



Vibrio Species Fact Sheet

What are *Vibrio* species?

Vibrio species are a group of bacteria in the same family as those that cause cholera. They cause gastrointestinal illness in humans. They naturally inhabit coastal waters in the United States and Canada and is present in higher concentrations during summer, when the water is warmer. The most common kinds of *Vibrio* are *Vibrio parahaemolyticus*, *Vibrio alginolyticus*, and *Vibrio vulnificus*, which cause infections called “vibriosis.”

What type of illness is caused by *Vibrio*?

When ingested, *Vibrio* cause watery diarrhea often with abdominal cramping, nausea, vomiting fever and chills. Usually these symptoms occur within 24 hours of ingestion. Illness is usually self-limited and lasts 3 days. Severe disease is rare and occurs more commonly in persons with weakened immune systems. Occasionally, these bacteria can cause a wound infection they are introduced into a cut or wound.

How do people get infected with *Vibrio*?

Most people become infected by eating raw or undercooked shellfish, particularly oysters. Less commonly, this organism can cause an infection in the skin when an open wound is exposed to warm seawater.

Who is at risk for *Vibrio* infection?

People with compromised immune systems, especially those with chronic liver disease, are more likely to get vibriosis. People who eat raw seafood, particularly oysters, and who expose wounds to saltwater, are at higher risk of infection.

How is *Vibrio* infection diagnosed?

Vibrio organisms can be isolated from cultures of stool, wound, or blood. If there is clinical suspicion for infection with this organism, the microbiology laboratory should be notified so that they can use special techniques.

How is *Vibrio* infection treated?

Treatment is not necessary in most cases of *Vibrio* infection. There is no evidence that antibiotic treatment decreases the severity or the length of the illness. Patients should drink plenty of liquids to replace fluids lost through diarrhea. In severe or prolonged illnesses, antibiotics such as tetracycline, ampicillin or ciprofloxacin can be used. The choice of antibiotics should be based on antimicrobial susceptibilities of the organism.

How do oysters get contaminated with *Vibrio*?

Vibrio is a naturally occurring organism commonly found in waters where oysters are cultivated. Water containing the *Vibrio* gets inside and on the oysters because they live in water.

How is *Vibrio* infection prevented?

Avoid consuming raw or undercooked seafood. Seafood should be cooked at $\geq 145^{\circ}\text{F}$ for at least 15 seconds, and if not ingested immediately, it should be refrigerated. Wound infections can be prevented by avoiding exposure of open wounds to warm seawater. When an outbreak is traced to an oyster bed, health officials recommend closing the oyster bed until conditions are less favorable for *Vibrio* growth.