



Relief Workers and Others Traveling to Haiti: Important Health Information

On January 12, 2010, Haiti experienced an earthquake measuring 7.0 on the Richter scale with the epi-center 17 km from the capitol Port-Au-Prince. As a result of the devastation caused by the earthquake, many relief workers (volunteers, military personnel, medical personnel) are traveling to Haiti to help relief efforts. This information sheet provides a summary of what relief workers should be aware of *before* and *during* their travel to Haiti.

What should I do before leaving for Haiti?

Anyone traveling to Haiti should ensure they are up to date on their routine vaccines and fill their medication prescriptions, including prescriptions for anti-malarials. Additional vaccines recommended for travel to Haiti are listed below and should be received as soon as possible. Information on where to obtain these vaccines is available at:

www.phila.gov/health/units/ddc/index.html

Routine Vaccines

- Diphtheria, Pertussis, Tetanus (Tdap or Td)
- Measles, Mumps, Rubella (MMR)
- Seasonal and H1N1 flu
- Polio
- Varicella

Additional Vaccines

- Hepatitis A
- Typhoid
- Hepatitis B
- Rabies - *if activities will involve frequent close contact with animals*

What should I bring to Haiti?

If traveling with an organization, refer to their guidelines of what to pack. Follow airport/TSA guidelines regarding what should go in a carry-on bag versus a checked bag. The following is a list of recommended items to bring with you to Haiti:

- Copies of passport and other identification as well as a list of emergency contacts
- Food and water for the length of your stay and water purification tablets or system
- Soap and an alcohol-based hand sanitizer (>60% alcohol)
- Mosquito repellent and mosquito netting for sleeping
- Flashlight
- Batteries
- Medications
 - Anti-malarials
 - Personal prescriptions medications (including extras and copies)
 - Anti-diarrheal agent
 - Over-the-counter medications regularly taken or preferred
- Extra contact lenses or prescription glasses
- Medic-alert bracelet or identification of health conditions
- Personal Protective Equipment (PPE)
 - Disposable gloves
 - Safety glasses or goggles
 - Work boots
 - Leather gloves for physical labor
 - Hard hat
 - Ear plugs
 - Surgical masks or N-95 respirators
- First aid kit (at a minimum)
 - Bandages (roller, adhesive, triangular)
 - Tweezers
 - Scissors
 - Antiseptic wipes
 - Antibiotic cream
 - Hydrocortisone cream
 - Absorbent compress dressings (5 x 9 in)
 - Adhesive bandages (assorted sizes)
 - Adhesive cloth tape (10 yards x 1 inch)
 - Sterile gauze pads (3x3 and 4x4 inches)
 - Cold compress

What infectious diseases are common in Haiti? How can I protect myself from them?

Diarrheal Illness

Many organisms can cause diarrheal illness. In addition to diarrhea, these organisms may cause nausea, vomiting, fever, and stomach cramps. Being careful of what foods and drinks you consume can prevent diarrheal illness. Make sure all water has been treated or, if drinking bottled beverages, ensure that the seal has not been broken. Do not use ice cubes that have not made with treated water and do not use tap water to brush your teeth, wash dishes or prepare food. Avoid undercooked or raw meats, seafood, and unpeeled fruits and vegetables. Water can be treated by boiling for 1 minute or filtering the water and adding 2 drops of household bleach or ½ an iodine tablet per liter of water.

Tuberculosis (TB)

Tuberculosis is spread through the air by respiratory droplets from a person with an active TB infection. Symptoms may include a bad cough that is full of blood or sputum, weakness, chest pain, and loss of appetite among others. TB rates in Haiti are very high. If you expect to be working closely with ill or displaced people in Haiti, a baseline TB test (the two-step tuberculin skin test is recommended) should be done before leaving. A negative test in the past 12 months is adequate (a positive test in the past 12 months does not need to be repeated). Within 8 to 10 weeks of returning from Haiti a repeat test should be done. An N-95 or similar respirator should be worn when working with known or suspected TB patients.

Malaria

Malaria is spread by the bite of infected mosquitoes, which are common in Haiti. Symptoms include fever and flu-like illness and can take up to a year to develop. Malaria can be prevented by:

- Taking anti-malarial medication such as malarone, chloroquine, doxycycline, or mefloquine, before, during, and after your trip.
- Protecting yourself from mosquito bites (see section below).

Dengue

Dengue is common in Haiti and is also spread by mosquitoes. Symptoms include high fever, chills, muscle aches, headache and a faint rash on the torso and arms (the rash usually develops after the fever goes away). Dengue symptoms usually appear 4-7 days after a person is bit by an infected mosquito, but it can take up to 2 weeks for symptoms to appear. Protecting yourself from mosquito bites can help prevent dengue (see section below).

HIV

Haiti has a high rate of HIV infection. Condoms should be used to protect against HIV and other sexually transmitted infections. If you expect to be working closely with ill or displaced people in Haiti:

- Wear gloves if coming in contact with blood or bodily fluids, broken skin, mucous membranes or items that have come in contact with blood or bodily fluids.
- Use personal protective equipment such as masks and gowns to protect your face and body for any procedures that could cause blood or bodily fluids to splash.

