



Department of Health & Human Services

Vibriosis (NOT including cholera)

Disease plan

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Last updated: August 6, 2026 by BreAnne Osborn

Note: This plan contains current information on standards, guidance, and best practices to be used by public health departments as they respond to vibriosis. Circumstances may vary based on local health department capacity.

**Questions about this disease plan? Contact the Utah Department of Health and Human Services
Office of Communicable Diseases: 801-538-6191.**

Disease overview summary

About vibriosis

Causative agent

What pathogen causes this disease?¹

- All *Vibrio* spp. (including *V. cholerae*, *V. parahaemolyticus*, *V. vulnificus*, and others)
- ***Vibrio cholerae* types O1 and O139 that produce cholera toxin cause cholera, NOT vibriosis** (see cholera disease plan). These types of *Vibrio cholerae* are only identified by public health labs. All other types of *Vibrio cholerae* cause vibriosis.

Reservoir

Where does this pathogen normally live and grow (reservoir)?²

- Bivalve molluscan shellfish (ex. oysters)
- Brackish water (mix of salt and fresh water) and seawater, often coastal waters or areas where a river meets the ocean

Clinical description

Signs and symptoms¹

- Acute gastroenteritis (diarrhea, vomiting, fever, chills, etc.)
- Bloodstream infection (fever, chills, dangerously low blood pressure, blistering skin lesions)
- Wound infections (necrotizing fasciitis, fever, redness, pain, swelling, warmth, discoloration, discharge, etc.)
- Ear, eye, sinus, or other infections

Complications

- Limb amputation

Case fatality rate

What percentage of infected people die from this disease?

- Vibriosis caused by *Vibrio vulnificus*: 1 in 5 (20%) people die¹
- Vibriosis caused by other *Vibrio* spp.: Case fatality is low

Differential diagnosis

Which other diseases have similar signs and symptoms?

- Other bacterial diarrheal illness (e.g. salmonellosis, shigellosis)

Period of communicability

How long is someone contagious?

- *Vibrio* is not easily spread from person-to-person

Incubation period

How long does it take to show signs and symptoms?

- 24 hours for acute gastroenteritis³
- 1–7 days for wound and bloodstream infections³
- Incubation period can vary by *Vibrio* spp.

Mode of transmission¹

How does the disease spread?

- Eating raw or undercooked shellfish, especially oysters
- Swimming in brackish (mix of salt and fresh) water, often coastal waters or where rivers meet the ocean
- Person-to-person transmission has not been reported³

Susceptibility

Who is at risk for this disease?

- Anyone can get vibriosis. Those at higher risk include people who:
 - Have liver disease, cancer, diabetes, HIV, or thalassemia
 - Are taking immune-suppressing medications
 - Are taking antacids
 - Have recently had stomach surgery
- Behaviors that increase risk of vibriosis include:
 - Eating raw seafood, particularly oysters
 - Exposing an open wound to coastal waters
 - Exposing an open wound to raw seafood or its drippings

Seasonality²

What time of year does the disease happen most?

- Vibriosis is more common in the U.S. during May through October, when water temperatures are warmer.
- Travelers may have increased risk of vibriosis during other times of the year when water temperatures at their destination are warmer.

Public health control measures quick reference table

Laboratory testing
Type of lab test¹ • Culture and culture-independent diagnostic tests (CIDTs), such as polymerase chain reaction (PCR), can be used to test for <i>Vibrio</i>. Type of specimen/timing of collection¹ • Stool is required for testing of gastrointestinal infections • Blood, wound, and other specimens can be collected for culture of extraintestinal infections • Collect specimens as soon as possible after symptom onset, preferably during period of active diarrhea. See the laboratory identification section below for more details.
Treatment recommendations
• Supportive therapy, including hydration, is adequate for most cases. Antibiotics are not recommended for mild intestinal infections.² • Early antibiotic treatment and/or surgical intervention for severe illness, including wound and bloodstream infections, can be lifesaving See the treatment section below for more details.
Prevention
• Cook fish and shellfish to 145°F before you eat them.^{3,4} • Avoid swimming in coastal and other brackish water with an open wound. See the prevention section below for more details.
Vaccine
• None

