The current cholera outbreak in Haiti has now spread to several locations within the country. As of October 23rd there have been over 2500 cases. As the cholera outbreak is expected to continue to spread, it is likely that PAHO/WHO personnel and/or family members will be exposed. Cholera is an acute bacterial intestinal infection that is acquired through the consumption of water or food that is contaminated with the bacteria *Vibrio Cholerae*. Typical symptoms include the sudden onset of severe watery diarrhea and vomiting resulting in volume depletion. If severe and untreated this can result in death.

Symptoms of severe volume depletion include dizziness, lethargy, and low urine output. Individuals with any of these symptom, as well as those who have a weakened immune system from diseases such as HIV or cancer, or have significant chronic diseases such as diabetes, severe lung or kidney disease should seek prompt medical assistance. Similarly, pregnant women and children also have a significantly higher risk of death from cholera and should promptly seek medical care if they develop symptoms typical of cholera.

There are several basic steps that can be taken to minimize the risk of exposure to this disease. They include:

- **Frequent hand washing**, especially after using the toilet and always before eating
- **Drink only purified water, do not use ice** unless you are certain it has been prepared from purified water
- **Follow the “boil it, cook it, peel it, or forget it” rule for food**

If you or a family member develops a gastrointestinal illness typical of cholera, the treatment is rehydration usually in combination with antibiotics. Oral rehydration salts (ORS) should be used. However if they are not available, WHO recommends a substitute containing 6 level teaspoons of sugar plus 1 level teaspoon of salt in 1 liter of safe drinking-water taken in the same amounts as for ORS. (A level teaspoon contains a volume of 5 ml.) The recommended amount of ORS solution to drink, as stated in the WHO International Travel and Health 2010 publication is:

- Children under 2 years: **1/4–1/2 cup (50–100 ml)** after each loose stool up to approximately 0.5 liter a day.
- Children 2–9 years: **1/2–1 cup (100–200 ml)** after each loose stool up to approximately 1 liter a day.
- Patients of 10 years or older: **As much as wanted**, up to approximately **2 liter a day**.

Additional information is available in the WHO Frequently Asked Questions sheet that accompanies this document.

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*PAHO Medical Director*
Frequently asked questions and information for travellers

What is cholera?
Cholera is a diarrhoeal disease caused by infection of the intestine with the bacterium *Vibrio cholerae*. Children as well as adults can get infected.

In most cases, infection causes only mild diarrhoea or no symptoms at all. In 5-10% of cases, however, patients develop very severe watery diarrhoea and vomiting from 6 hours to 5 days after exposure to the bacterium. In these cases, the loss of large amounts of fluids can rapidly lead to severe dehydration. In the absence of adequate treatment, death can occur within hours.

How is cholera spread?
A person can become infected by drinking water or eating food contaminated by the bacterium. Common sources of foodborne infection include raw or poorly cooked seafood, raw fruit and vegetables, and other foods contaminated during preparation or storage.

Bacteria present in the faeces of an infected person are the main source of contamination. The bacterium can also live in the environment in brackish rivers and coastal waters. The disease can thus spread rapidly in areas where sewage and drinking water supplies are inadequately treated.

Where do outbreaks occur?
Cholera remains an ever-present risk in many countries. New outbreaks can occur sporadically in any part of the world where water supplies, sanitation, food safety, and hygiene are inadequate. The greatest risk occurs in overpopulated communities and refugee settings characterized by poor sanitation and unsafe drinking water. For information of whether there is cholera in the area where you are travelling, contact your health care provider, local office of public health or travel health centre.

Can cholera be prevented?
Yes. People living in high-risk areas can protect themselves by following a few simple rules of good hygiene and safe food preparation. These include scrupulous washing of hands, especially before food preparation and eating, thorough cooking of food and consumption while hot, boiling or treatment of drinking water, and use of sanitary facilities.

By taking a few basic precautions, travellers can likewise protect themselves against cholera and most other food- and water-borne diseases. Above all, travellers should be very careful with food and water, including ice, and remember this simple rule: boil it, cook it, peel it, or forget it.

- Drink only water that has been boiled or disinfected with chlorine, iodine or other suitable products. Products for disinfecting water are generally available in pharmacies. Beverages such as hot tea or coffee, wine, beer, carbonated water or soft drinks, and bottled or packaged fruit juices are usually safe to drink.
- Avoid ice, unless you are sure that it is made from safe water.
- Eat food that has been thoroughly cooked and is still hot when
Boil unpasteurized milk before drinking it. Ice cream from unreliable sources is frequently contaminated and can cause illness. If in doubt, avoid it. Be sure that meals bought from street vendors are thoroughly cooked in your presence and do not contain any uncooked foods.

What treatments are available?
The most important treatment is rehydration, which consists of prompt replacement of the water and salts lost through severe diarrhoea and vomiting. Early rehydration can save the lives of nearly all cholera patients. Most can be rehydrated quickly and easily by drinking large quantities of a solution of oral rehydration salts. Patients who become severely dehydrated may need to receive fluid intravenously.

Packets of oral rehydration salts are available from most city pharmacies and health care facilities. WHO recommends that travellers include oral rehydration salts in their medical kits.

If you have diarrhoea - especially severe diarrhoea - and are in an area where there is cholera, seek treatment immediately from a physician or other trained health care provider. Begin drinking water and other non-sweetened fluids, such as soup, on the way to getting medical treatment.

What about antibiotics and other drugs?
In individual cases of severe cholera, an effective antibiotic can help shorten illness, though rehydration remains the mainstay of treatment. For whole communities, however, preventive mass treatment with an antibiotic does not limit the spread of cholera and is thus not recommended. Antidiarrhoeal medicines, such as loperamide, are not recommended and should never be given.

Do vaccines confer protection?
The injectable cholera vaccine, previously used, conveyed incomplete, unreliable protection of short duration and is no longer recommended. Two new oral cholera vaccines which provide good protection for up to 3 years are now available for use by travellers. However, as these vaccines do not provide 100% protection, basic hygienic precautions should always be followed. For more information, contact your local travel medicine centre.

No country requires proof of cholera vaccination as a condition for entry, and the international certificate of vaccination no longer provides a space for recording cholera vaccination.