

Malaria



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Malaria is a **serious disease** found in warm countries. It is an infection of the **blood** that is spread by **mosquitoes**.



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More than **2 billion** people live in countries where there is malaria.¹



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Every year **300–500 million** people get sick from malaria in the world...



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...and over **2 million** die.



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In Africa, for example, every 30 seconds a child under the age of 5 years dies from malaria.²



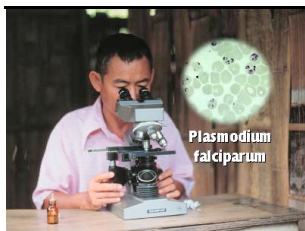
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Because there is **no vaccine** against malaria we need to know this disease well so that we may prevent it and treat it when necessary.



What causes Malaria?

Malaria is caused by germs called **parasites**.



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These parasites are so small they can't be seen without special machines called microscopes.

There are **four** kinds of malaria germs.



The one called **Plasmodium falciparum** (pronounced fal-sip-arum) **is the most deadly**.



Looking through the microscope, this is what it looks like.

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The other three can make a person very sick but they usually don't kill. **Mosquitoes** spread malaria from one person to another. This is how it happens:



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When a mosquito bites a person who has malaria, it sucks a bit of blood with the malaria germs in it. When the mosquito bites another person, a few malaria germs move into that person's blood.



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In the **beginning** that person **does not feel sick** because there are only a few germs in the blood. These germs, however, grow and multiply and after a few days make the person very sick.



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How does someone with malaria feel?



- Most people with malaria have **fever and chills**. The fever and chills can come and go every one to two days but it can also stay all the time.

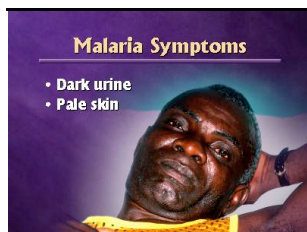


- They do not feel like eating (**No appetite**)
- have a **headache**
- feel tired (**Tiredness**)



- and may even have a **slight cough**
- and **pain in the stomach**

In the beginning this disease may look like a bad flu.

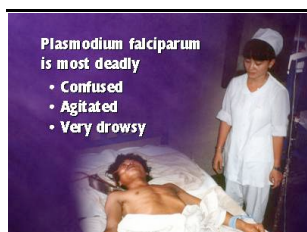


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As the disease gets worse,

- the urine may turn dark (**Dark urine**)
- and the person may become pale (**Pale skin**)

This is because malaria germs destroy the red blood cells. These are "**danger signs**" and the person needs medical treatment **urgently**.



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Plasmodium falciparum, the deadliest malaria germ, can also affect the **brain**.³ This is very dangerous, as many people who get it may die.



They may become confused, agitated or very drowsy.

- Confused
- Agitated

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- Very drowsy

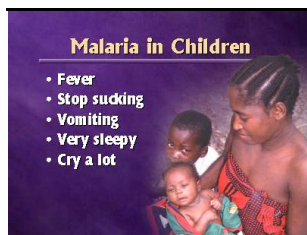
These people need medical attention **immediately**. The best way to prevent this is to treat malaria early and be sure that there is improvement on treatment.



©CARE

Pregnant women who get sick with malaria should be treated immediately. The future mother can get very sick from the disease and the baby may be born before the time or even die inside the mother.

Do not delay going to see a health worker if you are pregnant and think you might have malaria.



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What about malaria in babies and young children?

They can't tell us how they feel. How can we suspect malaria in them?



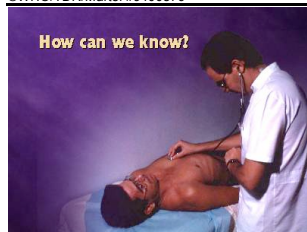
- They usually have **fever**.
- They may **stop sucking** or drinking,
- They may **vomit**,
- be very **sleepy**
- or even **cry a lot**

Once again, we can see that malaria could look like so many other common diseases.



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If the child lives in or has recently visited an area where there is malaria, he or she should be taken for **medical care** as soon as possible.



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How can we be sure if a person has malaria?



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There are **blood tests** that can confirm it. These tests do **not always show** the malaria even in a person who has the disease. Because of this, once other diseases are ruled out,

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...one should **always treat** the person for malaria if it looks like they could have it.
(This is even more important in areas where there is *Plasmodium falciparum* because this kind could get worse and dangerous very quickly.)



What is the treatment for malaria?

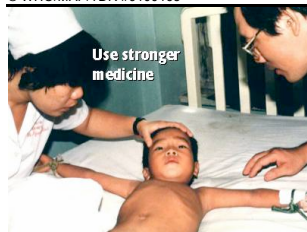
There are a few **medicines** that can be used. Health workers usually start by giving the kinds of medicine that are more likely to kill the malaria germs without making one feel very sick from the medicine itself.



A big problem exists; in many countries, the medicines that were very good in treating malaria, now, **are not so good anymore.**



This happens because the germs are getting stronger and because of this, stronger medicine is needed.



