

August 2013

## ***Vibrio vulnificus* Infection**

### **What is *Vibrio vulnificus* Infection?**

It is a potentially serious illness caused by a bacterium called *Vibrio vulnificus*. This bacterium is found naturally in salt and brackish waters throughout the world. It thrives in warm waters and thus causes more infections during the summer months.

### **Who gets *Vibrio vulnificus* infection?**

All persons are susceptible. Persons with underlying medical conditions, especially liver disease, are at increased risk of serious illness.

### **How is *Vibrio vulnificus* spread?**

People can get infected through eating raw or undercooked shellfish (including oysters, clams and mussels). Anyone with liver disease such as cirrhosis, chronic medical conditions such as kidney disease, iron disorders, or diabetes or those who have weakened immune systems are at a high risk of severe or fatal infection from *Vibrio vulnificus* and should not eat raw shellfish. A recent study showed that people with these pre-existing medical conditions were 80 times more likely to develop *Vibrio vulnificus* bloodstream infections than were healthy people.

Another way infection occurs is by getting seawater on an open wound, cut, sore or puncture. The bacterium can enter through a break in the skin and cause the infection. In some people the infection resolves by itself, in others it progresses to severe skin damage. *Vibrio vulnificus* is not spread from one person to another.

### **What are the symptoms of *Vibrio vulnificus*?**

Among healthy people, consuming food contaminated with *Vibrio vulnificus* can cause vomiting, diarrhea and abdominal pain. In those with weakened immune systems, particularly those with chronic liver disease, it can infect the bloodstream, causing a severe a life-threatening illness with fever and chills, decreased blood pressure and blistering skin lesions. *Vibrio vulnificus* can cause an infection of the skin when open wounds are exposed to warm seawater. These infections may lead to skin breakdown and ulcers.

### **How soon after exposure do symptoms appear?**

Symptoms usually develop within 12 to 72 hours after eating raw or undercooked seafood.

### **How is *Vibrio vulnificus* diagnosed?**

*V. vulnificus* infection is diagnosed by laboratory testing of stool, wound, or blood specimens. Doctors should suspect this organism when patients present with gastrointestinal illness, fever, or shock after eating raw seafood, especially oysters, or with a wound infection after exposure to seawater.

### **What is the treatment for *Vibrio vulnificus*?**

If *V. vulnificus* is suspected, treatment should be initiated immediately because antibiotics improve survival.

### **How can *Vibrio vulnificus* be prevented?**

Most infections can be prevented by thoroughly cooking seafood, especially oysters. Wound infections can be prevented by avoiding exposure of open wounds to warm seawater.

### **Can you test for this bacterium in waterways?**

Yes, but it is not necessary. We know it is naturally found in all marine and estuarine (brackish) waters.

### **How common is this infection?**

This is a rare infection, but it is also underreported. Most cases occur in the Gulf Coast states. Fewer than 10 cases are usually reported each year in Virginia.

### **Should you avoid Chesapeake Bay waters?**

People who swim or fish in the Chesapeake Bay have little risk of contracting *Vibrio vulnificus*. All cuts and wounds that happen in the water should be washed and cleaned. People with liver disease or weakened immune systems should not eat raw shellfish. People should continue to enjoy water activities on the Chesapeake Bay.

### **What should you do if you get a cut or wound in the water?**

If you get cut or wounded in the water, be sure to clean the wound. It is fine to use soap and water. You can use a disinfectant, such as hydrogen peroxide, but cleaning the wound is most important. If you notice signs of infection such as redness, swelling or warmth, see your doctor.

### **How can I get more information about *Vibrio vulnificus*?**

- 1) If you have concerns about *Vibrio vulnificus*, contact your healthcare provider.
- 2) Call your local health department. A directory of local health departments is located at <http://www.vdh.virginia.gov/LHD/index.htm>.
- 3) Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/nczved/divisions/dfbmd/diseases/vibriov/>.