



Communicable Disease Case Reporting and Investigation Protocol
MENINGOCOCCAL DISEASE
(*Neisseria meningitidis*)

I. IDENTIFICATION AND DEFINITION OF CASES

A. **Clinical Description:** A very serious, acute disease caused by infection with the bacterium *Neisseria meningitidis*. This bacterium is often associated with meningitis and/or sepsis. Signs and symptoms include: sudden onset of fever, intense headache, stiff or rigid neck, photophobia, petechial or purpuric rash, nausea, and vomiting.

B. **Laboratory Criteria:**

- Confirmatory laboratory evidence:
 - Isolation of *Neisseria meningitidis* from a normally sterile site (e.g., cerebrospinal fluid [CSF], blood, joint, pleural, pericardial fluid, or another normally sterile site).
NOTE: Isolation from urine, sputum, abscesses or pharyngeal swabs **does not** meet the case definition.
 - Molecular detection of *N. meningitidis* by polymerase chain reaction (PCR) test, performed on CSF only.
- Supportive laboratory evidence:
 - Visualization of Gram-negative diplococci on Gram stain of CSF or blood.
 - Positive antigen test for *N. meningitidis* performed on CSF only.

Specimens that are positive for *N. meningitidis* should be forwarded to the Wisconsin State Laboratory of Hygiene (WSLH) for further identification (e.g., serogrouping).

C. **Wisconsin Surveillance Case Definition:**

- **Confirmed:** A clinically compatible illness that meets one of the confirmatory laboratory criteria.
- **Probable:** A clinically compatible illness that meets one of the supportive laboratory criteria for diagnosis.
- **Suspect:** Clinical purpura fulminans in the absence of a positive blood culture.

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 Disease Case Report (DHS [F-44151](#)) to the address on the form, or enter the data into the Wisconsin Electronic Disease Surveillance System (WEDSS), 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:** Clinically compatible illness.
- D. **Laboratory Criteria for Reporting:** Laboratory evidence of infection by culture or nonculture-based (e.g., polymerase chain reaction) methods. All positive results from CSF, blood, or other normally sterile sites 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 WEDSS disease incident investigation report, including appropriate, disease-specific tabs (e.g., WEDSS Lab Clinical Tab, “Invasive bacteria - Specimen summary” section).
2. Upon completion of investigation, set WEDSS disease incident process status to “Sent to State.”

C. Additional Investigation Responsibilities:

1. Contact and work with Bureau of Communicable Diseases staff on the investigation.
2. Conduct case and contact investigation:
 - a. Invasive Meningococcal Disease Protocol: <https://www.dhs.wisconsin.gov/publications/p01626.pdf>.
 - b. Meningococcal Disease Case Investigation Flowchart: <https://www.dhs.wisconsin.gov/invasive-bacteria/mening-flowchart.pdf>.
3. Coordinate submission of the positive patient specimen to the WSLH for further identification.

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. Conduct a case investigation to identify contacts that may need antibiotic prophylaxis. Educate contacts about minimizing risk of transmission. Additional guidance regarding identification, investigation, and prevention can be found in the following resources:
 - Invasive Meningococcal Disease Protocol: <https://www.dhs.wisconsin.gov/publications/p01626.pdf>
 - Meningococcal Disease Case Investigation Flowchart: <https://www.dhs.wisconsin.gov/invasive-bacteria/mening-flowchart.pdf>
- C. Provide the patient and contacts with appropriate health education and offer fact sheet: <https://www.dhs.wisconsin.gov/library/P-42072.htm>

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. Meningococcal Meningitis. In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 404-409.
- B. Pickering LK, ed. Meningococcal Infections. In: *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015: 547-558.
- C. Centers for Disease Control and Prevention website: <https://www.cdc.gov/meningococcal/index.html>
- D. Division of Public Health Meningococcal Disease website: <https://www.dhs.wisconsin.gov/invasive-bacteria/meningococcaldisease.htm>
- E. Division of Public Health Meningococcal Disease Fact Sheet: <https://www.dhs.wisconsin.gov/library/P-42072.htm>