

# Vibrio Infections

## Information for Health Professionals

Between 2009 and 2013, an average of ~36 *Vibrio* infections were reported in Virginia each year. A large increase (62%) was observed in 2014, when 59 cases were reported. Forty *Vibrio* infections were reported in 2015. Many additional cases are likely not diagnosed or reported.

### Clinical Features

**Gastrointestinal Infections:** Gastrointestinal *Vibrio* infections are typically characterized by watery diarrhea, usually with abdominal cramping, nausea, vomiting, and fever.

**Wound Infections:** *Vibrio* bacteria can cause rapidly progressing wound or soft tissue infections. In severe cases, hemorrhagic bullae can develop, typically in patients with underlying risk factors.

**Bloodstream Infections:** *Vibrio* bacteria can cause bloodstream infections characterized by fever, chills, dangerously low blood pressure, blistering skin lesions, and sometimes death.

**Ear Infections:** Both otitis media and otitis externa may be caused by many *Vibrio* species, especially *Vibrio alginolyticus*.

### Diagnosis

Infection is diagnosed when *Vibrio* bacteria are found in the stool, wound, or blood of a patient who has symptoms of vibriosis. **Laboratory testing is critical to confirm the diagnosis and guide treatment decisions.**

### Reporting

All *Vibrio* infections are **RAPIDLY REPORTABLE** in Virginia; please report directly to your local health department. Find your health department here: <http://www.vdh.virginia.gov/local-health-districts/>

### High Risk Groups

Anyone can get sick from vibriosis, but patients with the following characteristics are at higher risk for infection or severe complications:

- Have liver disease, cancer, diabetes, HIV, thalassemia, or alcohol dependence;
- Receive immune-suppressing therapy for the treatment of disease;
- Take medicine to decrease stomach acid levels; or
- Have had recent stomach surgery.

### Where *Vibrio* are found

*Vibrio* species have a worldwide distribution in temperate and tropical marine and coastal waters. In Virginia, the Atlantic Ocean, Chesapeake Bay, and Bay tributaries (including the James, York, Potomac and Rappahannock rivers) are all natural habitats for *Vibrio* species. *Vibrio* can live in both saltwater and brackish (mix of salt and fresh) water.

### Key Questions for Patients

- Have you had any recent skin contact with ocean water or coastal rivers?
- Have you eaten raw or undercooked shellfish or been in contact with shellfish drippings?
- Have you received any cuts or wounds from items such as catfish barbs, fish hooks, crab pots, or any other item that was in contact with marine or coastal waters?

### For More Information

<http://www.vdh.virginia.gov/environmental-epidemiology/waterborne-hazards-control-program/vibrio/>  
<http://www.cdc.gov/vibrio/index.html>