## Traveling? Make Sure You Protect Yourself from Malaria







#### What is malaria?

Malaria is a serious and sometimes fatal disease caused by a parasite that can infect a certain type of mosquito which feeds on humans.

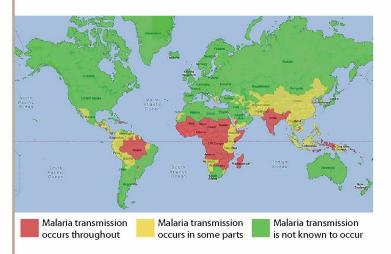
About 1,500 cases of malaria are diagnosed in the United States each year. Almost all are in travelers and immigrants returning from parts of the world where malaria transmission occurs, mainly sub-Saharan Africa and South Asia.

The World Health Organization estimates that in 2010, there were 216 million cases of malaria, and 655,000 people died of malaria, most of them children in Africa.

#### Where does malaria occur?

Malaria transmission occurs in many tropical and subtropical countries (see map). CDC has a list of all the places in the world (http://www.cdc.gov/malaria/travelers/country\_table/a.html) where malaria transmission occurs and the malaria drugs that are recommended for use in each place.

If you are traveling to parts of the world where malaria transmission occurs, you could be at risk for malaria.



## How do people get infected with malaria?

People get malaria from the bite of a mosquito that is infected with the malaria parasite.

## How can I prevent malaria?

- 1. Take an antimalarial drug.
- 2. Prevent mosquito bites.

## **Antimalarial drugs**

#### How and where can I obtain antimalarial drugs?

Visit your health-care provider 4–6 weeks before travel for a prescription for an antimalarial drug based on your travel itinerary and medical history.

Antimalarial drugs are available in the United States by prescription only.

Some antimalarial drugs can be started the day before travel and so last-minute travelers can still benefit from a visit to their health-care provider before traveling.

Obtain your prescription **before** you travel rather than at your destination because buying medications abroad has its risks. They could be of poor quality, contaminated, or counterfeit and therefore not protect you from malaria.

All medicines may have some side effects. Minor side effects such as nausea, occasional vomiting, or diarrhea usually do not require stopping the antimalarial drug. If you have side effects that are too uncomfortable, see your health-care provider; other antimalarial drugs are available.





### **Prevent Mosquito Bites**

Mosquitoes that transmit malaria bite between dusk and dawn.

- Prevent mosquito bites by staying indoors during this time.
- If out-of-doors, wear a long-sleeved shirt, long pants, and a hat.
- Apply insect repellent to exposed skin only; do not use under clothing.
- If you will not be staying in well-screened or air-conditioned rooms, take additional precautions, such as sleeping under an insecticide-treated bed net (mosquito netting). Bed nets sprayed with the insecticide permethrin are most effective. In the United States, you can buy permethrin as a spray or liquid to treat clothes and bed nets and you can also purchase bed nets that have already been treated with permethrin. Permethrin and another insecticide, deltamethrin, can be purchased overseas to treat nets and clothes.

# Which travelers need to be concerned about malaria prevention?

All travelers! Anyone, child or adult, who goes to a country where malaria transmission occurs should take precautions against contracting malaria. This includes tourists, business travelers, long-term travelers, missionaries, airline crew, students, and immigrants returning to their home countries to visit friends and relatives.

First- and second-generation immigrants are at very high risk of malaria infection because they may not realize that they have lost any partial protection that they had against malaria. However, they **are** susceptible to malaria infection and need to be sure to take their malaria medicines and avoid mosquito bites.

## What if I am pregnant?

Getting malaria while you are pregnant can harm you and your fetus. It is best if you do not travel to malaria-endemic areas during your pregnancy. If you have to travel, it is essential to take one of the two malaria medicines that are safe to take during pregnancy: chloroquine and mefloquine. Your health-care provider will determine which one is appropriate for your destination.

## What are the symptoms and what should I do if I have them?

Symptoms of malaria include fever and flu-like illness, including shaking chills, headache, muscle aches, and tiredness. Nausea, vomiting, and diarrhea may also occur. Malaria is potentially life-threatening if it is not immediately treated. Untreated malaria can cause mental confusion, seizures, coma, kidney failure, and death.

Malaria symptoms occur at least 7 to 9 days after infection. Fever in the first week of travel is unlikely to be malaria, but any illness should be promptly evaluated.

It is critical to get immediate treatment of malaria. Any traveler who becomes ill with a fever or flu-like illness while traveling or up to 1 year after returning home should immediately seek professional medical care. Inform your health care provider that you have been in a malaria-endemic area and should be tested for malaria infection.

#### For more information:

Check out the CDC malaria website at

www.cdc.gov/malaria

Health-care providers needing assistance with diagnosis or management of suspected cases of malaria should call the CDC Malaria Hotline: **770-488-7788** or **855-856-4713** toll-free (M-F, 9am-5pm, Eastern Time).

For emergency consultation after hours, call: **770-488-7100** and request to speak with a CDC Malaria Branch clinician.

### **Prevent Malaria**

- Take an antimalarial drug.
- · Prevent mosquito bites.
- If you get sick, immediately seek professional medical care.

Cut out this card, and take it on your trip. Keep it with your passport, so you'll always have the information handy.

Malaria is a serious illness and may be rapidly fatal. Immediate
treatment of malaria is critical. If you develop an illness with a
high fever while traveling or up to 1 year later, you should seek
immediate medical care.

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