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Malaria

What Is Malaria?

Malaria is a common infection in hot, tropical areas. Very rarely, it also can happen in temperate climates.

Malaria can cause mild illness in some people and life-threatening illness in others. Proper treatment can cure malaria.

What Causes Malaria?

Malaria is caused by parasites carried by mosquitoes. The insects pick up the parasite by biting someone who already has the disease. Malaria is then passed to other people when the mosquitoes bite them.

Rarely, malaria can pass from person to person — from mother to child in "congenital malaria," or through blood transfusion, organ donation, or shared needles.

What are the Signs and Symptoms of Malaria?;

Early symptoms of malaria can include irritability and drowsiness, with poor appetite and trouble sleeping. These symptoms are usually followed by chills, and then a fever with fast breathing. The fever may either gradually rise over 1 to 2 days or spike very suddenly to 105°F (40.6°C) or higher. Then, as the fever ends and the person's body temperature quickly returns to normal, there is an intense episode of sweating.

The same pattern of symptoms — chills, fever, sweating — may repeat every 2 or 3 days, depending on which malaria parasite is causing the infection.

Other symptoms include headache, nausea, aches and pains all over the body (especially the back and abdomen), and an abnormally large spleen. If malaria affects the brain, someone might have seizures or loss of consciousness. The kidneys can also be affected in some cases.

Who Gets Malaria?

Worldwide, hundreds of millions of people are infected with malaria each year. Most cases are in sub-Saharan Africa. (Asia, Latin America, and parts of Europe are also affected by malaria.) Every year, there are about 500,000 deaths from malaria worldwide.

Malaria is rare in the United States, and most of these cases are in travelers, military personnel, and immigrants. Malaria can affect people of all ages, but young children and pregnant women are more likely to develop severe illness.

How Is Malaria Diagnosed?

Doctors suspect malaria based on a person's symptoms, physical findings, and where a person lives or has traveled. Doctors might take a blood sample to be checked under a microscope for malaria parasites, which are seen inside infected red blood cells.

In countries where the disease is seen a lot, doctors often treat people for malaria who have a fever with no obvious cause without getting lab tests to prove the person has malaria.

How Is Malaria Treated?

Malaria is treated with anti-malarial drugs given by mouth, by injection, or intravenously (into the veins). Depending on the parasite causing the malaria, a person might be treated as an outpatient over a few days or in the hospital with IV medicine.

Doctors also watch for signs of dehydration, convulsions, anemia, and other complications that can affect the brain, kidneys, or spleen. A patient may need fluids, blood transfusions, and help with breathing.

If diagnosed early and treated, malaria can usually be cured in about 2 weeks. However, many people who live in areas where malaria is common get repeated infections and never really recover between episodes of illness. Without treatment, the disease can be fatal, especially in children who are malnourished.

Can Malaria Be Prevented?

Health authorities try to prevent malaria by using mosquito-control programs aimed at killing mosquitoes that carry the disease. If you travel to an area of the world with a high risk for malaria, you can install window screens, use insect repellents, and place mosquito netting over beds. Insecticide-impregnated bed netting has successfully lowered the number of malaria deaths among African children.

Check with your doctor before visiting any tropical or subtropical area at high risk for malaria. Your doctor can give your family anti-malarial drugs to prevent the disease, which need to be taken before travel. Several malaria vaccines are currently being developed and tested across the world, but because the malaria parasite has a complicated life cycle, it's a difficult vaccine to develop.

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