

Fact Sheet

Malaria

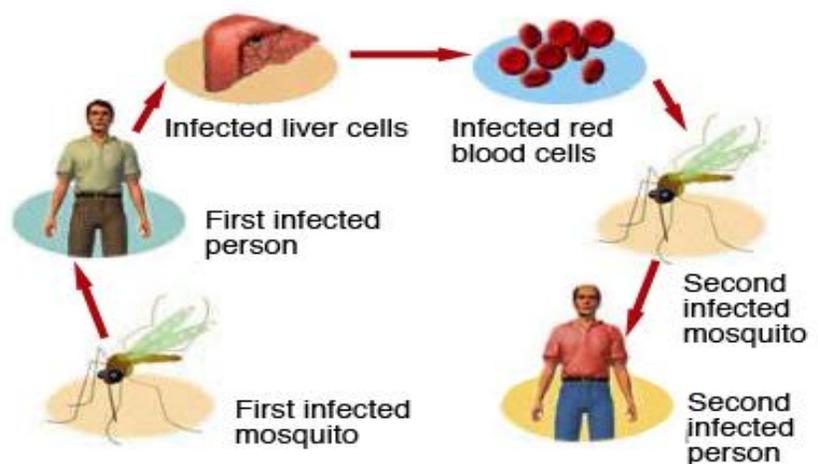
What is Malaria



Malaria is a serious and sometimes fatal disease caused by a parasite that commonly infects a certain type of mosquito which feeds on humans. About 1,500 cases of malaria are diagnosed in the United States each year. The vast majority of cases in the United States are in travelers and immigrants returning from countries where malaria transmission occurs, many from sub-Saharan Africa and South Asia.

Spread of Disease

Malaria is most commonly spread to people by the bite of an infected female *Anopheles* mosquito. Only *Anopheles* mosquitoes can transmit malaria and they must have been infected through a previous blood meal taken from an infected person. When a mosquito bites an infected person, a small amount of blood is taken in which contains microscopic malaria parasites. About 1 week later, when the mosquito takes its next blood meal, these parasites mix with the mosquito's saliva and are injected into the person being bitten.



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Because the malaria parasite is found in red blood cells of an infected person, malaria can also be transmitted through blood transfusion, organ transplant, or the shared use of needles or syringes contaminated with blood. Malaria may also be transmitted from a mother to her unborn infant before or during delivery ("congenital" malaria).

Signs and Symptoms

Symptoms of malaria include fever and flu-like illness, including shaking chills, headache, muscle aches, and tiredness. Nausea, vomiting, and diarrhea may also occur. Malaria may cause anemia and jaundice (yellow coloring of the skin and eyes) because of the loss of red blood cells. If not promptly treated, the infection can become severe and may cause kidney failure, seizures, mental confusion, coma, and death.

For most people, symptoms begin 10 days to 4 weeks after infection, although a person may feel ill as early as 7 days or as late as 1 year later. Two kinds of malaria, *P. vivax* and *P. ovale*, can occur again (relapsing malaria). In *P. vivax* and *P. ovale* infections, some parasites can remain dormant in the liver for several months up to about 4 years after a person is bitten by an infected mosquito. When these parasites come out of hibernation and begin invading red blood cells, the person will become sick.

Diagnosis

Malaria can very rapidly become a severe and life-threatening disease. The surest way to know whether it is malaria is to have a diagnostic test where a drop of blood is examined under the microscope for the presence of malaria parasites. If a person is sick and there is any suspicion of malaria (for example, recent travel to a country where malaria transmission occurs), the test should be performed without delay.

Treatment

Malaria can be cured with prescription drugs. The type of drugs and length of treatment depend on the type of malaria, where the person was infected, their age, whether they are pregnant, and how sick they are at the start of treatment.

People at Risk

Anyone can get malaria. Most cases occur in people who live in countries with malaria transmission. People from countries with no malaria can become infected when they travel to countries with malaria or through a blood transfusion (although this is very rare). Also, an infected mother can transmit malaria to her infant before or during delivery.

Malaria is not spread from person to person like a cold or the flu, and it cannot be sexually transmitted. You cannot get malaria from casual contact with malaria-infected people, such as sitting next to someone who has malaria.

Prevention

If traveling to a location where malaria is common, it is a good idea to contact a health care provider a few months ahead of time about drugs to take, before, during and after the trip to help protect from malaria parasites. In general, the drugs taken to prevent malaria are the same drugs used to treat the disease.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs

CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov

THE MAYO CLINIC www.mayoclinic.org