Malaria

Disease fact sheet

(*Plasmodium falciparum*, *P. malariae, P. ovale and P. vivax*)

What is malaria?
Malaria, a serious disease caused by a parasite, is spread to people by the bite of a mosquito infected with the parasite. People who have malaria infection are usually ill with fevers, shaking chills, headache, muscle aches and fatigue.

The four malaria parasite species that cause human infections are *Plasmodium falciparum*, *P. malariae*, *P. vivax*, and *P. ovale*. The severity of disease depends on the species of *Plasmodium* causing the infection. *P. vivax* and *P. ovale* can become dormant in the liver. Symptoms of illness can reoccur several months or years after initial infection.

Who gets malaria?
Any person can get malaria if bitten by a mosquito in a region where malaria occurs. Almost all cases in Wisconsin and the United States are acquired during travel to other countries where malaria is endemic.

How is malaria spread?
The malaria parasite invades the liver, spreads to the red blood cells, and is carried in the bloodstream of infected individuals. A mosquito acquires the parasite as it ingests blood from an infected person and injects the parasite into a healthy person during a bite. Malaria can also be acquired by receiving a blood transfusion from an infected donor and by the sharing of contaminated syringes. Young children and pregnant women are at greater risk of becoming fatally ill from malaria. An infected mother can also transmit malaria to her infant before or during delivery.

What are the symptoms of malaria?
Malaria is commonly characterized by fever, chills, headache, and sweating. Depending upon the species, acute malaria may develop into a variety of syndromes with severe complications including coma and death. The infected person may experience relapses later in life.

How soon after exposure do symptoms appear?
The appearance of symptoms is dependent on the species of *Plasmodium* but can vary from seven days to two years (*P. vivax)* or as many as four years (*P. ovale)* after infection occurs**.**

Where is malaria found?
Malaria is common in most developing countries. Travelers to Central and South America, the Caribbean, sub-Saharan Africa, India, Southeast Asia, the Middle East and the South Pacific are especially at risk.

Do infected people need to be isolated or excluded from work or school?
Patients with malaria need not be excluded from work or school.

Can malaria be treated?
Patients with malaria should **immediately** seek medical attention. Malaria can be effectively treated if diagnosed early, but infections caused by *P. falciparum* can be severe and harder to treat.

How does traveling to a malaria-risk area or having malaria change my blood donor status?
Most travelers to an area where malaria is common are deferred from donating blood for one year after their return. Former residents of malaria-risk areas will be deferred for three years. Persons diagnosed with malaria cannot donate blood for three years after treatment, during which time they must have remained free of malaria symptoms.

How can malaria be prevented?
Although no vaccine against malaria is currently available, there are oral drugs that can prevent travelers from becoming infected while visiting areas where malaria is common. Travelers to such areas can further protect themselves by using anti-mosquito measures such as mosquito netting and insect repellents.

It is **very important** to consult with a physician about currently recommended preventive medications before traveling to areas where malaria occurs.

Information about the occurrence of malaria in various parts of the world and about the most effective preventive drugs can be obtained from the Centers for Disease Control and Prevention (CDC) (www.cdc.gov), your physician, or local and state health departments.