Prophylaxis
How to reduce or prevent illness after exposure • None
What to do when someone has vibriosis
Isolation of case • Exclude infected persons in high-risk settings (food handling, patient care, childcare, etc.) until diarrhea has ended. Precautions for infectious patients in healthcare settings (infection control procedures) • Use contact precautions for hospitalized patients or patients in a group living setting until diarrhea has ended. See the isolation and quarantine section below for more details.
What to do when someone has been exposed to vibriosis
Quarantine of contacts • Recommend exclusion for symptomatic contacts in high-risk settings (food handlers, patient care, childcare, etc.) until diarrhea has ended. See the isolation and quarantine section below for more details.

Laboratory identification

Table 1. Laboratory testing types for *Vibrio*

Type of lab test	Also known as	Type of specimens
Culture	n/a	Stool, blood, wound swabs, ear fluid, tissue, etc.
PCR	Culture-independent diagnostic test (CIDT)	Stool only

PCR testing for *Vibrio* has been documented to produce high rates of false positives.⁵ However, *Vibrio* can also be difficult to culture. Patients with PCR-positive and culture-negative testing are still considered cases for public health surveillance purposes, but may represent false-positive cases, especially if there is no documented high-risk exposure (e.g. ocean water, shellfish consumption).

Utah laboratories performing clinical testing are required to send all positive clinical specimens and isolates to the Utah Public Health Laboratory (UPHL) for reflex culture and whole genome sequencing..⁶ Note: Culture results from UPHL have a test type of “Identification” in EpiTrax.

Public health control measures

Treatment

Antibiotics are not recommended for mild intestinal infections, but can be lifesaving for patients with severe illness, including wound infections and bloodstream infections.¹

Healthcare providers should suspect *Vibrio* infection in patients with compatible symptoms who have recently eaten raw or undercooked seafood (especially oysters), or who have wounds that were exposed to coastal waters. Any necrotic tissue should be debrided. Severe cases may require aggressive debridement, fasciotomy, or amputation of the infected limb. Treatment of wound infections should be started quickly. Do not withhold treatment while waiting for laboratory confirmation or consultation with an infectious disease specialist.¹

Table 2. Antibiotic treatment recommendations for treatment of *Vibrio wound* infections¹

Type	Treatment	Notes
Recommended treatment	3rd-generation cephalosporin (e.g. ceftazidime 1–2g IV/IM every 8 hours) PLUS Doxycycline (100 mg PO/IV twice a day for 7–14 days)	Doxycycline is sometimes avoided in children due to concerns about side effects. Doses should be adjusted for renal and hepatic function.
Alternate treatment	3rd-generation cephalosporin (e.g. ceftazidime 1–2g IV/IM every 8 hours) PLUS A fluoroquinolone (e.g. 500 mg ciprofloxacin PO twice a day)	Fluoroquinolones are sometimes avoided in children due to concerns about side effects. Doses should be adjusted for renal and hepatic function.
Alternate treatment (for children)	Trimethoprim-sulfamethoxazole PLUS Aminoglycoside	Doses should be adjusted for renal and hepatic function.

Prevention

General preventive measures

- Cook fish and shellfish to 145°F before you eat them^{3,4}
- Avoid swimming in coastal and other brackish (mix of salt and fresh) water if you have an open wound

Vaccine

- None

Prophylaxis

- None

Isolation and quarantine requirements

Infected persons and symptomatic contacts in high-risk settings (food handling, patient care, childcare, etc.) should be excluded until diarrhea has ended. Infected persons and symptomatic contacts who are patients in group living settings (hospitals, long-term care facilities, etc.) should be placed on contact precautions until diarrhea has ended. The end of diarrhea is defined as less than 3 loose stools in a 24-hour period.

