

***RHEUMATIC FEVER***  
Last revised August 19, 2011

**I. IDENTIFICATION**

- A. **CLINICAL DESCRIPTION:** An inflammatory illness that occurs one to five weeks after infection with group A  $\beta$ -hemolytic *Streptococcus* (*Streptococcus pyogenes*). 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. **REPORTING CRITERIA:** Clinical diagnosis.
- C. **LABORATORY CRITERIA FOR CONFIRMATION:** No specific laboratory test exists for the diagnosis of rheumatic fever.
- D. **WISCONSIN CASE DEFINITION:** A case meeting the Jones Criteria, characterized by:
- Two major manifestations or one major and two minor manifestations, **AND**
  - Supporting evidence of preceding group A streptococcal infection by one of the following methods:
    - Positive throat culture for *Streptococcus pyogenes* (group A *Streptococcus*), OR
    - Positive rapid streptococcal antigen test, OR
    - Elevated or rising streptococcal antibody titer, OR
    - History of recent scarlet fever

Major manifestations: carditis, polyarthritits, Sydenham chorea, erythema marginatum, and subcutaneous nodules (usually over the joints)

Minor manifestations: fever, arthralgia, elevated erythrocyte sedimentation rate and positive C-reactive protein, and an abnormal EKG (prolonged PR interval)

**II. ACTIONS REQUIRED / PREVENTION MEASURES**

- A. **WISCONSIN DISEASE SURVEILLANCE CATEGORY II:**  
Report to the patient's local health department either electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means within 72 hours upon recognition of a case or suspected case.
- B. **EPIDEMIOLOGY REPORTS REQUIRED:**
- *Electronically* – Report through WEDSS, including appropriate disease-specific tabs  
OR
  - *Paper Copy* – Acute and Communicable Diseases Case Report ([F-44151](#)) along with:
    - [Rheumatic Fever Case Criteria Worksheet](#)
- C. **PUBLIC HEALTH INTERVENTIONS:**

## Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

- Testing and treatment of contacts is recommended for household members of pediatric cases of rheumatic fever (2009 Red Book, p. 620) and may be recommended in other situations.

In accordance with Wisconsin Administrative rule DHS 145.05, local public health should follow the methods of control recommended in the current edition of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association.

### III. CONTACTS FOR CONSULTATION

- A. LOCAL HEALTH DEPARTMENT – REGIONAL OFFICES – TRIBAL AGENCIES:  
<http://www.dhs.wisconsin.gov/localhealth/index.htm>
- B. BCDER / COMMUNICABLE DISEASE EPIDEMIOLOGY SECTION: (608) 267-9003
- C. WISCONSIN STATE LABORATORY OF HYGIENE / BACTERIOLOGY: (608) 263-3421

### IV. RELATED REFERENCES

- Dajani AS, Ayoub E, Bierman FZ, et al. Guidelines for the diagnosis of rheumatic fever. Jones Criteria, 1992 update. *JAMA* 1992;268(15):2069-2073.
- Gerber MA, Baltimore RS, Eaton CB, et al. Prevention of rheumatic fever and diagnosis and treatment of acute streptococcal pharyngitis. *Circulation* 2009;119:1541-1551.
- Heymann DL, ed. Streptococcal diseases caused by group A (beta hemolytic) Streptococci. In: *Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008:577-585.
- Pickering LK, ed. Staphylococcal infections and group A streptococcal infections. In: *Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009:601-628.