



## Communicable Disease Case Reporting and Investigation Protocol **YERSINIOSIS**

### I. IDENTIFICATION AND DEFINITION OF CASES

- A. **Clinical Description:** A bacterial illness characterized in young children by fever, abdominal pain, and diarrhea that often contains leukocytes, blood, or mucus. In older children and adults the symptoms may mimic appendicitis (right lower quadrant tenderness or pain) with fever and leukocytosis. Complications are rare, but may include skin rash, joint pain, or spread of bacteria to the bloodstream.
- B. **Laboratory Criteria:**
- Confirmatory laboratory evidence: Isolation of *Yersinia enterocolitica*, *Y. pseudotuberculosis*, *Y. intermedia*, *Y. fredericksonii*, *Y. kristensenii*, or *Y. ruckeri* by culture from a clinical specimen.
  - Presumptive laboratory evidence: Detection of any *Yersinia non-pestis* species from a clinical specimen using a PCR culture-independent diagnostic test (CIDT).
- C. **Wisconsin Surveillance Case Definition:**
- Confirmed: A case that meets the confirmed laboratory criteria for diagnosis.
  - Probable: A case that meets the presumptive laboratory criteria for diagnosis, OR a clinically compatible case that is epidemiologically linked to a yersiniosis case that meets the presumptive or confirmatory laboratory criteria for diagnosis.
- Note:** Clinical laboratories are requested to forward all isolates of *Yersinia* species, and all clinical specimens from which a *Yersinia non-pestis* species was detected by CIDT, to the WSLH for surveillance purposes. CIDT positive specimens from which a *Yersinia non-pestis* species was not isolated (culture negative or culture not performed) should remain classified as Probable.
- D. **Criteria to Distinguish a New Case:**
- A case should not be reported as a new case if laboratory results were reported within 365 days of a previously reported *Yersinia* infection in the same individual and the same *Yersinia* species is isolated or detected by PCR CIDT in both cases.
  - When two or more different species are identified from one or more specimens from the same individual, each should be reported as a separate case.

### II. REPORTING

- A. **Wisconsin Disease Surveillance Category II – Methods for Reporting:** This disease shall be reported to the patient's local health officer or to the local health officer's designee within 72 hours of recognition of a case or suspected case, per Wis. Admin. Code § [DHS 145.04\(3\)\(b\)](#). Report electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), or mail or fax a completed Acute and Communicable Disease Case Report ([F-44151](#)) to the address on the form.
- 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.
- E. **Laboratory Criteria for Reporting:** Laboratory evidence of *Yersinia non-pestis* species infection by culture or non-culture-based methods. All positive results should be reported, regardless of specimen source.

### 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 WEDSS disease incident investigation report, including appropriate, disease-specific tabs. This may be facilitated by completing a [Routine Enteric Follow-Up Worksheet](#). See page 1 of the Worksheet for specific instructions regarding which sections should be completed during routine follow-up.
2. Upon completion of investigation, set WEDSS disease incident process status to “Sent to State.”

**C. Additional Investigation Responsibilities:**

1. Assess patient for high-risk settings or activities to include food handling, providing patient care or child care, or attending a child care facility.
2. Source investigation by LHD.
3. If the case is potentially outbreak-related, notify the Wisconsin Division of Public Health (DPH), Bureau of Communicable Diseases (BCD).

**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. Educate the public about proper handwashing after using the toilet, changing diapers, assisting another with toileting, handling contaminated clothing or linens, before cooking, or when associating with high-risk individuals.
- C. Exclude symptomatic patients from high-risk settings including food handling, providing patient care or child care, or attending a child care facility, generally until asymptomatic for 24 hours.

**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. Yersiniosis In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 689-692.
- B. Pickering LK, ed. *Yersinia enterocolitica* and *Yersinia pseudotuberculosis* Infections In: *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31<sup>st</sup> ed. Elk Grove Village, IL: American Academy of Pediatrics, 2018: 891-894.
- C. Centers for Disease Control and Prevention website: <https://www.cdc.gov/yersinia/>