



Communicable Disease Case Reporting and Investigation Protocol **SYPHILIS**

I. IDENTIFICATION AND DEFINITION OF CASES

- A. **Clinical Description:** A sexually transmitted disease (STD) caused by the spirochete *Treponema pallidum*. The infection in non-infants usually progresses to four stages (Primary, Secondary, Latent, Tertiary):
- **Primary Syphilis** is characterized by a chancre (ulcer) that appears in 10 to 90 days, with an average of 21 days, after exposure. The chancre appears at the site of exposure and heals within one to five weeks, even without treatment. This is the most infectious stage of syphilis.
 - **Secondary Syphilis** is characterized by eruptions of the skin and/or mucous membranes that are generally infectious. Generalized adenopathy may be present. The skin eruptions can appear as a variety of different rashes and may begin while the chancre is present. However, it usually starts four weeks after the chancre resolves and can occur up to six months after inoculation. The rash resolves in two to six weeks, but may recur with infectious lesions for the first year of the disease. The most common secondary rash is a maculopapular rash of the palms and soles.
 - **Early Latent Syphilis** occurs when the primary and secondary symptoms resolve and lasts throughout the first year of infection. This stage represents the asymptomatic stage of infection; however, all serologic tests for syphilis will be positive. This stage is indicated because of a documented negative test in the last year or knowing the source of infection and knowing it could have only occurred in the last year from a reactive test.
 - **Late Latent Syphilis** occurs when early latent syphilis cannot be indicated during the first year of infection. This stage represents an asymptomatic stage of infection; however, all serologic tests for syphilis will be positive.
 - **Late Syphilis with Clinical Manifestations**, sometimes called tertiary, is characterized by manifestations that occur five to 20 years after infection. They include gummas; destructive lesions of the skin, viscera, bone, and mucosal surfaces; cardiovascular syphilis, destructive lesions of the aorta; and neurosyphilis, destruction of areas of the central nervous system including the brain. Late syphilis can cause death or permanent disability. During the course of the infection, syphilis is latent (asymptomatic).
 - **Congenital Syphilis** is characterized by infection in utero with *Treponema pallidum*. A wide spectrum of severity exists and only severe cases are clinically apparent at birth. An infant or child (aged less than 2 years) may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, or pseudoparalysis. An older child may have stigmata (e.g., interstitial keratitis, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).
 - **Syphilitic Stillbirth** is characterized by a fetal death that occurs after a 20-week gestation or in which the fetus weighs greater than 500 g and the mother had untreated or inadequately treated (see current CDC STD Treatment Guidelines for definition of adequate treatment) syphilis at delivery.
- B. **Laboratory Criteria:** Laboratory confirmation of *T. pallidum* in clinical specimens by darkfield microscopy, by reactive serology (nontreponemal: Venereal Disease Research Laboratory [VDRL], rapid plasma reagin [RPR], or equivalent serologic methods and/or; treponemal: fluorescent treponemal antibody absorbed [FTA-ABS], *T. pallidum* particle agglutination [TP-PA], enzyme immunoassay [EIA], chemiluminescence immunoassay [CIA], or equivalent serologic methods), or by clinical manifestations of acquired infection.
- C. **Wisconsin Surveillance Case Definition: Confirmed**—A laboratory confirmed infection.

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 Sexually Transmitted Diseases Morbidity and Epidemiologic Case Report [F-44243](#) to the local health department.

- 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 confirmation of *T. pallidum* in clinical specimens by darkfield microscopy, by reactive serology (nontreponemal: Venereal Disease Research Laboratory [VDRL], rapid plasma reagin [RPR], or equivalent serologic methods OR; treponemal: fluorescent treponemal antibody absorbed [FTA-ABS], *T. pallidum* particle agglutination [TP-PA], enzyme immunoassay [EIA], chemiluminescence immunoassay [CIA], or equivalent serologic methods), or by clinical manifestations of acquired infection.

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.

Currently, LHDs cede responsibility for the investigation of syphilis to the Wisconsin Sexually Transmitted Disease (STD) Control Section and their associates. The Milwaukee Health Department STD Control Program currently performs case investigation for the southeastern region of Wisconsin. The other four regions (northeastern, northern, southern, and western) are followed-up by the Madison office of the Wisconsin STD Control Section.

- B. **Required Documentation:**
 1. Complete the WEDSS disease incident investigation report, including appropriate, disease-specific tabs.
 2. Upon completion of investigation, set WEDSS disease incident process status to “Final” and resolution status to “Confirmed.”
- C. **Additional Investigation Responsibilities:**
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.
- B. In counties with a high incidence of syphilis, pregnant women should receive syphilis serologies on the first prenatal visit, at 28 weeks gestation and at delivery.
- C. In counties with low incidence, pregnant women should be tested on the first visit and delivery.
- D. Although treatment ends infectiousness, a pregnant woman treated less than 30 days before delivery can have an infected infant and therefore a full evaluation of the infant is recommended. These recommendations are outlined in the current Centers for Disease Control and Prevention STD Treatment Guidelines.
- E. Patients treated for early syphilis should be advised to have follow-up serologies at three and six months. Those treated for syphilis of more than one year’s duration should be advised to have serologies done at six and 12 months.
- F. Patients diagnosed with syphilis or identified as contacts, suspects, or associates, should receive educational information about the disease, be counseled on ways to reduce their risk of acquiring STDs, including HIV, and offered an HIV test.

- G. Patients with primary symptoms should be interviewed for all sexual contacts within 90 days prior to onset of symptoms; patients with secondary symptoms should be interviewed for all contacts in the six months prior to onset of symptoms; patients with early latent syphilis should be interviewed for all contacts in the year preceding treatment.
- H. All patients and contacts should be cluster interviewed to identify other individuals at risk. All individuals at risk should be counseled on risk reduction and referred for examination and treatment if appropriate.
- I. All interviews should pursue screening sites in areas of high incidence or where there is a danger of an outbreak.
- J. All sexual contacts within 90 days should be preventively treated. Those over 90 days should be tested and only treated if a case.

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, Sexually Transmitted Disease Control Section: 608-266-7365
- C. Wisconsin State Laboratory of Hygiene / Bacteriology: 608-262-1616
- D. Milwaukee Bureau of Laboratories: 414-286-3526

VI. RELATED REFERENCES

- A. Heymann DL, ed. Syphilis. In: *Control of Communicable Diseases Manual*. 20th ed. Washington, DC: American Public Health Association, 2015: 595-600.
- B. Pickering LK, ed. Syphilis. In: *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2015: 755-768.
- C. Centers for Disease Control and Prevention CDC Sexually Transmitted Diseases Treatment Guidelines 2015: <https://www.cdc.gov/std/tg2015/syphilis.htm>
- D. Wisconsin Administrative Code, [Chapter DHS 145.14 – DHS 145.22](#)
- E. Wisconsin State Statute [252.11](#)
- F. Centers for Disease Control and Prevention, National Prevention Information Network: <https://npin.cdc.gov/disease/stds>

VII. DISEASE TRENDS

- Wisconsin STD Control Section Surveillance and Statistics: <https://www.dhs.wisconsin.gov/std/data.htm>