Anthrax

Anthrax is a naturally occurring organism and is found in soil, animals, or products from infected animals. Symptoms usually appear 1-7 days after exposure to anthrax spores. Symptoms of cutaneous anthrax include itching at the exposure site followed by a painless blister (papular lesion), which turns into an ulcer (macular lesion) that then develops a black center. Symptoms of inhaled anthrax are often flu-like, including sore throat, mild fever (>100° F), and muscle aches. Later symptoms include cough, chest discomfort, shortness of breath and tiredness. *Seek healthcare immediately if you experience symptoms of anthrax.*

Typhoid Fever

Persons may be exposed to typhoid fever by eating or drinking contaminated food or water or coming into contact with a person sick with typhoid. Symptoms of typhoid include fever, headache, tiredness, loss of appetite, constipation or diarrhea and red spots on the torso. Symptoms can develop anywhere from 1 week to 2 months after exposure. The disease can be prevented by:

- Frequent handwashing.
- Avoiding risky foods and drinks such as undercooked meat, raw vegetables, unpeeled fruit, and untreated water.
- Typhoid vaccine, either the oral or injectable form prior to travel.

Hepatitis A

Persons may be exposed to hepatitis A by consuming contaminated food or water. Symptoms usually develop within a month after being exposed and include jaundice (yellowing of eyes and skin), fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay or pale-colored stools and joint pain. People only can develop hepatitis A once in their lifetime. Hepatitis A can be prevented by:

- Avoiding risky foods and drinks such as undercooked meat, raw vegetables, unpeeled fruit, and untreated water.
- Hepatitis A vaccine before traveling.

Leptospirosis

Leptospirosis is caused by bacteria that are spread through animal urine, which infects water supplies. Symptoms include fever and flu-like illness with different phases that can last a few days to 3 weeks. In order to avoid exposure to leptospirosis do not drink untreated water and avoid swimming in bodies of water that may be infected with the bacteria by animals.

How can I prevent myself from insect bites?

It is important to protect yourself from insect and animal bites to reduce your risk of getting sick. Diseases such as malaria and dengue may be spread through mosquito bites. These bites can be avoided by:

- Using insect repellent with 10-50% DEET or picardin.
- Wearing lightweight long-sleeved shirts, pants, and a hat while outdoors.
- While sleeping, using a mosquito bed net or coil unless in an air-conditioned or screened room.

What should I do if I am exposed to animals?

Animals pose a serious risk to cause injury or illness. Persons should stay away from all animals. If you are bitten or scratched by an animal while in Haiti, immediately wash your wound well with soap and clean water. Upon your return to the United States, consult a healthcare provider regarding the need for post-exposure rabies prophylaxis.

If you anticipate being repeatedly exposed to animals (dogs, cats, bats, racoons, skunks) due to the nature of your relief work while in Haiti, it may be advisable to get rabies pre-exposure vaccination. This is a series of three shots on days 0, 7 and either 21 or 28. If you are bitten by a stray or feral animal in Haiti, follow-up vaccine will be needed but immunoglobulin will not be required and the vaccine series will be shortened.

What other health concerns should I consider?

Injury

It is important to be careful to prevent personal injury in Haiti. Wear sturdy shoes or boots and pants due to rubble and debris. The roads may not be paved, power lines may be down, there may be gas leaks, hazardous material leaks, or sewer line breaks which are all potential hazards. Electricity and running water may not exist in many locations. Be aware of your surroundings and any potential health risks.

Infection Control

You may come in contact with human remains and need to protect yourself from potential disease. If you are handling remains, be certain to wear PPE to protect from any potential bodily fluid contamination (blood, feces, wound exudates) and thoroughly wash your hands after disposing of your gloves.

Mental Health

Following a natural disaster, it is common for persons to experience psychological or emotional difficulties coping with their experience in Haiti, especially as a relief worker. There are many resources available to help persons cope with these feelings.

Here are some ways to manage stress while in Haiti:

- Do not work more than 12 hours per day
- Take breaks during the work day
- Drink water and eat snacks along with meals
- Have a partner to help monitor one another's moods and stress levels
- Communicate with family and friends

What should I be concerned about after returning from Haiti?

The most frequent illnesses include stomach illness (diarrhea, vomiting, stomach pain), skin rashes, respiratory infections (cough, shortness of breath, chest pain) and fever. People experiencing these signs and symptoms should stay home while ill and contact a healthcare provider if the symptoms don't get better. Most of the signs and symptoms will develop within several days after returning from Haiti however other illnesses, such as those described above, may take longer. Also, pay attention to stress levels and mental health. If you experience emotional distress, contact a mental health professional or your healthcare provider for a referral. PDPH has an FAQ on health information in relation to returning from Haiti. This FAQ is available at: www.phila.gov/Health/pdfs/PDPH_FAQ_for_Haiti_Earthquake_Returnees%26Evacuees.pdf

Who should I contact for additional information?

Additional guidance and disease-specific information is available from the Centers for Disease Control and Prevention (www.cdc.gov). You may also contact the Philadelphia Department of Public Health for specific information on diseases and vaccines by visiting www.phila.gov/Health or calling 215-685-6740.

References:

Brunette G.W., Kozarsky P.E. Magill A.J., Shlim, D.R., (Eds.). (2009). CDC Health Information for International Travel 2010. Atlanta, GA. The Post-Travel Consultation, 270-289
<http://wwwnc.cdc.gov/travel/content/news-announcements/relief-workers-haiti.aspx>.

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