

Vibriosis in Shellfish

What is vibriosis?

Vibriosis is an intestinal disease caused by small bacteria called vibrio. Vibrio are found in fish and shellfish living in saltwater and in rivers and streams where freshwater meets saltwater. Although there are several types of vibrio, *Vibrio parahaemolyticus* and related species are the most common in the northwest.

Where does it come from?

Vibrio is found naturally in marine coastal waters, normally in low numbers that pose no problems. It multiplies rapidly in warm conditions, so fish and shellfish are more likely to be contaminated in the summer.

How is it spread?

Most cases occur from eating raw or undercooked fish or shellfish. However, even fully cooked food can be recontaminated if rinsed with seawater. Failure to keep shellfish cold after harvesting can contribute to the growth of the bacteria. Poor food handling practices during preparation or improper refrigeration of prepared seafood can also lead to illness. See [Food Safety Tips](http://www.doh.wa.gov/YouandYourFamily/FoodSafety/Tips) (www.doh.wa.gov/YouandYourFamily/FoodSafety/Tips) for more information on safe food handling practices.

How can I prevent vibriosis?

Vibrio is destroyed by cooking shellfish to an internal temperature of 145° F for 15 seconds.

Eat only well-cooked shellfish, especially in summer months. Do not consider shellfish to be fully cooked when the shells just open — they need to cook longer to reach 145° F.

When harvesting:

- Just before you leave, check for closures and advisories due to vibrio, biotoxins, and pollution at our [Shellfish Safety Map](http://www.doh.wa.gov/shellfishsafety) (www.doh.wa.gov/shellfishsafety), by contacting your local health department, or by calling our biotoxin hotline at 1-800-562-5632.
- Harvest shellfish as soon as possible with the receding tide.
- Don't harvest shellfish that have been exposed to the sun for more than one hour (less in really hot weather).
- Keep shellfish cold after harvesting.
- [More shellfish safety tips](http://www.doh.wa.gov/CommunityandEnvironment/Shellfish/RecreationalShellfish/IllnessPrevention) (www.doh.wa.gov/CommunityandEnvironment/Shellfish/RecreationalShellfish/IllnessPrevention).

Who is at risk?

Anyone who eats raw or partially cooked fish or shellfish can become ill. People with compromised immune systems are especially at risk.

People taking antacids are also more likely to get sick. Stomach acids help destroy bacteria. When stomach acids are reduced vibrio bacteria are more likely to pass through the stomach and into the intestine, where the illness occurs.

What are the symptoms?

Symptoms include diarrhea, abdominal cramps, nausea, vomiting, headache, fever, and chills. The illness is usually mild or moderate and runs its course in 2 to 3 days. In severe cases, hospitalization may be required.

How soon do symptoms appear?

Symptoms usually appear about 12-24 hours after consumption but can take as long as four days.

What is the treatment for vibriosis?

Treatment is not necessary in most cases. Drink plenty of liquids to replace fluids lost through diarrhea. Severe cases may require use of ciprofloxacin antibiotics and hospitalization.

What should I do if I think I have vibriosis?

If severe diarrhea or fever persists, contact your primary care provider. You should also report the illness to your local health department, or you can email us through our illness reporting address, sf.illness@doh.wa.gov.

What other marine vibrio organisms exist?

Several other marine vibrios found in Washington can cause intestinal illness, and symptoms from these infections are similar to those from *Vibrio parahaemolyticus*. One type of vibrio, *Vibrio vulnificus*, can cause serious infection and death in people with weakened immune systems. There have been no reports of *V. vulnificus* infection attributed to eating Washington State shellfish or contact with Washington marine waters. The first locally acquired *V. vulnificus* infections reported in Washington residents occurred in 2016 and 2017 (one case each year) and both were associated with handling farmed tilapia fish purchased from live freshwater tanks.

Are there any other illnesses associated with shellfish?

Yes. There are several types of [biotoxins](#) found in the northwest that can cause severe illness, and in extreme cases, death. [Norovirus](#) is also a concern. Learn more about [shellfish-related illnesses](#) (<https://www.doh.wa.gov/CommunityandEnvironment/Shellfish/RecreationalShellfish/Illnesses>). Some people can have an allergic reaction to shellfish.

More Resources

- Call the Shellfish Program at 360-236-3330 or Communicable Disease Epidemiology at 206-418-5500.
- [Vibrio Species Causing Vibriosis, CDC](http://www.cdc.gov/vibrio/index.html) (www.cdc.gov/vibrio/index.html)



www.doh.wa.gov/shellfishsafety

For people with disabilities, this document is available on request in other formats. To submit a request, call 1-800-525-0127 (TDD/TTY call 711).