

## What is cholera?

Cholera is a severe diarrheal illness caused by two strains of the bacteria *Vibrio cholerae*, serogroup O1 and O139. Cholera became rare in the United States following the introduction of modern sewage and water treatment systems, although a few imported or domestically acquired cases continue to be reported each year. The disease now occurs largely in parts of the world that have inadequate water treatment facilities. Between 1996-2004, an average of 5.6 cases of cholera per year were reported in the U.S. Cholera cases are rare in Oklahoma and are usually associated with international travel. Since 1978, two confirmed cases of cholera have been reported to the Oklahoma State Department of Health. Other strains of *V. cholera* can cause disease, but produce a much milder diarrheal illness or wound infections. These bacteria, which exist worldwide, are called non-O1/O139 *Vibrio cholera*. They live in fresh or salt water and can cause disease when water comes into contact with an open wound, or following ingestion of raw or undercooked seafood.

## What are the symptoms of cholera?

The infection is often mild or without symptoms, but sometimes can be severe. A person with cholera may have mild to severe diarrhea, vomiting and dehydration. Fever is usually absent. Approximately 1 in 20 persons experiences severe symptoms characterized by profuse, watery diarrhea, vomiting, and leg cramps. In these persons, rapid dehydration, shock or kidney failure can occur without treatment.

## How is cholera spread?

A person may get cholera by drinking water or eating food contaminated with *Vibrio cholerae*. People traveling to foreign countries with insufficient public sanitation and water treatment are at a greater risk. Cholera bacteria are found in the stool or vomit of an infected person, which can directly contaminate food or water. A person who is infected can also spread the bacteria by not washing his or her hands after going to the bathroom, followed by handling uncooked foods, such as raw fruit or vegetables, that are eaten by others. A person can also become infected with cholera by eating contaminated shellfish such as clams and oysters. Investigations in the United States have revealed that some cases of cholera were related to eating raw or undercooked oysters from the Gulf of Mexico. The disease is not likely to spread from one person to another; therefore, casual contact with an infected person is not a risk for becoming ill.

## How soon after infection do symptoms occur?

Symptoms can occur within a few hours to 5 days after exposure, usually within 2 to 3 days.

## Should people sick with cholera stay home from work, school, or day care?

If a person is employed as a food handler, works in a day care center, or has direct contact with ill persons or the elderly, they must not work while they have diarrhea. Children with diarrhea should not attend a day care center. People who are sick with cholera will be given specific instructions by a public health nurse or epidemiologist about working with food, immunocompromised people, or day care center attendance or employment.

## What is the treatment for cholera infection?

Replacement of fluids lost through diarrhea is important to prevent dehydration. Antibiotics can be prescribed by a physician to shorten the length of the disease and reduce the amount of time a person sheds the bacteria in their stool.

### **What can be done to prevent cholera infection?**

The most important preventive measure is to avoid consuming uncooked foods or water in foreign countries where cholera occurs unless the food or water is known to be safe or has been properly treated. There are several steps that a person can take to reduce their chances of being exposed to cholera:

1. Avoid eating raw or undercooked shellfish.
2. Avoid drinking untreated water.
3. Always wash your hands thoroughly with soap and water after going to the bathroom and before preparing or eating meals.

### **If a person is traveling outside of the United States, what should be done to prevent a cholera infection?**

All travelers to areas where cholera has occurred should observe the following recommendations:

1. A simple rule of thumb is “Boil it, cook it, peel it, or forget it.”
2. Drink only water that you have boiled or treated with chlorine or iodine. Other safe beverages include tea and coffee made with boiled water and carbonated, bottled beverages with no ice.
3. Eat only foods that have been thoroughly cooked and are still hot, or fruit that you have peeled yourself.
4. Avoid undercooked or raw fish or shellfish.
5. Make sure all vegetables are cooked.
6. Avoid foods and beverages from street vendors.
7. Do not bring perishable seafood back to the United States.

### **Where can a traveler get information about cholera?**

The international status of cholera changes periodically, so travelers should search for updated information on countries of interest. Travelers should consult with their physician or contact an international travel clinic for additional information. Travelers can also receive information on cholera and other diseases of concern by visiting the Centers for Disease Control and Prevention travelers' health website at [www.cdc.gov/travel/](http://www.cdc.gov/travel/).

