#### What is Vibrio vulnificus?

- Vibrio vulnificus is a type of bacteria that can enter your body through open wounds or when you eat raw or undercooked shellfish, especially oysters.
- It can cause a severe illness called "vibriosis", which can quickly lead to sepsis, shock, and blisters on your skin.
- This infection is relatively rare, with about 100 to 200 cases reported each year in the United States, but is more commonly seen in people who are elderly and immunosuppressed, especially if they have cirrhosis of the liver.
- The Vibrio vulnificus bacteria prefers to live in bodies of water near the coast. The bacteria can be found in greatest numbers between the months of May and October, when the water is warmer. Around 80% of infections happen during these summer months.
- Due to climate change, studies show that the number of Vibrio infections is expected to rise in the future because of warming waters. This increases the chance for growth of Vibrio organisms in a wider area of the United States.

# How does a person get infected with Vibrio vulnificus?

- Most of the infections with Vibrio vulnificus are caused by eating raw or undercooked shellfish, especially oysters.
- You cannot tell if the shellfish you are eating happens to be contaminated with Vibrio bacteria because there is no change to the smell, taste, or appearance of the shellfish.
- A second way of getting this infection is by exposing open wounds on your skin to warm waters that may be contaminated with the bacteria.
- Vibrio vulnificus is not known to spread between person to person.
- A lab test is needed to detect the bacteria and make the diagnosis.

## What are the symptoms of a Vibrio vulnificus infection?

- The faster you recognize the symptoms of the infection, the better the chance for the treatment you receive to be effective.
- A person usually starts to feel ill within 24 hours of becoming infected and the symptoms tend to last about 2-3 days.
- If you ate raw or undercooked seafood, your symptoms may be similar to other infections that affect the gastrointestinal tract such as diarrhea, abdominal cramping, nausea, vomiting, fever, and chills.
- If the bacteria gains access to an open wound, through contact with raw or undercooked shellfish, it's juices or drippings, or with contaminated saltwater or brackish water (places where sea and freshwater mix), then this may result in intense pain, redness, swelling, pus from the wound, blistering of the skin, fever, and chills.
- If the bacteria spreads to the bloodstream, it can result in sepsis, which is a life-threatening medical emergency.

# Who is more likely to get infected with Vibrio vulnificus?

- Recently, there has been an increase in cases of Vibrio vulnificus infections through open wounds, per the CDC.
- Although anyone can get vibriosis, older people over the age of 60 and people who have diabetes, cancer, and other immunocompromised conditions, especially those who have cirrhosis of the liver, are particularly at risk.
- Some people may get the infection from shucking oysters or from a cut on their foot from a shell while walking in water.
- People who take medications to reduce stomach acid may also be more likely to get infected or to develop complications following infection.

#### Is there treatment available for a Vibrio vulnificus infection?

- Yes, treatment involves antibiotics and supportive care, with most people being able to recover at home in a few days.
- But in extreme cases, the infection may cause necrotizing fasciitis, which is a process that destroys underlying muscle and tissue, and it may be necessary to amputate a limb in order to stop the spread of infection and save the person's life.
- Treatment is most successful when started early. If you feel sick within 24 hours of eating raw or undercooked shellfish or swimming in saltwater or brackish water, please seek medical attention immediately.

# What can I do to avoid getting infected with Vibrio vulnificus?

- The easiest way to avoid getting infected is to refrain from eating raw or undercooked shellfish, especially oysters, and make sure to stay out of the ocean if you have an open wound, cut, scrape, or other abrasion that might allow the Vibrio vulnificus bacteria into your body. This includes wounds from a recent surgical operation, piercing, or tattoo.
- If there is a chance that your wound could possibly come into contact with saltwater or brackish water, marine life, or raw or undercooked shellfish when cooking, swimming, fishing, boating, or walking on the beach, then you should cover the open wound with a waterproof bandage.
- If a wound or cut does come into contact with saltwater or brackish water, raw seafood or its juices, then make sure to wash the area thoroughly with soap and water, and then apply an anti-bacterial ointment.
- Remember, if you do develop a skin infection, seek medical attention immediately since this is an infection that can spread very rapidly.

Knowing these facts and taking the proper precautions will help keep you safe and healthy!

Questions regarding *Vibrio vulnificus* wound infections should be directed to the <u>CT</u> <u>Department of Public Health</u>.

Questions regarding bathing beaches should be directed to CT DEEP Beach Monitoring.

## Additional information and articles:

https://www.greenwichsentinel.com/2023/08/25/vibrio-vulnificus-bacteria-public-health-hazardous-bacteria-department-of-public-health-long-island-sound/

https://portal.ct.gov/DOAG/Aquaculture1/Aquaculture/Vibrio

https://portal.ct.gov/DOAG/Aquaculture1/Aquaculture/Vibrio-2023