Syphilis

Reporting Obligations
Individuals who have or may have syphilis shall be reported as soon as possible to the local Health Unit.

Epidemiology
Aetiologic Agent:
The spirochete Treponema pallidum, subspecies pallidum is the infective agent.

Clinical Presentation:
An acute and chronic treponemal disease characterized clinically by a primary lesion, a secondary eruption involving skin and mucous membranes, long periods of latency, and late lesions of skin, bone, viscera, the central nervous system (CNS) and cardiovascular system.
The primary lesion (chancre) usually appears 3 weeks after exposure. Four stages in syphilis infection include: primary, secondary, latent and tertiary.

- Primary syphilis is characterized by one or more painless superficial chancres at the site of exposure and regional lymphadenopathy.
- Secondary syphilis develops 2 -12 weeks following resolution of primary lesion and is characterized by macular, maculopapular or papular lesions or a rash, typically involving palms, soles and flexor areas of extremities and regional lymphadenopathy.
- Latent Syphilis is serological evidence of infection in the absence of symptoms and is further defined as: Early latent syphilis, acquired within the preceding year, and late latent syphilis, all other cases of latent syphilis. If left untreated, late latent syphilis can progress to tertiary (rare) or neurosyphilis. Tertiary syphilis may manifest as mucocutaneous/osseous lesions where cardiovascular involvement and neurosyphilis is present and typically is not infectious.

Primary, secondary and early latent syphilis are considered infectious.
Congenital syphilis can result in stillbirth, hydrops fetalis or preterm birth, as well as other systemic complications within the first 4-8 weeks of life.

Modes of transmission:
Spread by sexual contact, including vaginal, oral and anal sex, and also from an infected mother to her infant before or at the time of birth.
Transmission of syphilis from mother to fetus is most probable during early maternal syphilis, but can occur throughout the latent period. Infected infants may have moist mucocutaneous lesions that are more widespread than in adult syphilis and are a potential source of infection.

Incubation Period:
From 10 days to 3 months; usually 3 weeks

Period of Communicability:
Communicability exists when moist mucocutaneous lesions of primary and secondary syphilis are present. Primary, secondary, and early latent syphilis are considered infectious.

Risk Factors/Susceptibility
- Those who have had sexual contact with a known case of syphilis and in the following individuals: MSM, sex workers, those with street involvement/homeless, injection drug users, those with multiple sexual partners, those with a history of syphilis, HIV and other STIs, those originating from or having sex with an individual from a country with a high prevalence of syphilis.
- Individuals of aboriginal ethnicity are disproportionately affected by syphilis in some geographic areas of Canada, particularly in some areas experiencing outbreaks of infectious syphilis; the decision to screen or re-screen Aboriginal persons for syphilis should be made in the context of local epidemiology.

Diagnosis & Laboratory Testing
Diagnosis of syphilis requires combination of history including epidemiologic risk factors or exposure, physical examination and laboratory tests as there is no single optimum diagnostic criterion. Refer to “Syphilis: Screening, Testing & Treatment algorithm.”

Treatment & Case Management
Treatment is under the direction of the attending health care provider. Refer to the “Canadian Guidelines on Sexually Transmitted Infections, evergreen edition” and “Syphilis: Screening, Testing & Treatment algorithm.” In Ontario, syphilis has been more prevalent among men having sex with men (MSM), with transmission occurring through oral and anal contact. Rates are climbing among men in the 40 – 44 age group.

Patient Information

Additional Resources

References