

Dr Dulcy: Risk of getting malaria

ENDEMIC: PARASITE THAT CAUSES ILLNESS FOUND IN MANY PLACES

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Preparation is everything, knowing what to do if you get the disease.



In South Africa, malaria is endemic in the Lowveld of Mpumalanga and in Limpopo (including Kruger National Park and other private game lodges in those areas).

In KwaZulu-Natal it is endemic along the Maputaland coast. The intermediate risk areas are Kosi Bay, Sodwana Bay, Mkuze Game reserve and St Lucia Lake.

In North West and Northern Cape along the Molopo and Orange rivers malaria is only occasionally locally transmitted, and there is usually no need for preventive medication.

Talk to your doctor if you experience a high fever while living in or after travelling to a high-risk malaria region. The parasites that cause malaria can lie dormant in your body for up to a year. If you have severe symptoms, seek emergency medical attention.

Residents of a malaria region may be exposed to the disease so frequently that they acquire a partial immunity, which can lessen the severity of malaria symptoms.

However, this partial immunity can disappear if you move to a country where you're no longer frequently exposed to the parasite. Some varieties which typically cause milder forms can persist for years and cause relapses.

WHAT IS MALARIA?

Malaria is caused by a parasite transmitted most commonly by mosquito bites.

Malaria produces recurrent attacks of chills and fever. Malaria kills an estimated 660 000 people each year. While the disease is uncommon in temperate climates, malaria is still prevalent in tropical and subtropical countries. World health officials are trying to reduce the incidence of malaria by distributing bed nets in those countries to help protect people as they sleep.

Scientists around the world are still working to develop a vaccine. If you are travelling to locations where malaria is common, it is advisable that you take preventive medicine before, during and after your trip. Many malaria parasites are now immune to the most common drugs. Malaria signs and symptoms typically begin within a few weeks after being bitten.

SYMPTOMS

Moderate to severe shaking chills;

High fever; Sweating; Headache; Vomiting, and Diarrhoea.

HOW IS MALARIA TRANSMITTED?

Infected mosquito: A mosquito becomes infected by feeding on a person who has malaria.

Transmission of parasite: If you're the next person the mosquito bites, it can transmit.

In the liver: The parasites then travel to your liver where it could lie dormant for as long as a year.

Into the bloodstream: When the parasites mature, they leave the liver and infect your red blood cells. This is when people typically develop symptoms.

On to the next person: If an uninfected mosquito bites you at this point in the cycle, it will become infected.

OTHER MODES OF TRANSMISSION

People can also catch malaria from exposures to infected blood, including some of the following scenarios:

From mother to unborn child; Through blood transfusions; and By sharing needles used to inject drugs.

RISK FACTORS

The biggest risk factor for developing malaria is to live in or to visit tropical areas where the disease is common.

Many different subtypes of malaria parasites exist. The variety that causes the most lethal complications is most commonly found in African countries south of the Sahara Desert, The Asian subcontinent, Solomon Islands Papua New Guinea and Haiti.

People at increased risk of serious disease include:

Young children and infants;

Travellers coming from areas with no malaria;

Pregnant women and their unborn children;

Poverty, lack of knowledge, and little or no access to health care also contribute to malaria deaths worldwide.

Malaria can be fatal, particularly the variety that is common in tropical parts of Africa. The Centres for Disease Control and Prevention estimate that 90% of all malaria deaths occur in Africa, most commonly in children under the age of five.

COMPLICATIONS

In most cases, malaria deaths are related to one or more serious complications, including:

Cerebral malaria: If parasite-filled blood cells block small blood vessels to your brain (cerebral malaria), swelling of your brain or brain damage may occur. Cerebral malaria may cause coma.

Breathing problems: Accumulated fluid in your lungs (pulmonary oedema) can make it difficult to breathe.

Organ failure: Malaria can cause your kidneys or liver to fail, or your spleen to rupture, all life-threatening.

Anaemia: Malaria damages red blood cells, which can result in anemia.

Low blood sugar: Severe forms of malaria itself can cause low blood sugar, as can quinine (one of the most common medications used to combat malaria). Very low blood sugar can result in coma or death.

DIAGNOSIS

Some blood tests can take several days to complete, while others can produce results in less than 15 minutes. Blood tests can show the presence of the parasite and help tailor treatment by determining:

Whether you have malaria;

Which type of malaria parasite is causing your symptoms;

If your infection is caused by a parasite resistant to certain drugs; and

Whether the disease is affecting any of your vital organs.

TREATMENT

The types of drugs and the length of treatment will vary, depending on which type of malaria parasite you have, the severity of your symptoms, your age and whether or not you are pregnant.

The most common antimalarial drugs include: chloroquine (Aralen); quinine sulfate (Qualaquin); hydroxychloroquine

(Plaquenil); mefloquine; combination of atovaquone and proguanil (Malarone).

The history of antimalarial medicine has been marked by a constant struggle between evolving drug-resistant parasites and the search for new drug formulations. In many parts of the world, for instance, resistance to chloroquine has rendered the drug ineffective.

PREVENTION

If you are going to be travelling to a location where malaria is common, talk to your doctor a few months ahead of time about drugs you can take, before, during and after your trip.

In general, the drugs taken to prevent malaria are the same drugs used to treat the disease.

Your doctor needs to know where you will be travelling so that he or she can prescribe the drug that will work best on the type of malaria parasite most commonly found in that region.

There is still no vaccine yet. Scientists around the world are trying to develop a safe and effective vaccine for malaria.

As of yet, however, there is still no malaria vaccine approved for human use.

Reduce your exposure:

Spray your home.

Sleeping under a net.

Cover your skin.

Spray clothing and skin.