Vibriosis (non-Cholera species)
Information Sheet

WEST VIRGINIA
Department of
Health & Human
Resources
BUREAU FOR PUBLIC HEALTH

What is Vibriosis?
Vibriosis is an infection with bacteria that are in the family called *Vibrio*. There are several different species of *Vibrio* bacteria, including the one that causes cholera. But most *Vibrio* bacteria cause a much milder form of illness than cholera, which is called Vibriosis. The most common species that cause illness are *Vibrio parahaemolyticus* and *Vibrio vulnificus*. These bacteria live in salt water and naturally inhabit coastal waters in the United States and Canada.

What are the symptoms?
Vibrio species cause watery diarrhea often with abdominal cramping, nausea, vomiting, fever and chills. Usually these symptoms occur within 24 hours of ingestion. Illness will usually go away on its own and lasts around 3 days. More serious disease can happen rarely, and is more common in people with weakened immune systems or liver disease. *Vibrio sp.* can also cause an infection of the skin when an open wound is exposed to seawater. Rarely, the V. *vulnificus* species of the bacteria can infect the bloodstream, causing a severe and life-threatening illness characterized by fever and chills, decreased blood pressure, and blistering skin lesions.

How does infection occur?
Most people become infected by eating raw or undercooked shellfish, particularly oysters. Less commonly, infection is caused by an open wound or broken skin being exposed to salt or seawater. There is no evidence of person-to-person transmission.

How is it diagnosed?
The only way to know for certain you have a *Vibrio* infection is to have a stool, wound or blood culture done by a doctor. A physician should suspect *Vibrio* infection if a patient has watery diarrhea and has eaten raw or undercooked seafood, especially oysters, or when a wound infection occurs after exposure to seawater.

How is it treated?
For most cases of Vibriosis, treatment is not necessary. Patients should drink plenty of liquids to replace fluids lost through diarrhea. In severe or prolonged illness, antibiotics may be needed and should be based on the antimicrobial susceptibilities of the organism. In the case of a wound infection, surgical intervention can sometimes be necessary. Wound infections caused by *V. vulnificus* can be extremely serious and should be treated more aggressively.

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How do shellfish and saltwater get contaminated?

Vibrio are naturally occurring bacteria and are commonly found in waters where oysters and other shellfish live. The bacteria thrive in warm salt water, so shellfish harvested in the summer months or from southern areas where the water temperature is warmer are more likely to be contaminated. The presence of *Vibrio spp.* in water is not a sign of pollution. *V. parahaemolyticus* and *V. vulnificus* naturally occur in coastal waters in the United States and Canada. *V. vulnificus* occurs at highest concentrations along the Gulf Coast and in the Northeast.

How can Vibriosis be prevented?

➢ Do not consume raw seafood, especially oysters, particularly if you are immunocompromised or have chronic liver disease.
➢ Cook Molluscan shellfish (oysters, clams, and mussels) thoroughly to an internal temperature of 145°F for 15 seconds. Do not eat shellfish that do not open during cooking.
➢ Avoid cross contamination of cooked seafood and other foods with raw seafood and juices from raw seafood.
➢ Obtain oysters from reputable sources. However, eating oysters from "clean" waters or in restaurants with "high turnover" does not provide protection, since *Vibrio* naturally live in waters where oysters are harvested.
➢ Do not expose open wounds or broken skin to sea water, or to raw shellfish harvested from salt water.