

Vibriosis is a disease caused by an infection with bacteria of the *Vibrio* genus, most commonly *Vibrio parahaemolyticus* or *Vibrio vulnificus*. *Vibrio* bacteria cause diarrhea, skin infections, and blood infections.

What are *Vibrio* species (non-cholera) infections?

Vibrio species (non-cholera) infections are infections caused by *Vibrio* species bacteria in the same family as those that cause cholera, but do not cause cholera. Bacteria that cause cholera only include *V. cholerae* O1 and *V. cholerae* O139.

What is a *vibriosis* infection?

Vibriosis infections are variable in severity and are characterized by diarrhea, vomiting, primary septicemia (illness associated with bacteria in the bloodstream), or wound infections.

Where are *Vibrio* species (non-cholera) found?

Vibrio species (non-cholera) bacteria live in saltwater and are commonly found in marine environments and estuaries. These bacteria are frequently associated with consumption from oysters and other shellfish during the warmer months, as well as recreational water use.

Who gets infected with *Vibrio* species (non-cholera)?

Persons who are immunocompromised, especially those with chronic liver disease, are at risk for *Vibrio* species (non-cholera) infection when they eat raw seafood, particularly oysters. Since *Vibrio* species (non-cholera) are naturally found in warm marine waters, people with open wounds can be exposed to these bacteria through direct contact with seawater.

What are the symptoms of *vibriosis* infection?

Among healthy people, ingestion of *Vibrio* species (non-cholera) can cause vomiting, diarrhea, and abdominal pain. In immunocompromised persons, particularly those with chronic liver disease, these bacteria can infect the bloodstream, causing a severe and life-threatening illness.

Vibrio species (non-cholera) can also cause an infection of the skin when open wounds are exposed to warm seawater. These infections can also occur from wounds exposed to brackish water or raw shellfish/seafood drippings. These infections may lead to skin breakdown and ulceration.

How do *Vibrio* species (non-cholera) spread?

Vibrio species (non-cholera) can cause disease in people who eat contaminated seafood or have an open wound that is exposed to seawater. There is no evidence of person-to-person transmission with these strains.

How soon do symptoms appear?

Symptoms usually occur within 24 hours of eating contaminated food or within 12 to 72 hours after exposure to contaminated seawater.

What is the treatment for vibriosis?

Because of the rapid dehydration that may result from severe diarrhea, replacement of fluids by mouth or by the intravenous route is critical. Patients with diarrhea should drink plenty of liquids to replace lost fluids. No additional treatment is required for the majority of patients with diarrheal disease and antibiotics have not been shown to shorten the disease duration. In severe illnesses, (e.g., bloodstream or wound infection) antibiotics are indicated.

How can vibriosis be prevented?

Here are some tips for preventing *Vibrio* species (non-cholera) infections, particularly among immunocompromised patients, including those with underlying liver disease:

- Do not eat raw oysters or other raw shellfish.
- Cook shellfish (oysters, clams, mussels) thoroughly:
- For shellfish in the shell, either a) boil until the shells open and continue boiling for 5 more minutes, or b) steam until the shells open and then continue cooking for 9 more minutes. Do not eat those shellfish that do not open during cooking.
- Boil shucked oysters at least 3 minutes or fry them in oil at least 10 minutes at 375°F.
- Avoid cross-contamination of cooked seafood and other foods with raw seafood and juices from raw seafood.
- Eat shellfish promptly after cooking and refrigerate leftovers.
- Avoid exposure of open wounds or broken skin to warm salt or brackish water and raw shellfish/seafood drippings.
- Wear protective clothing (e.g., gloves) when handling raw shellfish.