

Healthy Travels

Autumn 2008

Safari! Potential Health Risks on your African Vacation



One of the joys of traveling is having the opportunity to visit the world's most exotic places! Whether touring the great pyramids of Egypt, observing gorillas in the jungles of Rwanda, or cruising the Serengeti, the African continent offers an incomparable travel experience. However, these remote locations also expose travelers to many health risks, including malaria, food- and water-borne illnesses, and threats to personal safety.

Malaria is a very serious disease found in Africa and around the world. Bites from infected mosquitoes pass parasites into a person's blood, where they invade the liver and red blood cells. Malaria can be a very severe illness, with high fevers, chills, sweats, headache, nausea and vomiting, and can be fatal without proper medical care.

The good news is that malaria is preventable. Taking a prophylactic medication when traveling to malaria areas is extremely important. Your doctor will prescribe the one which works best for you by reviewing your medical history and itinerary.

Additionally, using DEET-containing insect repellent on your skin, wearing permethrin-treated clothing, and sleeping under bed nets will reduce your risk tremendously. These safety measures will also help prevent sickness from other severe diseases spread by insects, such as dengue fever, yellow fever, and trypanosomiasis. Your doctor will recommend a vaccine for yellow fever if you are traveling in an area of risk.

Monitor your health closely when you return home. If you have fevers, dizziness, shortness of breath, chills, and/or flu-like symptoms, get to your doctor or the emergency room and tell them where you have traveled and that you might have been exposed to malaria.

Food- and water-borne illnesses are among the most common infections acquired during overseas travel, especially to locations within the developing world. More information on preventing these diseases is provided in separate articles in this issue of Healthy Travels.

Personal safety is a serious consideration when traveling abroad.

Avoid carrying large amounts of cash, jewelry, and official passports after reaching your destination. Place your valuables and passport in a hotel safe and carry only a copy of your passport. As credit cards and ATMs have become common throughout the developing world, travelers' checks are largely obsolete. Credit cards are convenient and eliminate the need to carry large sums of cash. Know how to cancel credit cards quickly if lost or stolen. When using ATMs, withdraw small amounts of cash at a time and never use a machine alone or at night.

Traffic accidents are another threat to your safety. Many countries in the developing world lack adequate traffic laws; those that do exist are often disregarded by local drivers. Avoid driving in these countries, only ride in large vehicles (i.e., don't use motorcycle or "tuk-tuk" taxis), wear seatbelts when available, and don't hesitate to tell your driver to slow down. When crossing streets on foot, make sure to look carefully in all directions and wait for traffic to clear—don't assume pedestrians have the right of way!



Avoiding HIV and Other Sexually Transmitted Infections

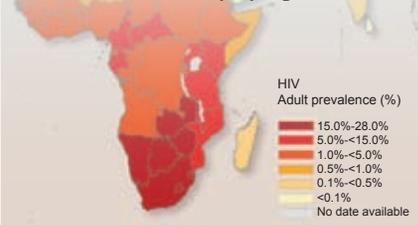
Sexually transmitted infections (STI) are among the most common communicable diseases worldwide. International travelers at high risk include those overseas for long periods of time, those who have contact with commercial sex workers, and men who have sex with men, especially in areas with high infection rates. Common STIs include gonorrhea, chlamydia, syphilis, and HIV/AIDS.

Human Immunodeficiency Virus (HIV), the virus that causes AIDS, deserves special mention. Sub-Saharan Africa remains the most affected region with approximately 25 million adults and children living with HIV.

HIV transmission occurs through sexual intercourse, needle sharing (including piercings and tattoos), blood transfusions, and organ transplantation. Casual contact, air, food, water or mosquitoes do not transmit HIV.

Prevention and abstinence are the most reliable ways to avoid STIs. Latex condoms used correctly and consistently can reduce but not eliminate the risk. Travelers should carry their own condoms since the quality and availability of latex condoms overseas is unpredictable.

Seek available medical attention if you have a high-risk sexual encounter while traveling, and certainly upon return to the U.S. Simple lab tests can determine the presence of STIs even in the absence of any symptoms.