Health department responsibility

- Investigate cases of vibriosis using the [Cholera and other *Vibrio* illness surveillance \(COVIS\) case report form](#) and enter all data into EpiTrax.
- Ensure the clinical specimen or isolate is received at the Utah Public Health Lab.
- Conduct environmental assessment at site(s) of high-risk seafood purchase or exposure.
- Collect documents for traceback, including shellfish tags, invoices, pictures of packaging, etc. and attach to CMR in EpiTrax.
- Notify the Utah Department of Agriculture and Food shellfish specialist and other jurisdictions of implicated seafood as appropriate.
- Provide education to the general public, clinicians, and first responders regarding disease transmission and prevention

Case investigation

Reporting

Note: The following section is copied directly from CSTE position statement [16-ID-05](#).¹

Report any illness to public health authorities that meets any of the following criteria:

1. Any person with a species of the family Vibrionaceae isolated from a clinical specimen (other than toxigenic *Vibrio cholerae* O1 and O139, which are reportable as cholera).
2. Any person with a species of the family Vibrionaceae detected in a clinical specimen using culture-independent diagnostic tests (CIDT).
3. Any person with clinically compatible illness who is epidemiologically linked (i.e., shared a seafood meal) to a case of vibriosis or a member of a risk group defined by public health authorities during an outbreak investigation.

4. A person whose healthcare record contains a diagnosis of vibriosis.
5. A person whose death certificate lists vibriosis as a contributing or underlying cause of death.

Other recommended reporting procedures

- All cases of vibriosis should be reported according to state regulations.
- Reporting should be ongoing and routine.
- Frequency of reporting should follow the state health department's routine schedule.

Table 3. Criteria to determine whether a case should be reported to public health authorities

Criterion	Reporting	
<i>Clinical evidence</i>		
Clinically compatible illness		N
Healthcare records contains diagnosis of vibriosis	S	
Death certificate lists vibriosis as a cause of death or a significant condition contributing to death	S	
<i>Laboratory findings</i>		
Isolation of a species of the family <i>Vibrionaceae</i> from a clinical specimen	S	
Detection of the family <i>Vibrionaceae</i> in a clinical specimen using a CDT	S	
<i>Epidemiological risk factors</i>		
Epidemiologically linked (consumed same seafood as) to a case of vibriosis		O
Member of a risk group as defined by public health authorities during an outbreak investigation		O

Notes: S = This criterion alone is Sufficient to report a case.

N = All "N" criteria in the same column are Necessary to report a case.

O = At least one of these "O" (One or more) criteria in each category (e.g., clinical evidence and laboratory evidence) in the same column—in conjunction with all "N" criteria in the same column—is required to report a case.

* A requisition or order for any of the "S" laboratory tests is sufficient to meet the reporting criteria.

Case definition: Vibriosis (CSTE position statement, 2016)

Note: The following section is copied directly from CSTE position statement [16-ID-05](#).¹

Clinical criteria

An infection of variable severity characterized by watery diarrhea, primary septicemia, or wound infection. Asymptomatic infections may occur, and the organism may cause extra-intestinal infection. (DHHS note: An extra-intestinal infection is an infection outside of the digestive tract. Extra-intestinal *Vibrio* infections can occur when wounds are exposed to seafood drippings or contaminated water, or when the bacteria moves beyond the digestive tract to affect other parts of the body, such as the joints, skin, or bloodstream.)

Laboratory criteria

Supportive laboratory evidence: Detection of a species of the family *Vibrionaceae* (other than toxigenic *Vibrio cholerae* O1 or O139, which are reportable as cholera) from a clinical specimen.

Confirmatory laboratory evidence: Isolation of a species of the family *Vibrionaceae* (other than toxigenic *Vibrio cholerae* O1 or O139, which are reportable as cholera) from a clinical specimen.

Epidemiologic linkage

A clinically compatible case that is epidemiologically linked to a case that meets the supportive or confirmatory laboratory criteria for diagnosis.

Case classification

Confirmed: A case that meets the confirmed laboratory criteria for diagnosis.

Probable: A case that meets the supportive laboratory criteria for diagnosis, OR a clinically compatible case that is epidemiologically linked to a case that meets the supportive or confirmatory laboratory criteria for diagnosis.

Criteria to distinguish a new case of this disease or condition from reports or notifications which should not be enumerated as a new case for surveillance

A case should not be counted as a new case if laboratory results were reported within 30 days of a previously reported infection in the same individual.

