



Communicable Disease Case Reporting and Investigation Protocol **SALMONELLOSIS (NON-TYPHOIDAL)**

I. IDENTIFICATION AND DEFINITION OF CASES

A. **Clinical Description:** An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea, fever, and sometimes vomiting. Asymptomatic infections may occur and the organism may cause extraintestinal infections.

B. **Laboratory Criteria:**

- Confirmatory laboratory evidence: Isolation of *Salmonella* from a clinical specimen.
- Supportive laboratory evidence: Detection of *Salmonella* from a clinical specimen using a culture-independent diagnostic test (CIDT) such as a Polymerase Chain Reaction (PCR) or an antigen-based test.

C. **Wisconsin Surveillance Case Definition:**

- **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.

Note: Clinical laboratories are requested to forward all isolates of *Salmonella*, and all clinical specimens from which *Salmonella* was detected using a CIDT, to the Wisconsin State Laboratory of Hygiene (WSLH) for surveillance purposes. CIDT positive specimens from which *Salmonella* 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 counted as a new case if laboratory results were reported within 365 days of a previously reported *Salmonella* infection in the same individual and the same *Salmonella* serotype is isolated in both cases.
- When two or more different serotypes 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 infection by culture or non-culture-based methods. All positive results should be reported. All *Salmonella* infections are reportable regardless of specimen source (e.g., stool, blood, urine, CSF).

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. LHD is responsible for completing a source investigation.
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. To meet the current [Wisconsin Food Code](#) requirements, exclude symptomatic food employees from the workplace, then restrict from food handling tasks (e.g., handling unpackaged food, kitchen utensils, cutting or serving surfaces, or equipment such as slicers, ice makers, refrigerators) once symptoms have resolved.
 1. Food employees should not return to food work following exclusion or restriction until they have been cleared by their LHD. Return-to-work criteria for food employees diagnosed with non-Typhoidal *Salmonella* infection requires that:
 - Two stool specimens from the patient have tested negative for *Salmonella* by culture **OR**
 - The patient has remained asymptomatic for **30 days**.
 2. Stool specimens for clearance (test of cure) should be collected:
 - After the individual is asymptomatic **AND**
 - At least 48 hours after discontinuing of antimicrobial therapy **AND**
 - At least 24 hours apart.
- D. Follow-up including case finding and education should be conducted with retail food establishments and other food service facilities where a food employee diagnosed with salmonellosis 1) worked while symptomatic, or 2) worked after symptom resolution but before having verified negative stool specimens.
- E. Exclude symptomatic patients from other high-risk settings including providing patient care or child care, or attending a child care facility, generally until asymptomatic for 24 hours.
 1. The LHD has the authority to exclude infected individuals in these high-risk settings until evidence of one or more stool specimens negative for *Salmonella* by culture or C1DT has been provided. This requirement is most often employed during outbreak situations but may be required during other situations as necessary.

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. Salmonellosis In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 532-539.
- B. Pickering LK, ed. *Salmonella* Infections In: *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31st ed. Elk Grove Village, IL: American Academy of Pediatrics, 2018: 711-718.
- C. Centers for Disease Control and Prevention website: <https://www.cdc.gov/salmonella/>
- D. Wisconsin Food Code: http://docs.legis.wisconsin.gov/code/admin_code/atcp/055/75_.pdf