

## Malaria

### **What is malaria?**

Malaria is a mosquito-borne disease caused by small, one-celled parasites called Plasmodium that infect and destroy red blood cells. Four different Plasmodium can cause disease in humans: Plasmodium falciparum, Plasmodium malariae, Plasmodium ovale, and Plasmodium vivax.

### **Where does malaria occur?**

Malaria occurs in many tropical and sub-tropical areas of the world, particularly sub-Saharan Africa, Southeast Asia, the Middle East, and Central and South America. It is estimated that nearly half of the world's population lives in a malaria area and nearly half a billion cases of malaria occur each year. Although malaria occurred naturally in parts of the United States, including California, until the mid 20th Century, today over 99 percent of the malaria cases diagnosed in U.S. residents are acquired during travel to other countries. Approximately 1,200 cases of malaria are diagnosed in the United States each year.

### **How do you get malaria?**

People get malaria from the bite of an infected mosquito. A mosquito can become infected when it bites a person who has malaria organisms in the blood. It takes a week or more for the malaria organisms to mature in the mosquito; then the mosquito can transmit the organism to another person when it bites them.

### **What are the symptoms of malaria?**

Fever is the most common early symptom of malaria. The fever tends to rise over several days and may be accompanied by headache, muscle pain, and fatigue. Temperatures of 104° to 106°F may be reached and patients may experience intense shaking chills and sweating. These symptoms occur repeatedly for several hours every one to three days. Infection with Plasmodium falciparum can progress to severe symptoms, coma, and death. Symptoms usually develop within one to four weeks of a person being infected, though in some cases symptoms do not appear for up to a year.

### **Is malaria treatable?**

Malaria can be cured with prescription drugs. The type of drugs and length of treatment depend on which kind of malaria is diagnosed, where the patient was infected, the age of the patient, and how severely ill the patient was at start of treatment. Some forms of malaria from South America and Southeast Asia are less susceptible to standard malaria drugs.

### **What can I do to keep from getting malaria?**

At least four weeks prior to travel in a malarious area, consult with a physician who specializes in travel medicine to obtain preventive medications. Anti-malarial drugs are very effective at preventing disease, but they must be taken according to the prescribed schedule. It is important to not miss any doses while traveling in malarious areas. Take an adequate supply of anti-malaria drugs to last for the entire trip. Also, while in malaria

areas, avoid mosquitoes by wearing protective clothing (long pants, long-sleeved shirts) and applying repellants. Placing mosquito netting around the bed can prevent being bitten while sleeping.

**Where can I find more information about malaria?**

To obtain information on malaria and other potential health threats during international travel, you can consult the CDC's Web site at: <http://www.cdc.gov/malaria/>.