

Syphilis

Reporting Obligations

Syphilis is designated as a disease of public health significance and is reportable under the *Ontario Health Protection and Promotion Act*. Report all suspect and confirmed cases within **one business day** to the health unit.

REPORTING FORM

Epidemiology

Aetiologic Agent:

The spirochete *Treponema pallidum*, subspecies pallidum is the infective agent.

Clinical Presentation:

Syphilis typically follows a progression of stages: primary, secondary, latent, and tertiary. Neurosyphilis and ocular syphilis can occur at any stage of infection.

- Primary syphilis is characterized by one or more painless superficial chancres at the site of exposure and regional lymphadenopathy. The chancre usually appears 3 weeks after exposure. Lesions may not be apparent i.e., on internal genital tract or intra-anal
- Secondary syphilis develops 2-12 weeks following resolution of primary lesion and is characterized by rash, fever, malaise, lymphadenopathy, mucous lesions, patchy alopecia, headaches, uveitis, and retinitis
- 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 can affect any organ system. Cardiovascular syphilis, neurosyphilis and gumma are seen in this stage. Manifestations depend on tissue destruction of the involved organs

Congenital syphilis can result in stillbirth, hydrops fetalis or preterm birth, as well as other systemic complications.

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

- Syphilis should be considered in anyone with signs or symptoms compatible with syphilis and also in the following individuals: contact of a known syphilis case, 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, sexual partners of any of the above
- 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 SMDHU Syphilis Serology Result Interpretation Flowchart.](#)

TESTING INFORMATION & REQUISITION

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.](#)" Or the [SMDHU Quick Reference Syphilis Treatment Guidelines](#). Public Health staff will be involved in case and contact investigations.

Patient Information

PATIENT FACT SHEET

References

1. [Ministry of Health, Infectious Diseases Protocol - Ontario Public Health Standards, 2022.](#)
2. [Public Health Agency of Canada. "Canadian Guidelines on Sexually Transmitted Infections, evergreen edition."](#)
3. Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.

Additional Resources

1. [Sexuality and U. ca. "Bacterial STIs—STDs."](#)
2. [Simcoe Muskoka HealthSTATS: Syphilis](#)
3. [PHO. "Syphilis". Dec 2022.](#)