

## Traveling Abroad Safely

The Center for Disease Control and its European counterpart recommend preparing yourself before traveling to developing countries, in order to prevent major health problems in an environment where it can take more time to receive medical treatment. This advice comes directly from the CDC.

**Cholera:** An outbreak of cholera has been ongoing in the Dominican Republic since November 2010. Cases continue to remain at elevated levels. Authorities are taking measures to prevent the spread of the disease, strictly monitoring suspicious and confirmed cases of cholera. The risk of cholera for travelers to the Dominican Republic is likely very low if precautions are taken. Travelers should consume only safe food and water, and exercise hand washing frequently.

Cholera is a bacterial disease that can cause diarrhea and dehydration. Cholera is most often spread through the ingestion of contaminated food or drinking water. Water may be contaminated by the feces of an infected person or by untreated sewage. Food is often contaminated by water containing cholera bacteria or by being handled by a person ill with cholera. Most travelers are not at high risk for getting cholera, but people who are traveling to Haiti and the Dominican Republic should exercise caution to avoid getting sick. We would like to recommend visiting <http://wwnc.cdc.gov/travel/page/pack-smart.htm> before going abroad as well as always carrying water purification tablets and oral rehydration salts (ORS). In the United States, these products can be purchased at stores that sell equipment for camping or other outdoor activities.

Although no cholera vaccine is available in the United States, travelers can prevent cholera by following these basic steps:



### 1. Drink and use safe water\*

- Drink only from bottles of water with unbroken seals. Canned/ bottled beverages such as carbonated drinks are safe to consume.
- Use safe water to brush your teeth, wash and prepare food, and make ice.
- Clean food preparation areas and kitchenware with soap and safe water and let dry completely before reuse.

\*Piped water sources, drinks sold in cups or bags, or ice may not be safe. All drinking water and water used to make ice should be boiled or treated with chlorine.

### 2. Wash your hands often with soap and safe water\*

- Before you eat or prepare food.
- Before feeding someone: a sick person, your children, etc.
- After using the latrine or toilet.
- After taking care of someone ill with diarrhea.

\* If no soap is available, use an alcohol-based hand cleaner (containing at least 60% alcohol).



### 3. Cook food thoroughly (especially seafood), keep it covered, eat it hot, and peel fruits and vegetables\*

- Boil it, cook it, peel it, or forget it.
- Be sure to cook shellfish (like crab and crayfish) until they are very hot all the way through.

\*Avoid raw foods other than fruits and vegetables you have peeled yourself, and do not eat food from street vendors.

If you get sick with diarrhea while you are in Haiti or the Dominican Republic, you can take an antibiotic as prescribed by your family doctor. Also, remember to drink fluids and use oral rehydration salts (ORS) to prevent dehydration. If you have severe watery diarrhea, seek medical care right away.

**Dengue:** Dengue is the most common cause of fever in travelers returning to the United States and to other countries from the Caribbean, Central America, and South Central Asia. Dengue is reported commonly from most tropical and subtropical countries of Oceania, Asia, the Caribbean, the Americas, and occasionally Africa.

This disease is caused by four similar viruses and is spread through the bites of infected mosquitoes. Dengue virus transmission occurs in both rural and urban areas; however, dengue infections are most often reported from urban settings. As of December 2, 2011, more than 900,000 cases have been reported to the Pan American Health Organization (PAHO) during 2011. Several countries across the region are reporting high incidence rates, including Brazil, Paraguay, Bolivia, the Bahamas, and Aruba.

Travelers can reduce their risk of infection with dengue fever by protecting themselves from mosquito bites. The mosquitoes that spread dengue usually bite at dusk and dawn but may bite at any time during the day, especially indoors, in shady areas, or when the weather is cloudy.

Travelers should follow the steps below to protect themselves from mosquito bites:

- Where possible, stay in hotels or resorts that are well screened or air conditioned and that take measures such as spraying with insecticide to reduce the mosquito population.
- When outdoors or in a building that is not well screened, use insect repellent on uncovered skin. If sunscreen is needed, apply before applying insect repellent.

*(continued next page)*

- Look for a repellent that contains one of the following active ingredients: DEET, picaridin (KBR 3023), Oil of Lemon Eucalyptus/PMD, or IR3535. Always follow the instructions on the label when you use the repellent.
- Wear loose, long-sleeved shirts and long pants when outdoors. For greater protection, clothing may also be sprayed with a repellent containing permethrin or another EPA-registered repellent. (Remember: don't use permethrin on skin.)