Reduce Your Risk of Travelers' Diarrhea

The most common illness experienced when vacationing abroad is travelers' diarrhea. While safe food and drinking water are things we take for granted in the United States, they are much more difficult to find in developing countries. As a general rule, municipal water in developing countries is unsafe for drinking (non-potable) and should never be consumed unless boiled. Food preparation and service standards are often poor, and the health and hygiene of food preparers is impossible to ascertain.

Up to 50% of travelers become ill during their trip, with most people experiencing symptoms in their first week abroad. Some destinations have greater risk than others; Africa is in the highest risk category.

Travelers' diarrhea is usually the result of consuming food or water contaminated with feces. Taking some basic precautions may reduce the risk of becoming ill:

- Wash your hands regularly (especially before eating). Choose your beverages carefully. The following are safe to drink: beverages made from boiled water, such as tea and coffee; water that you have disinfected or filtered; and canned or unopened beverages. When drinking from a can or bottle, always break the seal yourself, and never pour your drink over ice, which is usually made from local tap water and may not be safe.
- Don't rinse your toothbrush in tap water.
- Eat at establishments that cater to foreigners.
- Don't eat from street vendors.
- Avoid raw, undercooked, and unwashed foods.

- Make sure food that is supposed to be hot is still hot, and food that is supposed to be cold is still cold.
- Don't eat from buffets.
- Eat only produce that you can peel yourself, such as oranges or bananas; salads and undercooked vegetables may not be safe.
- Don't consume dairy products as milk and cheeses obtained overseas are often not pasteurized.
- If you have any questions about the health and safety of your food or drink, it is better to err on the side of caution and avoid it.

Instead of carrying gallons of bottled water, many travelers on long camping or safari vacations will treat the local water before drinking. By far, the most effective treatment is boiling water for a full minute and allowing it to cool before drinking. Disinfection kits and water filters are also an effective means to purify water.

Ask your physician about medications you can take with you to treat travelers' diarrhea. He/she will likely provide you with an antibiotic and an antimotility drug. Make sure you understand when and how to use these medications.

In addition to taking medications to treat a bout of diarrhea, ensure you stay well-hydrated. You can use electrolyte drinks like Gatorade or make your own rehydration solution by dissolving 1 teaspoon of salt and 8 teaspoons of sugar in a liter of clean water.

By following safe food and beverage guidelines and treating diarrhea early, you can spend more time on your itinerary and less time in the bathroom!

Worldwide Alert: Melamine-contaminated dairy products. Melamine-contaminated products manufactured in China have been found in several countries throughout the world, and the list of affected countries and products (liquid milk, frozen yogurt, instant coffee, coffee creamer, ice cream, chocolate cookies, candies, and more) continues to grow. Consumers worldwide are advised to continue to avoid using any infant formula made in China, as well as any milk products or products with milk-derived ingredients made in China. For a list of affected products in the U.S., visit www.fda.gov/oc/opacom/hotspots/melamine.html.

Long-Distance Air Travel and the Risk of Deep Vein Thrombosis

Deep Vein Thrombosis (DVT) is a potentially deadly threat to long-distance air travelers. It is a condition marked by blood clots forming in the deep veins of the lower legs.

Conditions that increase a traveler's risk for developing DVT include:

- Injury to deep veins from bone fracture or surgery.
- Decreased blood flow from dehydration or immobility. These two factors may be found in airplane travelers who have limited intake of fluids (due to airline restrictions on carry-on liquids, new requirements to purchase drinks on the plane, or reluctance to drink fluids to avoid repeated trips to cramped airplane lavatories) or are flying in cramped coach-class seats.
- Increased blood levels of estrogen hormone from birth control pills, hormone therapy or pregnancy.
- Chronic illnesses, including heart disease, lung disease, cancer and inflammatory bowel disease.
- Personal or family history of DVT, increased age, obesity, smoking, high blood pressure, or a disorder that increases blood clotting.

There are also several complications that can result from DVT:

- A blood clot in the leg can “break loose” and travel to the lungs as a Pulmonary Embolism (PE). A pulmonary embolism can cause chest pain, shortness of breath or even sudden death.
- One-third of people with DVT may develop chronic leg-swelling, pain and discoloration.
- Approximately one-third will also develop another DVT.

