

VIBRIO INFECTIONS Q&A

What are Vibrio infections?

Bacteria in the genus *Vibrio* cause these infections. Some specific types of *Vibrio* bacteria that cause infection in humans include *Vibrio parahaemolyticus*, *Vibrio vulnificus*, and *Vibrio cholerae*. Specific types of *V. cholerae* cause a specific disease called cholera that has great potential for epidemic spread and is discussed separately in the fact sheet called “Cholera.” However, other types of *V. cholerae*, as well as *V. vulnificus* and *V. parahaemolyticus*, can cause disease typified by diarrhea, vomiting, and stomach cramping or severe wound infections.

Who gets Vibrio infections?

Anyone can become infected with *Vibrio* organisms. Certain individuals, such as those with chronic liver disease, when infected with *V. vulnificus*, are more likely to have severe disease that can lead to shock and death.

How are Vibrio organisms spread?

Vibrio organisms are spread when a person eats food or water that has been contaminated with feces or vomit from an infected person. Some *Vibrio* organisms are free living in salt or brackish water, or reside in sea animals that filter water, such as oysters and other shellfish. Therefore infection can occur after eating these shellfish if raw or undercooked. Finally, infection can occur after a wound is contaminated by water that harbors vibrios, but this route of infection is less commonly identified than the others described above.

What are the symptoms of Vibrio infection?

Vibrio infection generally causes digestive symptoms such as nausea, vomiting, a watery diarrhea, and abdominal cramping. It is often accompanied by headache and fever. In certain individuals who have liver disease, leukemia, or other chronic diseases that affect their immune system, certain species of *Vibrio*, such as *V. vulnificus*, can cause shock, which if untreated can be fatal.

How soon do symptoms appear?

Symptoms usually appear 12 to 24 hours after infection for most *Vibrio* organisms. For *V. vulnificus*, symptoms can take as long as 72 hours to appear.

When and for how long can a person spread vibrios?

People can contaminate water and food with vibrios for as long as the organism remains in the stool. This can last as long as several days.

What is the treatment for Vibrio infection?

Most cases with dehydrating illness can be treated by giving a solution of oral rehydration salts, a prepackaged mixture of sugar and salts to be mixed with water and consumed in large amounts. For individuals with severe disease, intravenous rehydration may be needed. For individuals with chronic liver disease, alcoholics, or other immunosuppressed individuals, a combination of antibiotics, minocycline and cefotaxime, is usually given in addition to intravenous rehydration.

How can Vibrio infection be prevented?

- Persons with immunocompromising conditions or chronic liver disease should not eat undercooked or raw shellfish, particularly oysters. They should eat their seafood well cooked.

“Boil it, cook it, peel it, or forget it!” Travelers visiting places where *Vibrio* infections have occurred should take the following precautions:

- Drink only boiled or bottled water. Other safe drinks include tea and coffee made with boiled water and carbonated bottled beverages with no ice.
- Eat only thoroughly cooked foods that are still hot.
- Peel fruits and raw vegetables yourself. Do not eat the peelings.

- Avoid undercooked or raw fish or shellfish.
- Eat only cooked vegetables and avoid salads.
- Avoid foods and beverages from street vendors.

Persons with diarrhea and those caring for them should wash their hands regularly and thoroughly. Ill persons should not prepare foods or beverages for others.

Where can I get additional information about Vibrio infections?

Contact the Georgia Division of Public Health, Epidemiology Branch, by email at gaepinfo@dhr.state.ga.us. The following web sites may be useful:

- CDC *Vibrio vulnificus* – http://www.cdc.gov/ncidod/dbmd/diseaseinfo/vibriovulnificus_g.htm
- CDC *Vibrio parahaemolyticus* - http://www.cdc.gov/ncidod/dbmd/diseaseinfo/vibrioparahaemolyticus_g.htm

