



Communicable Disease Case Reporting and Investigation Protocol **RHEUMATIC FEVER**

I. IDENTIFICATION AND DEFINITION OF CASES

- A. **Clinical Description:** An inflammatory illness that occurs one to five weeks after infection with group A β -hemolytic *Streptococcus pyogenes* (usually “strep throat”). Symptoms of rheumatic fever vary and may include: fever; heart failure with shortness of breath; fatigue; cough; joint pain and swelling; nodules under the skin, usually located over bony surfaces (e.g., elbows, knees, wrists, ankles); rash (erythema marginatum) on the trunk; and Sydenham chorea.
- B. **Laboratory Criteria:** No single definitive laboratory test exists for the diagnosis of rheumatic fever. Diagnosis is based on medical history, physical exam, and certain test results fitting the Jones Criteria.
- C. **Wisconsin Surveillance Case Definition:** A case meeting the Jones Criteria (1) **and** with evidence of preceding group A streptococcal infection (2):
1. Two major manifestations **or** one major and two minor manifestations of Jones Criteria:
 - o Major manifestations: carditis, polyarthritis, Sydenham chorea, erythema marginatum, and subcutaneous nodules (usually over the joints)
 - o Minor manifestations: fever, arthralgia, elevated erythrocyte sedimentation rate and positive C-reactive protein, and an abnormal EKG (prolonged PR interval)
 2. Supporting evidence of preceding group A streptococcal infection by one of the following methods:
 - o Positive throat culture for *Streptococcus pyogenes* (group A *Streptococcus*), **OR**
 - o Positive rapid streptococcal antigen test, **OR**
 - o Elevated or rising streptococcal antibody titer, **OR**
 - o History of recent scarlet fever.

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:** Clinically compatible illness.
- D. **Laboratory Criteria for Reporting:** No single definitive laboratory test exists for the diagnosis of rheumatic fever. Diagnosis is based on medical history, physical exam, and certain test results fitting the Jones Criteria.

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. Testing and treatment of contacts is recommended for household members of pediatric cases of rheumatic fever (2015 *Red Book*, p. 732-744) and may be recommended in other situations.
2. Determine whether the case is potentially outbreak-related and 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.

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. Rheumatic Fever. In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 581-589.
- B. Pickering LK, ed. Group A Streptococcal Infections. In: *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015: 732-744.
- C. Centers for Disease Control and Prevention website: <https://www.cdc.gov/groupAstrep/index.html>
- D. Division of Public Health Rheumatic Fever webpage: <https://www.dhs.wisconsin.gov/invasive-bacteria/rheumaticfever.htm>