

Guidance for Relief Workers and Others Traveling to Haiti for Earthquake Response

US Centers for Disease Control and Prevention

Posted: 01/20/2010

Editor's Note:

The following guidelines are provided by the US Centers for Disease Control and Prevention. They were last updated on January 16, 2010.

This notice is to advise relief workers and other personnel traveling to Haiti to assist with the humanitarian response following the January 12th earthquake near Port-au-Prince. Conditions in the area remain hazardous, including extensive damage to buildings, roads, and other infrastructure.

Before You Depart for Haiti

Recommended Vaccines

A number of vaccines are recommended for travelers to Haiti. See your doctor before you travel to make sure you have had all necessary vaccines.

Routine. Be sure that you are up to date on vaccines such as measles/mumps/rubella (MMR), diphtheria/pertussis/tetanus (DPT), polio, seasonal and H1N1 flu, and varicella. It is especially important to have a current tetanus shot.

Hepatitis A or immune globulin (IG). Even if your departure is imminent, one dose of hepatitis A vaccine provides adequate short-term protection for healthy people. For long-term protection, a second dose is required 6-18 months after the first dose, depending on the brand of vaccine used.

Typhoid. There are 2 vaccines available for typhoid prevention. The injectable vaccine may be preferable to the oral vaccine in cases where travel is imminent. The oral vaccine requires refrigeration and 4 tablets taken every other day over one week.

Hepatitis B. If your departure is imminent, the first in a 3-dose series (day 0, 1 month and 6 months) may provide some protection. An accelerated dosing schedule may be used (doses at days 0, 7, and at 21-30 days with a booster at 12 months).

Insect-borne Diseases

Malaria

Malaria occurs in all parts of Haiti. Ways to prevent malaria include the following:

- Taking a prescription antimalarial drug
- Using insect repellent and wearing long pants and sleeves to prevent mosquito bites
- Sleeping in air-conditioned or well-screened rooms or using bed nets.

No antimalarial drug is 100% protective, so it is important to use all three ways to prevent malaria.

All of the following antimalarial drugs are equal options for preventing malaria in Haiti: atovaquone/proguanil (Malarone®), chloroquine, doxycycline, or mefloquine. Each drug has its own side effects, contraindications, and precautions. You will need to talk to your doctor to decide which of these drugs would be best for you, depending on your current health, medical history, drug allergies, and specific needs. Additional information can be found on the Drugs to Prevent Malaria page.

Malaria is always a serious disease and may be a deadly illness. If you become ill with a fever or flu-like illness either while in Haiti or after you return home (for up to 1 year), you should seek immediate medical attention and should tell the doctor that you have recently been in Haiti.

Dengue

Dengue is a common infection in Haiti. Dengue is a disease caused by a virus transmitted to people by the bite of an infected mosquito. Some important information to know about dengue as you travel to Haiti:

- No vaccine or medications are available to prevent dengue.
- The best way to reduce your risk of dengue is to protect yourself from mosquito bites (see the section below called "Protection Against Insects and Animals").
- The mosquitoes that spread dengue usually bite at dusk and dawn but may bite at any time during the day.
- Symptoms and signs are high fever, chills, headache and muscle pain. Additionally, a faint rash on the trunk and upper arms may appear on the second to third day of illness.
- There are no specific medicines to treat dengue, so treatment is supportive with fever-reducing medicines and fluids.
- You can help control mosquito populations by draining all standing water that you find in open containers left outdoors.
- If you are in the Dominican Republic awaiting entry into Haiti, be aware that dengue is also common there.

Other Infectious Diseases

HIV

Haiti has a high prevalence of HIV infection. To reduce the risk of HIV and other sexually transmitted diseases, always use latex condoms. Healthcare workers should also take the following additional precautions:

- Wear gloves for touching blood and body fluids, mucous membranes, or broken skin and for handling items or surfaces soiled with blood or body fluids.
- Use masks and protective eyewear or face shields to prevent exposure of the mouth, nose, and eyes during procedures that are likely to generate droplets of blood or body fluids.
- Wear gowns or aprons during procedures that are likely to generate splashes of blood or body fluids.

Tuberculosis (TB)

Rates of tuberculosis are very high in Haiti.

- If you anticipate giving medical care or working closely with ill or injured victims, a tuberculin skin test (ideally, a two-step test) is recommended prior to travel and then 6-8 weeks after return.
- If exposure to known TB patients will occur, traveling with personal respiratory protective devices (e.g., N-95 respirators), along with training, is recommended.