In general, repellents protect longer against mosquito bites when they have a higher concentration (percentage) of any of these active ingredients. However, concentrations above 50% do not offer a marked increase in protection time. Products with less than 10% of an active ingredient may offer only limited protection, often no longer than 1-2 hours.

The American Academy of Pediatrics approves the use of repellents with up to 30% DEET on children more than 2 months old. To protect babies less than 2 months old use a carrier draped with mosquito netting with an elastic edge for a tight fit. For more information about the use of repellent on infants and children, please see the "Insect and Other Arthropod Protection" section on the CDC's Traveling Safely with Infant and Children webpage: <http://www.nccdc.gov/travel/yellowbook/2012/chapter-7-international-travel-infants-children/traveling-safely-with-infants-and-children.htm>

**Malaria:** About 3.3 billion people - half of the world's population - are at risk of malaria. Every year, this leads to about 250 million malaria cases and nearly one million deaths. People living in the poorest countries are the most vulnerable.

Malaria is a disease which can be transmitted to people of all ages. It is caused by parasites of the species plasmodium that are spread from person to person through the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect red blood cells.

Symptoms of malaria include fever, headache, and vomiting, and usually appear between 10 and 15 days after the mosquito bite. If not treated, malaria can quickly become life-threatening by disrupting the blood supply to vital organs. In many parts of the world, the parasites have developed resistance to a number of malaria medicines.

Key interventions to control malaria include: prompt and effective treatment with artemisinin-based combination therapies; use of insecticidal nets by people at risk; and indoor residual spraying with insecticide to control the vector mosquitoes. There is also a preventive treatment to take before, during and after your trip. Please visit your family physician to talk more about how to protect yourself.

**Typhoid Fever:** Salmonella Typhi lives only in humans. Persons with typhoid fever carry the bacteria in their bloodstream and intestinal tract. In addition, a small number of persons, called carriers, recover from typhoid fever but continue to carry the

bacteria. Both ill persons and carriers shed Salmonella Typhi in their feces (stool).

You can get typhoid fever if you eat food or drink beverages that have been handled by a person who is shedding Salmonella Typhi or if sewage contaminated with Salmonella Typhi bacteria gets into the water you use for drinking or washing food. Therefore, typhoid fever is more common in areas of the world where hand washing is less frequent and water is likely to be contaminated with sewage. Once Salmonella Typhi bacteria are eaten or drunk, they multiply and spread into the bloodstream. The body reacts with fever and other signs and symptoms.

Two basic actions can protect you from typhoid fever:

- Avoid risky foods and drinks (go to cholera section for details).
- Get vaccinated against typhoid fever.

Watching what you eat and drink when you travel is as important as being vaccinated. This is because vaccines are not completely effective. Avoiding risky foods will also help protect you from other illnesses, including travelers' diarrhea, cholera, dysentery, and hepatitis A.

"Boil it, cook it, peel it, or forget it".

If you are traveling to a country where typhoid is common, you should consider being vaccinated against typhoid. Visit a doctor or travel clinic to discuss your vaccination options. Remember that you will need to complete your vaccination at least 1-2 weeks (dependent upon vaccine type) before you travel so that the vaccine has time to take effect. Typhoid vaccines lose effectiveness after several years. If you were vaccinated in the past, check with your doctor to see if it is time for a booster vaccination. Taking antibiotics will not prevent typhoid fever; they only help treat it.

#### **Your Vaccines Up to Date** - Not Only for Children

Some vaccines may lose protection over the years, thus we need a boost to reinvigorate our defenses against infectious diseases. You should review where you are traveling to with your physician and if you are well protected or need any boosters or additional vaccines. For instance, it is mandatory for all travelers to Peru and Bolivia to have the yellow fever vaccine; you may be banned from entering the country if you have not had the vaccine.

The recommended vaccines to travel to Central/South America and the Caribbean are: hepatitis A, hepatitis B, tetanus/diphtheria/acellular Pertussis or tetanus/diphtheria depending on travelers' age, rabies, typhoid fever, poliomyelitis, measles, mumps, rubella, tuberculosis test (PPD), pneumococcal for persons over 50 and anyone with chronic conditions, as well as influenza since it exists year-round in tropical areas. You may also consider varicella if you have questionable history of the disease during childhood.

In NPH countries, we cope year round with epidemics such as measles, mumps, varicella, scarlet fever, hepatitis A, dengue and cholera.

