

# Cholera

## What is cholera?

Cholera is an acute diarrheal illness caused by infection of the intestine by the bacterium *Vibrio cholerae*.

## Who gets cholera?

Those at risk for getting cholera are people traveling to foreign countries where outbreaks of cholera are occurring and drinking water and food contaminated with the cholera bacterium. People who eat raw or undercooked seafood from the warm coastal waters near the U.S. that might be contaminated with sewage containing the cholera bacterium can also become infected.

## Where are the bacteria that cause cholera found?

*Vibrio cholerae* is found in water or foods that have been contaminated by the feces of a person infected with cholera. Cholera is most likely to be found and transmitted to others in places with inadequate water treatment, poor sanitation, and lack of clean water and soap for personal hygiene. The cholera bacterium may be able to survive for some time in certain types of water near the ocean (i.e., brackish water or estuaries).

## How are the bacteria spread?

The cholera bacteria are found in the stool or vomitus of an infected person. The stool or vomitus can directly contaminate food or water, or a person who is infected can spread the bacteria by not washing his/her hands after going to the bathroom and then handling food that is to be eaten by others.

## Why are we concerned about cholera from some types of seafood?

Seafood harvested from water that is contaminated with the cholera bacterium can become contaminated. Thorough cooking kills the cholera bacterium. If the seafood is served raw or only partly cooked, enough cholera bacteria may be swallowed to cause illness. So far, most seafood-associated cases in the U.S. have occurred after people ate shellfish, such as mollusks (oysters) harvested from the Gulf of Mexico. However, seafood from other places may also be contaminated, so all shellfish should be cooked before being eaten.

## What are the symptoms of cholera?

The majority of persons exposed to the cholera organism will not develop any symptoms. The most common symptoms are mild to severe watery diarrhea, vomiting, weakness, and leg cramps. In severe cases, when treatment is unavailable or delayed, death can occur within a

few hours due to loss of large amounts of fluid. With rapid, proper treatment, very few people will die from cholera.

### **How soon after exposure do symptoms appear?**

Symptoms can occur within 6 hours to 5 days after exposure, usually within 2-3 days.

### **What should I do if I think I have cholera?**

Seek medical care immediately. Dehydration can occur in a few hours, so rapid treatment is essential. Cholera is rare in the U.S., so not all healthcare providers are familiar with the treatment of cholera. Information on cholera treatment is available at <http://www.cdc.gov/haiticholera/consider-cholera.htm>. (This webpage was developed in response to the 2010 cholera outbreak in Haiti, but may be used for any cholera case.)

### **What is the treatment for cholera?**

The most important treatment is replacement of fluid lost from the body by the diarrhea. It is very important that the replacement fluids contain electrolytes (sodium, chloride, and potassium) as well as water. Special oral rehydration solutions containing the right balance of electrolytes, sugar and water are used to replace the fluids lost by the diarrhea. In severe illness, intravenous (I.V.) fluids may be necessary. Antibiotics are also sometimes used to shorten the duration of diarrhea and shedding of the bacteria in the stool.

### **Is there a vaccine for cholera?**

Two vaccines have been developed, but they are not available in the U.S.. The vaccines require two doses over several weeks, and provide only partial protection of short duration. Prospective travelers to cholera endemic or epidemic areas are advised to carefully follow recommendations for obtaining safe food and water at their destination, and seek medical attention promptly if they develop symptoms of cholera.

### **How can cholera be prevented?**

When traveling in countries where cholera is present, only thoroughly cooked hot foods, fruits that you peel just before eating, and bottled beverages or chlorinated water should be consumed. Thorough hand washing with soap after using the bathroom and before preparing or eating food is important in preventing the spread of the bacteria.

Seafood should always be thoroughly cooked before it is eaten.

### **Where can I learn more about cholera?**

Additional information on cholera is available at: <http://www.cdc.gov/cholera/index.html>.