How do you know if you might have a blood clot? In the lower legs, DVT often occurs in the calf, causing pain, swelling,

and tenderness. Sometimes the clot can be felt as a firm, rope-like area under the skin. PE causes shortness of breath and chest pain. Only a doctor can definitively diagnose and treat a DVT or PE, so it's important to seek immediate medical care for any of these signs or symptoms.

Air travelers can do several things to decrease their risk of DVT:

- Don't sit with legs crossed.
- Get out in the aisle and walk each hour while on the plane.
- Drink plenty of fluids. However, avoid drinking alcoholic or caffeinated beverages since these may lead to dehydration.
- Flex and relax leg muscles by doing toe and heel raises.
- Wear loose-fitting clothing to promote blood circulation.
- Exercise regularly and maintain a healthy weight.

Schistosomiasis: A Reason to Stay Out of Lakes, Rivers, & Streams

Your vacation may include plans to cruise the Nile River or hike to Victoria Falls. Regardless of the itinerary, you are likely to encounter a body of freshwater (e.g., a lake, river, stream) on your trip. Therefore, it is important to be aware of the risks associated with activities that may expose you to freshwater.

In sub-Saharan Africa, the primary hazard from freshwater exposure is a parasitic disease known as schistosomiasis. This disease is caused by certain types of flatworms that float in the water. These parasites can infect humans by penetrating intact skin. Once inside the body, the worms invade the blood and other organs such as the liver or bladder.

According to the CDC, the most common symptoms noticed several weeks after infection include fever, nausea, diarrhea, body aches, and resemble a flu-like illness. However, more serious symptoms may occur, including blood in the urine and seizures. Chronic infection may also result in bladder cancer.

After returning from your trip, you should seek medical care if you have similar symptoms or a flu-like illness. It is extremely important to remind your physician where you traveled and the activities you did while abroad.

Should there be a possibility of exposure to schistosomiasis, blood and urine tests can be used to make a diagnosis.



Schistosoma mansoni.
Photo courtesy of CDC.

Likewise, drugs are available to treat this disease.

Like most infections, avoidance is the best way to prevent disease. Wading, swimming, and bathing in freshwater will increase the risk of schistosomiasis. If needed for bathing, collected freshwater may be heated to >122° F for 5 minutes to kill the parasites.

Travel Medicine Clinic at Fort Myer



Are you planning on traveling internationally in the near future? If you are visiting a location in Africa, Asia, or Central/South America, an appointment at the travel medicine clinic can help you prepare for any disease risks you may encounter.

- The Family Health Center of Fort Myer (Rader Army Health Clinic) Travel Medicine Clinic is open on Tuesdays from 0900 to 1600.
- Appointments can be made by calling 703-696-3439.
- Schedule your appointment approximately 4-6 weeks prior to your departure date.
- Bring your medical records with you, including all prior vaccination records.

Fast Facts

- The vast majority of travel-related illnesses are preventable.
- You should visit the travel clinic 4-6 weeks before traveling to Africa, Asia, Central America, or South America.
- Vaccines are the safest, most effective means of preventing illness.
- Avoiding insect bites by using DEET-containing repellents is the only method of preventing some insect-borne diseases.
- One of the best ways to reduce the risk of illness while traveling is to wash your hands frequently.

Information Sources



Shoreland's Travel Health Online — www.tripprep.com

Centers for Disease Control & Prevention

- Traveler's Health Website — www.cdc.gov/travel
- Travel Notice Website — www.cdc.gov/travel/notices.aspx

U.S. Department of State

- Travel & Business Website — www.state.gov/travelandbusiness
- Embassy & Consulate Website — usembassy.state.gov

World Health Organization Travel Website — www.who.int/topics/travel/en

International Association for Medical Assistance to Travelers — www.iamat.org

International Society of Travel Medicine — www.istm.org

American Society of Tropical Medicine & Hygiene — www.astmh.org

U.S. Army Center for Health Promotion and Preventive Medicine — <http://chppm-www.apgea.army.mil/>

Tip: Check out these websites for more information about staying healthy while traveling abroad.

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