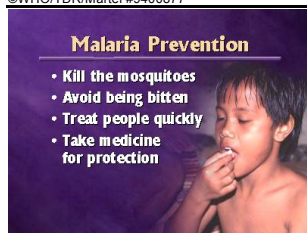
Because of this, the **health worker must watch** the sick person to see if he is getting better.



If not, stronger medicine must be given. This happens many times. Be sure to get the help of your local health worker.



As we can see, malaria is a very serious disease and it is becoming more difficult to treat. **The best thing is to prevent it.**



There are at least four ways to **prevent** malaria.

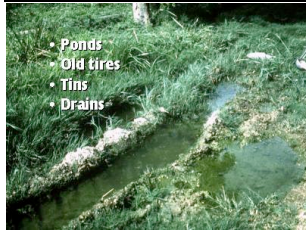
- ➔ **Kill the mosquitoes** that may carry the malaria germs.
- ➔ **Avoid being bitten** by a mosquito in areas with malaria.
- ➔ **Treat people** with malaria **quickly** so that they may not spread the disease.
- ➔ **Take a medicine** that may protect you against malaria.

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Mosquitoes breed in **water**. They can multiply and grow even...



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in small amounts of water; like small **ponds** or any object that traps and holds water such as **old tires**, **tins** and **drains**.



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After they grow bigger, mosquitoes look for people and animals to bite so that they can suck some of their blood. This is their food. Because of this, we find many mosquitoes around the houses or where animals are kept.



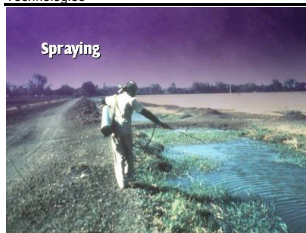
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Mosquitoes fly mostly in the evening because during the day it is usually very hot and they would die of thirst and heat.



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Get rid of all **containers** where water could collect and become a breeding place for mosquitoes.



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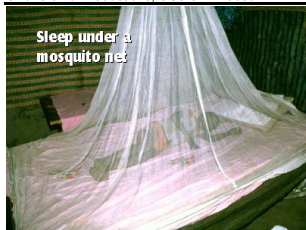
(Consider) spraying.

Governments in countries with malaria often have programs to **spray** homes and water tanks/dams. People should allow them to spray when they come.



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Avoid going out in the **evening** and if you go, try to wear long sleeves and long pants.



Sleep under a mosquito **net**. This is very important. Mosquito nets can be bought almost anywhere where there is a problem with malaria. Some mosquito nets are covered with a medicine that also kills mosquitoes.

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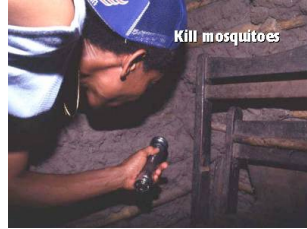
Cover windows with net

If you can, cover your **windows** with mosquito net.



You may also build an extra **door** with mosquito net. In this way less mosquitoes will go into your home.

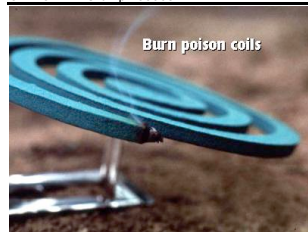
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Kill mosquitoes

Before going to sleep each night, shake a piece of cloth or a towel under your bed, tables and cupboards. These are the places where **mosquitoes hide**. Then, chase them and kill them!

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Burn poison coils

In many countries people can easily find **poison coils** that burn slowly and kill mosquitoes. These are very useful. Burn the coil for one hour, late in the afternoon. Then, take away the coil, close the door and wait at least one hour before going into the room to sleep.

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Use insect repellents

Insect repellents for the skin may keep mosquitoes away.

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Protective medicine

There are some medicines that may protect people against malaria. Some of them work well but others don't. Besides this, they all can make one sick, especially if taken over a long period of time. If you are visiting a country with malaria you may choose to take medicine. Consult your health worker regarding which one to take.

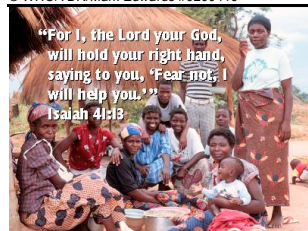
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Seek medical advice

Lastly, seek medical advice if you think you may have malaria. This is very important and it may save your life, especially if you live in an area where there is *Plasmodium falciparum*. Remember: Malaria can look like a bad flu.

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“For I, the Lord your God, will hold your right hand, saying to you, ‘Fear not, I will help you.’”
Isaiah 41:13

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Let us continually pray that Our Heavenly Father may give us wisdom to know how to protect our families from this disease; and if we do get it, to do all we can to overcome it safely.



“For I, the LORD your God, will hold your right hand, Saying to you, ‘Fear not, I will help you.’” Isaiah 41:13 NKJV

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- 2 <http://www.lshtm.ac.uk/centres/malaria/Gateshome.html> (London School of Hygiene and Tropical Medicine, *Gates Malaria Programme*)
- 3 The kidneys, liver, spleen and lungs can also be affected by malaria.