What is *Vibrio parahaemolyticus?*

MASSACHUSETTS PUBLIC HEALTH FACT SHEET

*Vibrio parahaemolyticus* Infection

*V. parahaemolyticus* is a germ (a bacterium) in the same family as the bacteria that cause cholera. It naturally lives in coastal waters in the United States and most commonly causes an infection of the bowel in humans, but can also result in wound and blood infections.

What are the symptoms of *V. parahaemolyticus* infection?

A person may have watery diarrhea, often with stomach cramps, nausea, vomiting, and chills. Symptoms usually appear within 24 hours of swallowing the germs. Illness usually lasts for three days. People with weakened immune systems or chronic liver disease are at a higher risk of becoming ill.

How does infection with *V. parahaemolyticus* occur?

*V. parahaemolyticus* must be swallowed to cause illness in most cases. This usually happens by eating food or drinking water that is contaminated with the germs. Most people become infected by eating raw or undercooked shellfish, particularly oysters. Illness can also occur by eating undercooked crab and shrimp. Less commonly, this germ can cause an infection in the skin when an open wound is exposed to warm seawater. It is not spread from person to person.

How is *V. parahaemolyticus* infection diagnosed and treated?

Your doctor, nurse, or health center must send a stool, wound, or blood sample to a laboratory. Other than drinking plenty of liquids to replace fluids lost through diarrhea, treatment is not necessary in most cases of *V. parahaemolyticus* infection but antibiotic therapy may be indicated for individuals with severe diarrhea, or wound or blood infections. People usually recover on their own in two to five days.

**How can *V. parahaemolyticus* infection be prevented?**

Most gastrointestinal infections caused by *V. parahaemolyticus* in the United States can be prevented by thoroughly cooking seafood. When an outbreak is traced back to an oyster or other shellfish bed, health officials may close the bed until the salt and temperature conditions are less favorable for this germ to thrive. People should not consume oysters self-harvested from closed or contaminated oyster or other shellfish beds. Wound infections can be prevented by avoiding exposure of open wounds to warm seawater, raw seafood, or raw seafood juices.

**The following advice can reduce the risk of foodborne illness from shellfish:**

* When ordering shellfish in restaurants, ask that they be fully cooked unless they have been treated with a method to reduce *Vibrio* (such as pressure treatment)
* Wash your hands with soap and water after handling raw shellfish
* Keep raw foods from touching cooked foods and surfaces used for cooking and eating
* Preparing oysters and other shellfish in the shell:
  + **Before** cooking: Discard any with open shells
  + **During** cooking: Boil for 3-5 minutes after shells open, or add to a steamer when water is already steaming and cook for another 4-9 minutes
  + **After** cooking: Discard any with shells that did not open
* Preparing shucked oysters:
  + **Boil** or simmer for at least 3 minutes
  + **Fry** in oil at 375 degrees Fahrenheit for at least 3 minutes
  + **Broil** 3 inches from heat for 3 minutes
  + **Bake** at 450 degrees Fahrenheit for 10 minutes

Are there any health regulations for people with *V. parahaemolyticus*?

Yes. Health care providers are required by law to report cases of illness to the local board of health.

In order to protect the public, workers at food-related businesses diagnosed with *V. parahaemolyticus* infection are advised not to return to work until their diarrhea is gone. Food-related businesses include restaurants, sandwich shops, hospital kitchens, supermarkets, dairy or food-processing plants. This also includes workers in schools, residential programs, day-care and health care facilities who feed, give mouth care or give medicine to clients.

**Where can I get more information?**

* Your doctor, nurse or clinic, or your local board of health (listed in the phone book under local government)
* The Massachusetts Department of Public Health (MDPH), Division of Epidemiology at (617) 983-6800 or toll-free at (888) 658-2850, or on the MDPH website at [www.mass.gov/dph](http://www.mass.gov/dph)
* The Centers for Disease Control and Prevention (CDC) website at <https://www.cdc.gov/vibrio/index.html>