What is malaria?

Malaria is a serious and sometimes deadly disease that people can get after being bitten by a certain type of mosquito that is infected with a parasite called *Plasmodium*. Four different types of *Plasmodium* (*P. falciparum*, *P. vivax*, *P. ovale*, and *P. malariae*) affect humans.

Who gets malaria?

Anyone can get malaria while visiting or living in an area where the disease is found. Most cases in the United States occur in people arriving from tropical or subtropical areas of the world. According to the World Health Organization, an estimated 216 million cases of malaria occurred in 2016. Maps of countries where malaria is common can be found in the Centers for Disease Control and Prevention (CDC) Health Information for International Travel at [https://wwwnc.cdc.gov/travel/yellowbook/2018/list/maps](https://wwwnc.cdc.gov/travel/yellowbook/2018/list/maps).

Certain people are at higher risk of getting malaria and developing severe disease. These include pregnant women, infants, children under five years of age, people with HIV/AIDS, and travelers coming from areas where malaria is not present.

How is malaria spread?

The parasite that causes malaria is usually spread by the bite of an infected female *Anopheles* mosquito. In addition, an infected mother can transmit the parasite to her infant before or during delivery. Rarely, the malaria parasite is spread by blood transfusion or organ transplant.

What are the symptoms of malaria?

Symptoms vary depending on the type of *Plasmodium* causing the infection, but might include high fever, chills, sweats, and headache. In some cases, the illness can progress to severe anemia, kidney and respiratory failure, coma and even death. Some types of malaria cause less severe illness, but if not treated the symptoms can continue for weeks or months with episodes of fever and chills. With some types of malaria, relapses of the disease might occur years after treatment that was thought to have been successful.

How soon after exposure do symptoms appear?

The symptoms usually appear 7–30 days after the bite of the mosquito, depending on the type of malaria involved. Some strains, however, might not cause symptoms for 10 months or even longer.

How is malaria diagnosed?

Malaria can be suspected based on the patient’s travel history, symptoms, and the findings of a medical examination. To confirm the diagnosis, laboratory tests must be done on samples of blood. The most common test involves identifying the malaria parasites by examining a specially-prepared and stained drop of the patient’s blood under a microscope.
What is the treatment for malaria?

Doctors can prescribe drugs to treat malaria. Treatment should begin as soon as possible, even if the disease is mild, to prevent complications and possible death. An untreated or inadequately treated person can carry the infection for many years depending on the Plasmodium type. Treatment usually depends on the type of malaria, where the disease was acquired, and patient factors like age and pregnancy status.

How can malaria be prevented?

The risk of acquiring malaria can be decreased by using mosquito repellents, bed nets, screens and protective clothing while travelling or living in areas where malaria is present. Travelers to areas where malaria is found might also be advised to take anti-malaria medications to prevent the disease.

How can I get more information about malaria?

- If you have concerns about malaria, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at https://www.vdh.virginia.gov/local-health-districts/.

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