# Malaria Prevention for Travelers: What to Know Before You Go

(Hint: It's Preventable and Treatable)

Do your travel plans include a destination in Africa, Central or South America, the Caribbean, or Southeast Asia?

Did you know these <u>countries</u> count malaria as a major public health problem?

They do, and it's important to plan ahead to protect yourself against malaria before, during, and after your trip.

Here's what you need to know.

## **Malaria and Mosquitoes**

Malaria is a mosquito-borne disease primarily transmitted to humans by the bite of an <u>infected female Anopheles mosquito</u> \*.

Malaria is caused by a <u>parasite</u> (*Plasmodium* species).

Once the mosquito bites (and it turns out that some mosquitoes may have <u>preferences</u> for specific human scents), it leaves the parasite behind in your body.

## What Are the Early Signs and Symptoms of Malaria?

- The initial classic signs and symptoms of malaria are fever, headache, and body chills, which usually develop within 10-15 days after a mosquito bite.
- Don't ever ignore these signs and symptoms! Get medical care as soon as possible, even if you don't feel that sick.
- Why? Because delaying medical care will lead to a more severe illness.

Malaria can be deadly if not treated immediately.

## Malaria Prevention: Preparation, Avoidance, and Medication

Avoiding mosquito bites requires planning and preparation before your trip. And it's definitely better to be a little overprepared than underprepared.

Because you probably know that travel doesn't always go according to plan.

## **Preparation: Know Before You Go**

Mosquitoes bite at dawn, dusk, and early evening.

Think ahead about what outside activities you want to do and at what time of day you plan to be doing them.

Note that early morning and evening hikes or safari excursions place you at greater risk of getting bitten by flying, biting insects, including mosquitoes.

### **Select and Pack Clothing Carefully**

- Wear long-sleeve, dark, lightweight synthetic shirts, pants, and jackets, and a hat (to keep insects out of hair), especially when outside at night.
- Wear sneakers or light hiking shoes, not open-toe sandals.
- Pack light with multiple layers for flexibility with weather and temperature changes.

## **Spray Permethrin on Clothing and Gear**

 Spray your synthetic long pants, long-sleeve shirts, hats, socks, and shoes with Permethrin a week before you travel.

- Spray the clothes heavily until they are very damp, either outside or in an open garage, then hang them outside to dry.
- Follow the instructions on the bottle very carefully, and keep pets (especially cats) away!
- Permethrin-sprayed clothing is effective for 6 weeks, or 6 washes, whichever comes first.
- You can also buy clothes at camping stores that are pre-treated with Permethrin.

#### **Bring Insect Repellent Lotion for Skin**

- You'll need to pack an insect-repellent lotion (sprays may not travel well) containing either 20% Picaridin or 25-30% DEET.
- There are many products to choose from, and ongoing online reviews of these products.
- Wear insect repellent every day, and reapply it at night if you're outside.
- During the day, sunscreen should be applied first, then apply insect repellent as the top layer.

## **Avoidance: Fight the Bite While You're Out and About**

## **Inside or Outside Sleeping Accommodations? Be Prepared**

- Mosquitoes don't thrive in cool air conditioning or around room fans; if you can, take advantage of lodges or hotels with these features.
- Check that your room's window screens are intact (no holes or slits).
- Camping out? Bring your own mosquito nets to sleep under (pre-treated with Permethrin is preferred). And spray your tent with Permethrin.

#### Limit Outside Activities During Dawn, Dusk, and Early Evening

- Try to schedule inside activities during dawn, dusk, and early evening.
- If you are outside, make sure you are covered up and wear insect repellent.

Use the Right Insect Protection!

Permethrin is for clothing and gear application only.

DEET or Picaridin is for direct skin application only.

## Malaria Medications: Yes, You Do Need to Take Malaria Pills During Every Trip to a Malaria-Risk Country

- Malaria pills are an essential part of a malaria prevention toolkit.
- There are several options for daily or weekly malaria medications; you should discuss the choices with your physician or a travel medicine professional.
- Plan to start taking the pills ahead of your trip; continue during your entire trip, and then for a designated time after your trip. (The timetable depends on the medication).
- Think you don't need to take malaria pills because you were born in a country where malaria is common? Or because you've had malaria in the past?
- Immunity, or protection, to malaria post-illness doesn't last as long as you might think. Protection varies, and surviving a bout of malaria does not confer lifelong immunity.

• Returning to your native (malaria-risk) country to visit friends and relatives still puts you at high risk for exposure to malaria.

## Are You Ready to Travel?

Want to know more about malaria? Still have questions or concerns?

Schedule a pre-travel consultation with a travel medicine provider, and check out the following travel and malaria websites:

#### Malaria and Traveler's Health

Centers for Disease Control and Prevention Traveler's Health

World Health Organization (WHO)

PassportHealth USA

<sup>\*</sup>Blood transfusions, human transplants, contaminated needles, and mother-to-child during delivery are other, less common modes of malaria transmission.