Anthrax

Anthrax occurs in Haiti and is primarily transmitted by direct contact with infected animals or with contaminated products from infected animals. Cases of cutaneous and inhalation anthrax have been reported among the local population.

- Symptoms of anthrax can occur within 7 days of infection. Symptoms include: fever (>100° F) and chills or night sweats; cough; chest discomfort; shortness of breath; fatigue; muscle aches; sore throat followed by difficulty swallowing; enlarged lymph nodes; headache; nausea; loss of appetite; abdominal discomfort, vomiting, or diarrhea; a sore, especially on your face, arms, or hands that starts as a raised bump and develops into a painless ulcer with a black area in the center.
- If you develop any of these symptoms, see a healthcare provider immediately.

Key Items to Bring

There will be almost no infrastructure support available in Haiti for the immediate future. Relief workers, volunteers, and other travelers will need to be self-sufficient.

Pack basic supplies, including:

- Food and water sufficient for the length of your stay.
- Insect protection: insect repellent and a bed net.
- Medications: antimalarial pills, medications for the treatment of travelers' diarrhea (e.g., loperamide and an antibiotic), personal prescriptions (including extras), any preferred over-the-counter medications, and copies of all your prescriptions.
- An extra set of prescription eyeglasses and/or contacts.
- Water purification tablets (iodine or chlorine), bleach, or a water purifier.
- Persons with pre-existing health conditions should consider wearing an alert-bracelet and make sure this information is on a contact card in their wallet or travel documents. A contact card should include the following information:
 - Name and contact information of U.S. family member or close contact.
 - Name and contact information of U.S. health-care provider.
 - Pre-existing health conditions and treatment.
- Personal protective equipment (PPE): safety glasses or goggles, work boots, leather gloves for physical labor, rubber gloves for handling blood or body fluids, surgical masks, hard hat, ear plugs, N-95 respirators for those who are fit-tested.
- Due to severe damage to health facilities and shortages of medical supplies, carry a first aid kit for your own protection. Minimum suggested contents:
 - Bandages (roller, adhesive, triangular)
 - Sterile gauze pads
 - Disposable gloves

- Scissors
- Tweezers
- Cold compress
- Antiseptic wipes
- Antibiotic ointment
- Hydrocortisone ointment
- Commercial suture/syringe kits to be used by a local health-care provider. These items will require a letter from the prescribing physician on letterhead stationery. Pack these items in checked baggage, since they may be considered sharp objects and confiscated by airport or airline security if packed in carry-on bags.

While in Haiti

Wash your hands often with soap and clean water or use an alcohol-based hand cleaner (with at least 60% alcohol). Clean your hands especially before you eat or prepare food.

Safe Food and Drinks

- Eat foods that are packaged or that are freshly cooked and served hot.
- Do not eat raw and undercooked meats and seafood or unpeeled fruits and vegetables.
- Drink only bottled, boiled, or chemically treated water and bottled or canned carbonated beverages. When using bottled drinks, make sure that the seal has not been broken.
- Avoid tap water, fountain drinks, and ice cubes.
- To disinfect your own water: boil for 1 minute or filter the water and add 2 drops of household bleach or 1/2 an iodine tablet per liter of water.
- Use bottled, boiled, or chemically treated water to wash dishes, brush your teeth, wash and prepare food, or make ice.

Protection Against Insects and Animals

Insects. Insect-borne diseases such as malaria and dengue are risks in Haiti. Prevent insect bites by:

- Using insect repellent (bug spray) 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.
- In general, repellents protect longer against mosquito bites when they have a higher concentration (percentage) of the active ingredient. 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.
- Wearing lightweight long-sleeved shirts, long pants, and a hat outdoors. For greater protection, clothing may also be sprayed with repellent containing permethrin or another EPA-registered repellent. (Remember: don't use permethrin on skin.)
- Remaining indoors in a screened area or using insect repellent frequently on uncovered skin during the peak biting period for malaria (dusk and dawn) and dengue (any time of day).
- Sleeping in beds covered by a bed net (preferably treated with permethrin), if not sleeping in an air-conditioned or well-screened room.
- Spraying rooms with products effective against flying insects, such as those containing pyrethroid.

- For detailed information about insect repellent use, see [Insect and Arthropod Protection](#).