When 2 or more different species of the family *Vibrionaceae* are identified in one or more specimens from the same individual, each should be reported as a separate case.

Table 4. Criteria for defining a case of vibriosis.

Criterion	Probable		Confirmed
Clinical evidence			
Clinically compatible illness	N		
Laboratory evidence			
Detection of the family <i>Vibrionaceae</i> in a clinical specimen using a CDT		N	
Isolation of the family <i>Vibrionaceae</i> from a clinical specimen			N
Epidemiologic evidence			
Epidemiologically linked to a case of vibriosis with laboratory evidence	O		
Member of a risk group as defined by the public health authorities during an outbreak investigation	O		
Criteria to distinguish a new case			
Not counted as a new case if occurred within 30 days of a previously reported infection in same individual.		N	N
Report infection with separate species of <i>Vibrionaceae</i> as distinct cases	N		

Notes:

N = All “N” criteria in the same column are Necessary to classify a case. A number following an “N” indicates that this criterion is only required for a specific disease/condition subtype (see below). If the absence of a criterion (i.e., criterion NOT present) is required for the case to meet the classification criteria, list the Absence of criterion as a Necessary component.

O = At least one of these “O” (One or more) criteria in each category (e.g., clinical evidence and laboratory evidence) in the same column—in conjunction with all “N” criteria in the same column—is required to classify a case. (These “O” criteria are alternatives, which means that a single column will have either no O criteria or multiple O criteria;

no column should have only one O.) A number following an “O” indicates that this criterion is only required for a specific disease/condition subtype.

Case investigation process

- Investigate cases of vibriosis using the CDC [Cholera and other *Vibrio* illness surveillance \(COVIS\) case report form](#)
- Coordinate the delivery of the clinical specimen or isolate to the Utah Public Health Laboratory.
- Conduct environmental assessment at sites of high-risk seafood purchase or exposure
- Collect documents for traceback, including shellfish tags, invoices, pictures of packaging, etc.
- Notify the Utah Department of Agriculture and Food shellfish specialist and other jurisdictions of implicated seafood as appropriate

Identifying case contacts

Symptomatic contacts should be linked to the parent case in EpiTrax. It is best practice to link all contacts to a single case.

Outbreaks

Outbreak definition

Utah DHHS defines an outbreak as the occurrence of 2 or more cases of *Vibrio* illness resulting from exposure to a common source.

Outbreak guidance

Report suspected outbreaks to DHHS as soon as possible and implement appropriate control measures. All efforts should be made to identify additional ill persons and an associated exposure. Outbreaks should be documented in the outbreak module in EpiTrax with any associated CMRs linked.

References

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3. Heymann, D. L. (Ed.). (2015). *Control of communicable diseases manual* (20th ed.). American Public Health Association. <https://ccdm.aphapublications.org/doi/10.2105/CCDM.2745.165>
4. Food Safety and Inspection Service. (2023, August 30). *Safe minimum internal temperature chart*. U.S. Department of Agriculture. <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/safe-temperature-chart>
5. Decuir, M., Fowler, R. C., Cebelinski, E., Smith, K., Boxrud, D., & Medus, C. (2021). Evidence of false positivity for *Vibrio* species tested by gastrointestinal multiplex PCR panels, Minnesota, 2016–2018. *Open Forum Infectious Diseases*, 8(6), Article ofab247. <https://doi.org/10.1093/ofid/ofab247>
6. Utah Administrative Code. (2023). *Rule R386-702: Communicable disease rule*. Utah Department of Health and Human Services, Division of Data, Systems, and Evaluation. <https://adminrules.utah.gov/public/rule/R386-702/Current%20Rules>
7. Council of State and Territorial Epidemiologists. (2016). *Public health reporting and national notification for vibriosis* [Position Statement 16-ID-05]. http://www.cste.org/resource/resmgr/2016PS/16_ID_05.pdf

Version control

Updated July 2026: Created this disease plan to separate vibriosis from cholera.

