

Instructions for reporting to the Cholera and Other *Vibrio* Illness Surveillance (COVIS) system

CDC requests that either a COVIS case report form is completed or electronic data elements are submitted for all laboratory culture-confirmed cases of cholera and other *Vibrio* illnesses, as well as all cases for these pathogens with positive results from culture-independent diagnostic tests (CIDT). Cases of *Vibrio* illnesses that are classified as probable based on epidemiologic linkage to a confirmed or probable case may be submitted at the state's discretion. The current CSTE case definition for vibriosis is available at:

<https://wwwn.cdc.gov/nndss/conditions/vibriosis/case-definition/2017>

Confirmed cases of vibriosis

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. This includes cases with an initial positive result from a culture-independent diagnostic test that undergo reflex culture.

Confirmed cases of cholera

Isolation of **toxigenic** (i.e., cholera toxin-producing) *Vibrio cholerae* O1 or O139 from stool or vomitus, **OR** serologic evidence of recent infection.

Probable cases of vibriosis

Based on supportive laboratory criteria:

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 using a culture-independent diagnostic test, that did not undergo culture or culture did not yield a species of the family *Vibrionaceae*.

OR

Based on epidemiologic linkage:

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

CDC requests that all *Vibrio* isolates are forwarded to the Enteric Disease Laboratory Branch. All suspected *V. cholerae* isolates should be forwarded immediately.

General reporting instructions

- Each patient should be represented by one case report form. Identification of multiple species of *Vibrio* in one patient should be reported on the same form.
- Notify CDC if additional information or laboratory results are identified after the case report form or case data elements have been submitted.
- COVIS data elements are submitted as a line list or by completed case report form.
 - Line lists and case report forms are submitted via email to COVISresponse@cdc.gov.

- A data dictionary is available for states that choose to transmit data as a line list. CDC requests that data elements submitted as an electronic line list match the COVIS data element naming and values schemes detailed in the data dictionary, and be submitted as excel formatted files or csv. Requests for the data dictionary should be sent to COVISresponse@cdc.gov.
- The case report form should be completed using the fillable PDF. If necessary, the case report form may be printed, completed by hand, and submitted via email or faxed to 404-235-1735.
- If a patient is lost to follow-up or unable to answer all questions, a case report form should still be submitted with any data available. Loss to follow-up can be indicated by checking the “Lost to follow-up” box in the additional comments on page 5, or adding “lost to follow-up” in the REPORTCOMMENT data element.
- This guidance provides a brief overview of COVIS reporting. Additional questions can be sent to COVISresponse@cdc.gov. Page and section number references are included for states using the COVIS form, and table references are included for states submitting data elements as an electronic line list.

Instructions for patient identifiers (page 1/no table)

This page is for use at the state and local level. **Do not include this information when forwarding the COVIS form to CDC.** Identifiers at the top of each page (state, year, age, sex, last name) are included to help both states and CDC identify loose form pages if they are completed at different times.

Instructions for reporting health department (page 3/demographics table)

- Include the state, city, and county of the reporting health department (not the case-patient).
- The health department reporting the case to CDC should be a health department in the state where the patient resides.

Instructions for patient case information (page 3, section 1/demographics table)

- Age in months does not need to be completed unless the patient is under one year of age.
- COVIS no longer collects the state identification number. Instead, include the NNDSS case identification number(s). The NNDSS case ID number is used to identify missing reports during the closeout process.
 - The NNDSS case investigation ID number, not the patient ID number should be recorded. If there is more than one case investigation ID for the same patient, include all case investigation IDs on the form.

Instructions for laboratory information (page 3, section 2/isolate table)

- COVIS collects laboratory data by specimen. Specimen information includes the source of the specimen, state laboratory ID number, culture results, and CIDI results. Both culture and CIDI results should be recorded for each specimen reported.
 - On the form, data for each specimen tested should be recorded under a separate specimen row. Two rows are included on the front of the form, and two additional rows are available on page 7. If the additional rows on page 7 are used, check the associated box under laboratory results on page 3 and attach the additional results.

