Disease Fact Sheet **Malaria**

What is malaria?
Malaria is a mosquito-borne disease caused by any one of four different blood parasites, called *Plasmodium*. The disease is transmitted to people by the Anopheles mosquito. This disease is a leading cause of debilitating illness, with over 200 million cases each year from around the world. Almost all of the cases reported in Ohio each year are acquired in foreign countries. However, a locally acquired case occurred in 1975.

Who gets malaria?
Any person residing in or traveling to a country where malaria is prevalent is at risk for contracting the disease. Malaria is currently a problem in tropical or subtropical areas of Asia, Africa and Central and South America. Some Black Africans show a natural resistance to some species of malaria. Otherwise, susceptibility to malaria is universal.

How is malaria spread?
Malaria is spread by the bite of an infected *Anopheles* mosquito. With certain malaria species, dormant forms can be produced which may cause relapses of malaria months to years later. Malaria may also be transmitted by transfusion of blood from infected people or by the use of contaminated needles or syringes.

What are the symptoms of malaria?
Symptoms include fever, chills, sweats and headache, and in some instances may progress to jaundice, blood coagulation defects, shock, kidney or liver failure, central nervous system disorders and coma. Cycles of chills, fever and sweating occurring every one, two or three days is a good indicator of malaria in a person recently returning from a tropical area.

How soon do symptoms occur?
The time between the infective mosquito bite and the development of malaria symptoms can range from 12 to 30 days depending on the type of *Plasmodia* involved. One strain of *Plasmodium*, called *P. vivax*, may have a prolonged incubation period of eight to 10 months. When infection occurs by blood transfusion, the incubation period depends on the number of parasites transferred but is usually less than two months.

When and for how long is a person able to spread malaria?
Untreated or inadequately treated cases may be a source of mosquito infection for one to three years depending on the strain of *Plasmodium*. Direct person-to-person transmission does not occur. Stored blood products can remain infective for 16 days.

What is the treatment for malaria?
Due to the changing pattern of drug-resistant strains, current recommendations can be obtained from your local, county or state health department.

What can be done to prevent the spread of malaria?
Since malaria is not native to the United States, exposure to American citizens occurs most frequently during foreign travel to malarious areas. It is very important to contact health officials to determine the proper preventive drug therapy. The liberal and frequent use of mosquito repellents as well as using a bed net can be very effective in preventing mosquito bites.

Travelers who become ill with a fever during or after travel in a malaria risk area should seek prompt medical attention and should inform their physician of their recent travel history. Malaria can be treated effectively in its early stages, but delaying treatment can have **serious** consequences.

Although malaria is not endemic to Ohio, there are *Anopheles* mosquitoes here which are efficient transmitters of *Plasmodium*. Thus, an infected person, if exposed to *Anopheles* mosquito bites, might allow the parasite to be transmitted in Ohio.

Adapted from the New York State Department of Health and CDC Websites; 9-3-99, 9-25-99
http://www.health.state.ny.us/nysdoh/consumer/malaria.htm
http://www.cdc.gov/travel/malinfo.htm