



## Communicable Disease Case Reporting and Investigation Protocol **CHOLERA (VIBRIO CHOLERAE O1/O139)**

### **I. IDENTIFICATION AND DEFINITION OF CASES**

- A. **Clinical Description:** An acute bacterial disease of variable severity ranging from a mild diarrhea to profuse watery diarrhea, occasional vomiting, and, if not treated, rapid dehydration. Infections may be asymptomatic.
- B. **Laboratory Criteria:** Laboratory-confirmed cholera infections are defined by:
- Isolation of toxigenic (i.e., cholera toxin-producing) *Vibrio cholerae* serogroup O1 or O139 from stool or vomitus, OR
  - Serologic evidence of recent infection.

**Note:** Clinical laboratories are requested to forward all isolates of *Vibrio*, and all clinical specimens from which *Vibrio* was detected using a CIDT, to the Wisconsin State Lab of Hygiene (WSLH) for confirmation, serotyping, and surveillance purposes. Illnesses caused by strains of *V. cholerae* other than toxigenic *V. cholerae* O1 or O139 should not be reported as cases of cholera; they should be reported as vibriosis.

- C. **Wisconsin Surveillance Case Definition:**

Confirmed: A clinically compatible illness that is laboratory-confirmed

### **II. REPORTING**

- A. **Wisconsin Notifiable Disease Category I – Methods for Reporting:** This disease shall be reported **IMMEDIATELY BY TELEPHONE** to the patient's local health officer or to the local health officer's designee upon identification of a case or suspected case, per Wis. Admin. Code § DHS 145.04 (3) (a). In addition to the immediate report, complete and fax, mail or electronically report an Acute and Communicable Diseases Case Report (DHS [F-44151](#)) to the address on the form, or enter the data into the Wisconsin Electronic Disease Surveillance System, within 24 hours.
- B. **Responsibility for Reporting:** According to Wis. Admin. Code § [DHS 145.04\(1\)](#), persons licensed under Wis. Stat. ch. [441](#) or [448](#), laboratories, health care facilities, teachers, principals, or nurses serving a school or day care center, and any person who knows or suspects that a person has a communicable disease identified in [Appendix A](#).
- C. **Clinical Criteria for Reporting:** None.
- D. **Laboratory Criteria for Reporting:** Laboratory evidence of infection. All positive results should be reported.

### **III. CASE INVESTIGATION**

- A. **Responsibility for case investigation:** It is the responsibility of the local health department (LHD) to investigate or arrange for investigation of suspected or confirmed cases as soon as is reasonably possible. A case investigation may include information collected by phone, in person, in writing, or through review of medical records or communicable disease report forms, as necessary and appropriate.
- B. **Required Documentation:**
1. Complete the Wisconsin Electronic Disease Surveillance System (WEDSS) disease incident investigation report, including appropriate, disease-specific tabs.
  2. Complete a Centers for Disease Control and Prevention (CDC) Cholera and Other Vibrio Illness Surveillance (COVIS) report and upload a copy in the WEDSS incident filing cabinet.
  3. Upon completion of investigation, set WEDSS disease incident process status to "Sent to State" and notify the Division of Public Health (DPH, Bureau of Communicable Diseases (BCD), Communicable Diseases Epidemiology Section (CDES).

**C. Additional Investigation Responsibilities:**

1. Contact diagnosing laboratory or provider to ensure the clinical isolate or positive specimen is forwarded to the WSLH, or other public health laboratory, for confirmation.
2. Source investigation by LHD to include history of travel to and from endemic areas, dates, mode of transportation, and foods consumed as outlined in WEDSS disease-specific tabs and CDC COVIS form.
3. If the case-patient reports exposure to seafood/shellfish in Wisconsin, as part of the seafood investigation an environmental assessment of the source restaurant, vendor, or retail venue should be conducted. Shellfish tags or invoices for the implicated item(s) should be collected and the seafood investigation section of the COVIS form completed. All information should be forwarded to CDES for coordination of trace-back investigation with other state and federal agencies. Conduct case finding for other individuals potentially exposed to the suspect food item in Wisconsin so they can be assessed for symptoms and offered education and stool testing as appropriate.
4. When possible, travel companions of patients reporting a travel history to endemic areas should be interviewed to assess for symptoms and offered education and stool testing as appropriate.
5. Cases with a negative travel history and no exposure to high-risk food items from endemic areas (e.g., raw or undercooked shellfish/seafood) may require more aggressive investigation. Consult with the CDES. In these cases, detailed interviews and testing of symptomatic or asymptomatic household members and meal companions by stool culture may be recommended to identify unreported cases and common exposures.
6. Determine whether the case is potentially outbreak related and notify the CDES.

**IV. PUBLIC HEALTH INTERVENTIONS AND PREVENTION MEASURES**

- A. In accordance with Wis. Admin. Code § [DHS 145.05](#), local public health agencies should follow the methods of control recommended in the current editions of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association, and the American Academy of Pediatrics' *Red Book: Report of the Committee on Infectious Diseases*, unless otherwise specified by the state epidemiologist.
- B. Assess patient for high-risk settings or activities to include food handling, providing patient care or child care, or attending a child care facility.
- C. Exclude symptomatic patients from high-risk settings including food handling, providing patient care or child care, or attending a child care facility until asymptomatic for at least 24 hours.
- D. Educate public about proper handwashing after using the toilet or handling contaminated clothing or linens, before cooking, or associating with high-risk individuals.
- E. Educate travelers to countries where cholera is endemic to drink only safe water and avoid consumption of raw fruits and vegetables, food from street vendors, and raw or undercooked seafood while traveling.
- F. Educate and advise high-risk patients and food handlers on enteric precautions.
- G. Recommend cholera vaccination before traveling to endemic countries. A single-dose live oral cholera vaccine is available and is recommended for adults who are 18–64 years old and are traveling to an area of active cholera transmission with toxigenic *Vibrio cholerae* O1 (the bacteria strain that most commonly causes cholera) to prevent infection.
- H. Exclude patient from swimming while ill and for two weeks after resolution of symptoms.
- I. Provide infection control instructions to family members of case-patients (see the CDC's [Infection Control Guide for Family Members of Patients with Suspect or Confirmed Cholera](#))

**V. CONTACTS FOR CONSULTATION**

- A. Local health departments and tribal health agencies: <https://www.dhs.wisconsin.gov/lh-depts/index.htm>

- B. Bureau of Communicable Diseases, Communicable Diseases Epidemiology Section: 608-267-9003
- C. Wisconsin State Laboratory of Hygiene: 1-800-862-1013

## **VI. RELATED REFERENCES**

- A. Heymann DL, ed. Cholera and Other Vibrios. In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 102-114.
- B. Pickering LK, ed. Cholera. In: *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015: 860-863.
- C. Centers for Disease Control and Prevention website: <https://www.cdc.gov/cholera/index.html>
- D. CDC Infection Control Guide for Family Members of Patients with Suspect or Confirmed Cholera. Available at: <https://www.cdc.gov/cholera/family-infection-control.html>
- E. CDC Infection Control for Cholera in Health Care Settings. Available at: <https://www.cdc.gov/cholera/infection-control-hcp.html>
- F. CDC Five Basic Cholera Prevention Messages fact sheet: <https://www.cdc.gov/cholera/pdf/five-basic-cholera-prevention-messages.pdf>