- In the data dictionary, each data element collected for a specimen is grouped by specimen number.
- The state laboratory ID number is used to link data between COVIS, the CDC reference laboratory, and PulseNet. If your state uses a different identifier when submitting specimens to CDC or transmitting information to PulseNet, please include that identifier instead.
- Use the three letter *Vibrio* species code found in the *Vibrio* species key at the top of section 2 or in the isolate table in the data dictionary when identifying species. These three letter codes should be used to identify cultured species.
 - **If multiple species of *Vibrio* are identified in one specimen, use the code “MUL” and list the individual species codes in the question “If species identified as multiple or other, specify”.**
 - **If the species identified is not listed, use the code “OTH” and identify the species in the question “If species identified as multiple or other, specify”.**
 - Laboratory information can be completed based on results from a clinical or state public health laboratory. If a specimen was tested at both a clinical laboratory and a public health laboratory, please include the result that is considered final by the state. This is often the public health laboratory result.
- Cholera isolate questions should only be completed for suspected or confirmed cases of toxigenic *Vibrio cholerae* O1 or O139. These data elements are included with the cholera exposure data elements in a separate cholera table.

Instructions for clinical information (page 4, section 3/syndrome table)

- Completion of the entire clinical information section is highly encouraged for confirmed cases.
- Completion of medical history is optional for probable cases. The other parts of the clinical information section should be completed for probable cases.

Instructions for epidemiology section (pages 4-5, section 4/exposures table)

- If the patient reports recent travel, only include the travel destination (city, state, and country) under the question “If yes [to travel outside of patient’s home state], list destinations and dates”. Any additional travel details that may be pertinent to the investigation should be included in the additional comments section.

Cholera exposure

- Only complete this section if toxigenic *V. cholerae* O1 or O139 is suspected.
- Cholera exposure elements are listed in a separate cholera table in the data dictionary, along with cholera isolate data elements.

Seafood consumption

- Only include information on seafood consumed during the **7 days before illness began**.

- If patient consumed the same seafood on multiple dates in the 7 days before illness began, indicate so in the column labeled “Multiple dates”. If this is the case, the only date that should be specified on the form is **the most recent date of consumption** for that particular seafood.
- Further description of seafood items consumed may be provided in this section.

Water exposure

- If the patient reports more than one instance of water exposure in the 7 days before illness began, only include the most recent date of exposure.
- If the patient reports exposure to a body of water, please identify that body of water by name, city, and state, and country in question 1b on the form, or the data element LOCEXPOS.

Instructions for seafood investigation (page 6, section 5/seafood table)

- One copy of the seafood investigation form should be completed for each instance of seafood consumption investigated. If more than one type of seafood is investigated at a restaurant, please complete one investigation form per type of seafood. If a case report form is being submitted, indicate how many seafood investigations are included with the form at the top of this section.
- Seafood investigation data elements submitted as an electronic line list should include one line for each case seafood investigation. The seafood investigation identification number is the data element “INVESTID”. The first seafood investigation is given the INVESTID “1” and numbering continues sequentially for additional investigations.
- If the seafood exposure occurred in another state coordinate the collection of investigation information with that state when possible.
- Raw shellfish investigations should be prioritized whenever possible.
- Seafood investigations are optional for probable cases.
- If the seafood investigation section will be completed by a separate agency, the case report form can be submitted prior to completion of the section and updated when additional seafood investigation information is available.

Product information

- If the product was harvested by the patient or a friend of the patient from a commercial harvest area, include the harvest area information under the “Source information” section.
- Products are considered fully cooked if they have been cooked to the following guidelines:
 - Shellfish in the shell:
 - Boil until the shells open and continue boiling 5 more minutes
 - Steam until the shells open and continue steaming for 9 more minutes
 - For shucked oysters:
 - Boil for at least 3 minutes
 - Fry in oil for at least 3 minutes at 375° Fahrenheit
 - Broil 3 inches from heat for 3 minutes
 - Bake at 450° Fahrenheit for 10 minutes

Commercial vendor information

- This section only needs to be completed if the product was consumed at a commercial establishment.
- If possible **provide at least the city and state** of the restaurant, oyster bar, or food store where the product was purchased or consumed.

Source information

- If seafood tags, invoices, or labels are available, please both fill out the relevant questions and attach photocopies to the COVIS form.
- The harvest area “Description of product harvested” should detail the name of the product as identified from the harvest tag, invoice, or label.
- If more than two harvest areas are associated with the seafood investigation, complete additional harvest area information on page 7, and check the box next to “Check if additional harvest area page is attached” at the bottom of page 6.

Instructions for additional harvest area and laboratory results (page 7)

- If no additional harvest area or laboratory results are reported, this page does need to be included with the form.