

Malaria

What is Malaria?

Malaria is a serious disease caused by a microscopic parasite that affects red blood cells. There are 4 species of malaria parasite: *Plasmodium falciparum*, *P. malariae*, *P. vivax*, and *P. ovale*. The severity of disease depends on the species of *Plasmodium* causing the infection.

Who gets Malaria?

Any person can get malaria if they are bitten by a mosquito in a region where malaria occurs. Almost all cases in Canada are acquired during travel to other countries.

How is Malaria spread?

Infected humans carry the malaria parasite in their bloodstream. Malaria is spread when a mosquito ingests blood from an infected person. The malaria parasite develops into an infective stage within the mosquito and later is injected into another person when that infected mosquito feeds again. Malaria can also be acquired by receiving a blood transfusion from an infected donor, and by the sharing of contaminated syringes. Rarely, the parasite can be passed on to infants born to infected mothers.

What are the symptoms of Malaria?

Fever, chills, headache, and sweating are the most commonly seen symptoms. Less common symptoms are cough, diarrhea, respiratory distress, muscle pain and vomiting. Symptoms can occur in cycles of 48-72 hours.

Depending upon the species, severe illness may cause very serious complications which can result in coma and death. Infants may also acquire the disease at birth. The infected person may also develop relapses throughout their life.

How soon after exposure do symptoms appear?

The appearance of symptoms is dependent on the species of *Plasmodium* but can vary from 9 days to 12 months.

It is VERY IMPORTANT to see a physician if you develop any of these symptoms upon return from your travels especially if you have been to a known malaria risk area. Tell your physician about your travels.

Where is Malaria found?

Malaria is common in most developing countries. Travellers to Central and South America, the Caribbean, sub-Saharan Africa, India, Southeast Asia, the Middle East and 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. Persons who have had malaria should not donate blood ever during their lives.

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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 cause more severe infections and can be harder to treat.

How can Malaria be prevented?

Although there is no vaccine currently available against malaria, there are oral drugs that can prevent travellers from getting infected while visiting areas in which malaria is common. Travellers to such areas can further protect themselves by using anti-mosquito measures such as mosquito netting and insect repellents.

It is **very important** for any person travelling to areas where malaria occurs to consult with their physician and/or local public health unit about the current recommendations for preventive medications against the disease. Information about the occurrence of malaria in various parts of the world and about the most effective preventive drugs can be obtained from the Centres for Disease Control and Prevention (CDC) homepage on the internet (www.cdc.gov), your physician, and local public health departments.

Other Resources:

Public Health Agency of Canada

<http://www.phac-aspc.gc.ca/tmp-pmv/info/malaria-eng.php>

Committee to Advise on Tropical Medicine and Travel (CATMAT) –

<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09vol35/35s1/index-eng.php>

World Health Organization (WHO) Malaria Fact Sheet

<http://www.who.int/mediacentre/factsheets/fs094/en/index.html>

This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns.

**For further information contact the Infectious Disease Program at 625-8318
or toll free 1-888-294-6630, ext. 8318.**