Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

SYPHILIS
Last revised July 29, 2011

I. IDENTIFICATION

A. CLINICAL DESCRIPTION:
A sexually transmitted disease (STD) caused by the spirochete *Treponema pallidum*. The infection usually progresses to four stages:

- **Primary Syphilis**, 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 1 to 4 weeks, even without treatment. This is the most infectious stage of syphilis.
- **Secondary Syphilis**, 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 4 weeks after the chancre resolves and can occur up to 6 months after inoculation. The rash resolves in 2 to 6 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.
- **Late Syphilis**, characterized by manifestations that occur 5 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).

Fetal infection often occurs in pregnant women with untreated primary, secondary and early syphilis. It can also occur, with less frequency, in women who have untreated late to latent syphilis. This infection may cause stillbirth, infant death, or severe complications that do not manifest and become apparent until much later in life. They include interstitial keratitis, saber shins, Hutchinson’s teeth, saddlenose, and deafness. The presence of the lesions caused by primary and secondary syphilis increases risk of acquiring HIV infection.

B. REPORTING CRITERIA: Laboratory confirmation.

C. LABORATORY CRITERIA FOR CONFIRMATION:
Laboratory confirmation of *T. pallidum* by darkfield microscopy, by reactive serology, or by clinical manifestations of acquired infection.

D. WISCONSIN CASE DEFINITION: A laboratory confirmed infection

II. ACTIONS REQUIRED / PREVENTION MEASURES

A. WISCONSIN DISEASE SURVEILLANCE CATEGORY II: Report to the patient's local health officer on a Sexually Transmitted Diseases Morbidity and Epidemiologic Case Report (*DPH F-44243*) or other means within 24 hours of the identification of a case or suspected case.

B. EPIDEMIOLOGY REPORTS REQUESTED
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- Sexually Transmitted Diseases Morbidity and Epidemiologic Case Report (DPH F-44243).
- WEDSS (Wisconsin Electronic Disease Surveillance System).

C. PREVENTION MEASURES:
- 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.
- In counties with low incidences, pregnant women should be tested on the first visit and delivery.
- 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 1993 CDC Treatment Guidelines.

D. PUBLIC HEALTH INTERVENTIONS:
- Patients treated for early syphilis should be advised to have follow-up serologies at 3 and 6 months. Those treated for syphilis of more than 1 year’s duration should be advised to have serologies done at 6 and 12 months.
- Patients diagnosed with syphilis or identified as contacts, suspects or associates, should received educational information about the disease, be counseled on ways to reduce their risk of acquiring STDs, including HIV, and offered an HIV test.
- 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 6 months prior to onset of symptoms; patients with early latent syphilis should be interviewed for all contacts in the year preceding treatment.
- 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.
- All interviews should pursue screening sites in areas of high incidence or where there is a danger of an outbreak.
- All sexual contacts within 90 days should be preventively treated. Those over 90 days should be tested and only treated if a case.

III. CONTACTS FOR CONSULTATION

A. BCDP / COMMUNICABLE DISEASES STD SECTION: (608) 261-6390.

B. REGIONAL AND LOCAL HEALTH DEPT. STAFF

C. WSLH / BACTERIOLOGY: (608) 262-1616

D. MILWAUKEE BUREAU OF LABORATORIES: (414) 286-3526

IV. RELATED REFERENCES

- CDC Sexually Transmitted Diseases Treatment Guidelines 2010
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- Wisconsin Administrative Code, Chapter DHS 145.14 – DHS 145.22
- Wisconsin State Statute 252.11

V. DISEASE TRENDS

Wisconsin STD Control Section Surveillance and Statistics