Vibrio vulnificus Investigation Overview

The following guidelines provide a brief overview of the steps of a Vibriosis investigation. *Vibrio* spp. are gram-negative bacteria that are naturally found in warm, salty marine environments, such as salt water and brackish water. Vibriosis is typically characterized by watery diarrhea, usually with abdominal cramping, nausea, vomiting, and fever. *Vibrio* bacteria can also cause wound or soft tissue infections. In people with underlying medical conditions, especially liver disease, *Vibrio* bacteria can cause bloodstream infections characterized by fever, chills, dangerously low blood pressure, blistering skin lesions, and sometimes death.

For additional support, consult the NC Communicable Disease Branch at (919) 733-3419.

**** This disease requires an additional CDC COVIS Form be completed and attached to event located in the CD Manual**

Basic Steps of a Vibrio vulnificus Investigation

IMPORTANT STEP:	• **If raw oysters are suspected from a commercial setting, notify your Environmental Health Specialist to ensure risk to others is reduced by ensuring proper handling/storage practices were/are occurring at the facility. Your EHS should complete page 5 of the COVIS form.**
1. Collect clinical information	• Identify risk factors. Individuals who have chronic liver disease or renal disease, or are immuno-compromised, are at increased risk and have higher rates of morbidity and mortality • Symptoms are dependent on the type of infection. *Vibrio vulnificus* usually causes wound, soft tissue, and/or blood stream infections characterized by fever, chills, dangerously low blood pressure, blistering skin lesions, and sometimes death.

2. Review Laboratory Information	• Evaluate laboratory result to determine if requirements for case definition are met
	• Ensure reporting laboratory has forwarded the specimen to the SLPH for serotyping
	  • You will have to specify on the Special Bacteriology form DHHS 4121 to test for Vibrio species
	  • Use the following link to obtain form: https://slph.ncpublichealth.com/forms.asp

3. Determine the onset	• Usually occurs within 24 hours of ingestion and lasts about 3 days
4. Manage the case	• Verify that case has been appropriately tested and treated • Interview the case and complete the Part 2 Form/risk history and clinical packages in NCEDSS • CDC's COVIS form will also need to be completed and attached to the NCEDSS event
5. Case Finding	• During the investigation, interview other exposed individuals if symptomatic of illness • Refer symptomatic individuals to healthcare provider for evaluation

6. Identify source of exposure	• Review clinical documentation and interview patient for potential source(s) of exposure:
	  • Travel to coastal areas
	  • Puncture wounds/injuries due to shrimp, crabs and other shellfish or finfish
	  • Exposure to coastal (estuarine or marine) waters during which a pre-existing or new wound may have become infected
	
	Note: Vibrio vulnificus is a marine vibrio. Infection is not associated with exposure to freshwater lakes, rivers, ponds or streams. These organisms only live in saline coastal waters so there must be some coastal connection (travel, shellfish, finfish, etc.)

7. Implement Control Measures	• Use the CDC website Centers for Disease Control and Prevention (cdc.gov)to teach at risk people about the disease.
Resources **–** ➢ *Vibrio Species Causing Vibriosis | Vibrio Illness (Vibriosis) | CDC*	