EpiTrax minimum/required fields by tab

Demographic

- First name
- Last name
- Street number
- Street name
- City
- State
- County
- ZIP code
- Date of birth
- Phone number
- Birth sex
- Ethnicity
- Race

Clinical

- Onset date
- Died?
 - Date of death
 - Death caused by Vibrio
- Vomiting
- Diarrhea
- Visible blood in stool
- Abdominal cramps
- Fever
- Muscle Pain
- Septic shock
- Cellulitis
 - Site
- Bullae
 - Site
- Sequelae

- Type

- Other symptoms
 - Specify

Laboratory

- Performing lab
- Organism
- Collection date
- Specimen source
- Test type
- Test result

Investigation

- Did the patient travel outside of Utah in the 7 days before illness began?
 - Country
 - State (if in US)
 - City
 - Departure date
 - Return date

In the 7 days before illness began, did patient eat:

- Clams
 - Eaten raw?
 - Eaten on multiple dates?
 - Last date consumed?
- Mussels
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Oysters
 - Eaten raw?

- Multiple dates?
- Last date consumed?
- Scallops
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Other shellfish
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Shrimp
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Crawfish?
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Lobster
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Crab
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Fish
 - Eaten raw?
 - Multiple dates?
 - Last date consumed?
- Skin exposed to a body of water (fresh, salt, or brackish water)?
 - If yes, specify name
 - If yes, type of water

In the 7 days before illness began, was the patient's skin exposed to:

- A body of water
 - Specify name
 - Indicate type
- Drippings from raw or live seafood?
- Marine life, including stings/bites?
- Date of most recent exposure to body of water, seafood drippings, or marine life
- If skin exposed to any of the above exposures:
 - Did patient sustain a wound or have a pre-existing wound?
 - If yes, describe how wound occurred and site on body
 - Was this an occupational exposure?

Contact attempts

- Was an interview attempted?
 - If yes, date interview first attempted
 - If yes, was an interview completed?
 - If yes, date interview completed
 - If no, what was the reason the interview was not completed?
 - If other, specify

- other reason
- If no, What was the reason no contact attempt was made?
 - If other, Specify other reason

Reporting

- Date first reported to public health

Administrative

- State case status (Completed by DHHS)
- Outbreak associated
- Outbreak name

Rules for entering laboratory test results

Note that the below rules are specific to informatics as a way to standardize what labs are entered into EpiTrax and should not be used for investigational purposes.

The following rules describe how laboratory results reported to public health should be added to new or existing events in EpiTrax. These rules have been developed for the automated processing of electronic laboratory reports, although they apply to manual data entry as well.

Test-specific rules

Test specific rules describe what test type and test result combinations are allowed to create new morbidity events in EpiTrax, and what test type and test result combinations are allowed to update existing events (morbidity or contact) in EpiTrax.

Test type	Test result	Create a new event	Update an existing event
Culture	Positive	Yes	Yes
	Negative	No	Yes
	Equivocal	No	Yes
PCR/Amplification	Positive	Yes	Yes
	Negative	No	Yes
	Equivocal	No	Yes

Whitelist rules

Whitelist rules describe how long an existing event can have new laboratory data appended to it. If a laboratory result falls outside the whitelist rules for an existing event, it should not be added to that event, and should be evaluated to determine if a new event (CMR) should be created.

Vibriosis (non-cholera *Vibrio* species infections) morbidity whitelist rule: If the specimen collection date of the laboratory result is 30 days or less after the date of the morbidity event, the laboratory result should be added to the morbidity event.

Vibriosis (non-cholera *Vibrio* species infections) contact whitelist rule: Never added to contact.

Graylist rule

We often receive laboratory results through ELR that cannot create cases, but can be useful if a case is created in the future. These laboratory results go to the graylist. The graylist rule describes how long an existing event can have an old laboratory result appended to it.

Vibriosis non-cholera *Vibrio* species infections) graylist rule: If the specimen collection date of the laboratory result is 30 days before to 7 days after the event date of the morbidity event, the laboratory result should be added to the morbidity event.

Other electronic laboratory processing rules

If an existing event has a state case status of “not a case,” ELR will never add additional test results to that case. New labs will be evaluated to determine if a new CMR should be created