Animals. Direct contact with animals can spread diseases like rabies or cause serious injury or illness. Displaced animals may revert to the wild and go about in packs. They will also be hungry and may be searching for food and may be more likely to bite. It is important to prevent animal bites and scratches:

- Stay away from all animals, including dogs and cats. Even animals that look like healthy pets can have rabies or other diseases.
- If you are bitten or scratched, wash the wound well with soap and clean water and **seek medical care right away**. If you have a povidone-iodine solution (such as Betadine®), use that to clean the wound after washing it.
- Resist the urge to rescue animals with the intent to bring them home to the United States. Dogs and cats may be infected with rabies but not show signs until several days or weeks after you first encounter them.
- After you return from Haiti, be sure to tell your doctor or state health department if you were bitten or scratched during travel.
- For more information about how to protect yourself from other risks related to animals, see [Animal-Associated Hazards](#). To learn more about rabies see [CDC's Rabies homepage](#).

Injury

The risk of injury after an earthquake is high. Hazards such as electrocution from downed power lines and structural damage to buildings and roads all pose a risk. Accidents and violence are documented risks for humanitarian workers and cause more deaths than disease and natural causes.

- The majority of the road network in Haiti is not paved. Haiti is predominately mountainous and has extensive deforestation and soil erosion, making travel over roadways especially hazardous. Exercise extreme care when traveling on roads particularly in rural areas.
- There has been extensive structural damage to buildings in Haiti. Avoid unstable structures if possible.
- Other potential hazards to be aware of in collapsed buildings include standing water from water system breaks, natural gas leaks, airborne smoke and dust, hazardous materials such as ammonia or leaking fuels, exposure to germs from sewer line breaks, and exposed wiring.
- Use personal protection equipment, such as hard hats and steel-toed boots, if in areas with damaged buildings.

Exposure to Human Remains

Human remains may contain blood-borne viruses and diarrhea-causing bacteria. Relief workers who are handling remains should take precautions to avoid being exposed to these organisms:

- Protect your face from splashes of body fluids and fecal material by using a plastic face shield or a combination of eye protection and surgical mask. In extreme situations, a cloth tied over the nose and mouth can be used to block splashes.
- Protect your hands from direct contact with body fluids and from injuries that break the skin by using a combination of a cut-proof inner layer glove and a latex (or similar) outer layer.
- Wash your hands with soap and water or with an alcohol-based hand cleaner immediately after you remove the gloves.

- Protect your feet and ankles against sharp debris by wearing foot wear that covers the entire foot and has thick soles.
- Give prompt care -- including immediate cleansing with soap and water, and a tetanus booster if indicated -- to anyone who is injured during work with human remains.

For more extensive information about working with human remains after a disaster, see the [Interim Health Recommendations for Workers who Handle Human Remains After a Disaster](#) fact sheet.

Psychological/Emotional Difficulties

As a first responder or relief worker, you may encounter extremely stressful situations, such as witnessing a tremendous loss of life, serious injuries, missing and separated families, and destruction of whole areas. It is important to recognize that these experiences may cause you psychological or emotional difficulties.

Normal Reactions to a Disaster Event

- Profound sadness, grief, and anger are common.
- You may not want to leave the scene until the work is finished.
- You will likely try to override stress and fatigue with dedication and commitment.
- You may deny the need for rest and recovery time.

Ways to Help Manage Your Stress

- Limit on-duty work time to no more than 12 hours per day.
- Rotate work assignments between high stress and lower stress functions.
- Drink plenty of water and eat healthy snacks and other energy foods.
- Take frequent, brief breaks from the scene when you are able.
- Keep an object of comfort with you such as a family photo, favorite music, or religious material.
- Stay in touch with family and friends.
- Pair up with another responder so that you can monitor one another's stress.

To learn about mental health resources, see:

- [Mental Health in Aid Workers Fact Sheet](#)
- [Self-Care Tips for Stress](#)
- Download Podcasts on stress management for first responders: [Stress Management for Emergency Responders - What Responders Can Do](#)
- [NIOSH: Traumatic Incident Stress: Information for Emergency Response Workers](#)
- [NIOSH: Estrés por sucesos traumáticos: Información para el personal de Emergencia](#)

After You Come Home

If you are not feeling well, you should see your doctor and mention that you have recently returned from response and relief work in Haiti. Also tell your doctor if you were bitten or scratched by an animal while traveling.

Symptoms of malaria can develop up to one year after travel, so be alert for fever or flu-like symptoms.

Approximately one-third of aid workers report depression shortly after returning home, and more than half of returned aid workers have reported feeling predominantly negative emotions on returning home, even though many reported that their time overseas was positive and fulfilling. You might want to see a professional counselor to help you adjust back into your home environment.

More Information

- [Haiti destination page](#) on the Travelers' Health website
 - [Haiti country specific information](#) from the US Department of State
 - [United Nations Relief Web](#)
 - Page last reviewed: January 16, 2010
 - Page last updated: January 16, 2010
 - Page created: January 14, 2010
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