootsnshoots.ae](mailto:MrH@rootsnshoots.ae) and we can set you up.

## KEEP UP TO DATE WITH JANE GOODALL'S ROOTS & SHOOTS UAE

As well as the website at [www.rootsnshoots.ae](http://www.rootsnshoots.ae) you can also find us on Facebook at <https://www.facebook.com/RootsnShoots.ae> or on Twitter as [@JaneGoodallUAE](https://twitter.com/JaneGoodallUAE)

## WANT TO HELP IMPROVE THIS ACTIVITY?

This activity is a living document! Please help us by editing this activity to make it as good as possible. You can edit it by using this short link (just type it into your web browser's address bar): [goo.gl/blP2Ur](https://goo.gl/blP2Ur) – full instructions are provided. Any edits that can make this resource easier to use in the classroom or more applicable to life in the United Arab Emirates are very welcome, so please follow the link and make your contribution!