



Department of Health

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TO: Healthcare Providers, Healthcare Facilities, Clinical Laboratories, and Local Health Departments (LHDs)

FROM: New York State Department of Health (NYSDOH)

HEALTH ADVISORY: RISK OF *VIBRIO VULNIFICUS* INFECTIONS

For All Clinical Staff in Internal Medicine, Primary Care, Infectious Diseases, Emergency Medicine, Family Medicine, Laboratory Medicine, and Infection Control/Epidemiology

NYSDOH is reminding healthcare providers to consider *Vibrio vulnificus* when seeing individuals with severe wound infections or sepsis with or without wound infections.

SUMMARY

- *Vibrio vulnificus* can cause life-threatening wound infections and sepsis.
- Providers should consider *Vibrio vulnificus* when seeing individuals with severe wound infections or sepsis with or without wound infections, especially those who report exposure to raw or undercooked seafood or salt/brackish waters, particularly from the Long Island Sound.
- Since July 1st, the Connecticut Department of Health has investigated three cases of *Vibrio vulnificus*, including one fatality.
- NYSDOH is currently investigating one fatality associated with *Vibrio vulnificus* during 2023.
- Providers should collect wound and blood specimens from individuals presenting with sepsis or wound infections with clinical suspicion *Vibrio vulnificus* infection.
- Report all vibriosis cases promptly to the local health department (LHD) where the patient resides.

Epidemiology

Vibrio vulnificus is found in marine environments, such as estuaries, rivers, deltas, shorelines as well as deeper ocean surfaces. It is infrequently reported in NYS but can cause life-threatening wound infections when a wound comes into contact with raw or undercooked seafood, its juices or drippings, or with saltwater or brackish water. Consumption of raw or undercooked seafood, especially oysters and other shellfish, contaminated with *Vibrio vulnificus* can cause septicemia and gastroenteritis. Individuals with chronic liver disease or immunocompromising conditions have an increased risk of severe infections. Most infections occur from May through October when water temperatures are warmer. One in five people infected with *Vibrio vulnificus* die, sometimes within a day or two of becoming ill. *Vibrio vulnificus* infections can lead to necrotizing fasciitis and sepsis. Patients with *Vibrio vulnificus* gastroenteritis may experience sudden onset of vomiting, diarrhea, fever, and abdominal pain with onset within 24 hours of suspect seafood ingestion.

Twelve cases of *Vibrio vulnificus* were identified in NYS residents outside of NYC during 2018–2022. Some of these individuals were exposed outside of NYS. NYSDOH is currently investigating one death associated with a *Vibrio vulnificus* infection during 2023; further investigation is underway to determine potential exposures.

In addition, since July 1, 2023, the Connecticut Department of Health has investigated three cases of *Vibrio vulnificus*. All three patients were hospitalized, and one died. Two patients reported exposure to salt or brackish water in Long Island Sound. Both patients had pre-existing cuts or wounds or sustained new wounds during these activities which likely led to the infections.

Information for Healthcare Providers, Facilities and Clinical Laboratories

Clinical suspicion of *Vibrio vulnificus* should be elevated for persons presenting with a wound infection or sepsis, especially if they report exposure to raw or undercooked seafood, its juices or drippings, or with saltwater or brackish water. Please remind your at-risk patients that consumption and the handling of raw or undercooked shellfish can result in serious illness, including death.

Providers should collect a stool, wound, or blood specimen to identify *Vibrio* bacteria. Positive culture-independent diagnostic tests should be reflexed to culture per the [Wadsworth Laboratory Reporting of Communicable Diseases Guidelines](#).

Since *Vibrio* sp. require selective culture media (thiosulfate-citrate-bile salts-sucrose agar) for isolation and are not recovered by laboratories culturing for routine enteric pathogens, testing for *Vibrio* sp. must specifically be requested when submitting specimens for bacteriologic examination. All clinical *Vibrio* sp. isolates should be forwarded for confirmation and molecular typing to a public health lab.

Public Health Reporting

- *Vibrio* sp. infections, including *Vibrio vulnificus*, are reportable diseases in New York State.
- Report cases promptly to the LHD where the patient resides¹. If you are unable to reach the LHD for cases residing outside of NYC, contact the NYSDOH Bureau of Communicable Disease Control (BCDC) at (518)473-4439 during business hours or 866.881.2809 evenings, weekends, and holidays.
- Laboratories should send all *Vibrio* sp. isolates to the appropriate public health lab for additional analyses as outlined in [Laboratory Reporting and Specimen Submission Requirements for Communicable Diseases](#).

¹ https://www.health.ny.gov/contact/contact_information/ or <https://www.nysacho.org/directory/>