

Appendix A: Disease-Specific Chapters

Chapter: Syphilis

Syphilis

- Communicable
- Virulent

Health Protection and Promotion Act, Section 1 (1)

Health Protection and Promotion Act: Ontario Regulation 558/91 – Specification of Communicable Diseases

Health Protection and Promotion Act: Ontario Regulation 559/91 – Specification of Reportable Diseases

1) Aetiologic Agent:	The spirochete <i>Treponema pallidum</i> , subspecies <i>pallidum</i> is the infective agent (1).
2) Case Definition:	
Surveillance Case Definition	See Appendix B
Outbreak Case Definition	Not applicable
3) Identification:	
Clinical Presentation	<p>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 CNS and cardiovascular system (2).</p> <p>The primary lesion (chancre) usually appears 3 weeks after exposure (1). Four stages in syphilis infection include: primary, secondary, early latent and late latent (1).</p> <ul style="list-style-type: none">• Primary syphilis is characterized by one or more painless superficial ulcerations or chancres at site of exposure and regional lymphadenopathy.• Secondary syphilis develops 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 follows:<ul style="list-style-type: none">○ Early latent syphilis, latent syphilis acquired within the preceding year, and○ Late latent syphilis, all other cases of latent syphilis.

	<p>Late latent syphilis or syphilis of unknown duration if left untreated can progress to tertiary or neurosyphilis. Tertiary syphilis is rare, may manifest as mucocutaneous/osseous lesions where cardiovascular involvement and neurosyphilis is present, and typically is not infectious.</p> <p>Primary, secondary, and early latent syphilis are considered infectious.</p> <p>Congenital syphilis, contracted from an infected mother via transplacental transmission or during the birthing process, can result in stillbirth, hydrops fetalis or preterm birth, as well as other systemic complications within the first 4-8 weeks of life.</p>
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Diagnosis	See Appendix B
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4) Epidemiology:

Occurrence	<p>Widespread; in developed countries, Syphilis is usually more prevalent in urban than rural areas and in some cultures, in males more than in females (1). In Ontario it has recently been more prevalent among men who have sex with men (MSM), with transmission occurring through oral and anal contact.</p> <p>Overall, syphilis rates were declining in Ontario until 2002 when rates began to climb among MSM with the highest reported rates occurring among men in the 30 – 39 age range.</p> <p>Persons from endemic countries infected with other treponemes such as yaws, pinta and bejel can cause biological false positive serological results (2).</p>
Reservoir	Humans (1)
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 (1).
Incubation Period	From 10 to 3 months; usually 3 weeks (1)
Period of Communicability	Communicability exists when moist mucocutaneous lesions of primary and secondary syphilis are present (1).
Susceptibility and Resistance	Universal susceptibility; approximately 30% of exposures result in infection (1)

5) Reporting Requirements:

To Local Board of Health	Laboratory confirmed cases shall be reported to the medical officer of health by persons required to do so under the <i>Health Protection and Promotion Act</i> , R.S.O. 1990.
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	<p>For reporting requirements and data collection requirements refer to the <i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current).</p>
<p>To Public Health Division (PHD)</p>	<p>Report only case classifications specified in the case definition to PHD.</p> <p>Cases shall be reported using the integrated Public Health Information System (iPHIS), or any other method specified by the Ministry within five (5) business days of receipt of initial notification as per <i>iPHIS Bulletin</i> Number 17: Timely Entry of Cases (3).</p> <p>The minimum data elements to be reported for each case is specified in the following:</p> <ul style="list-style-type: none"> • <i>Ontario Regulation 569</i> (Reports) under the Health Protection and Promotion Act (HPPA); • The disease-specific User Guides published by the Ministry, and • Bulletins and directives issued by the Ministry.
<p>6) Prevention and Control Measures:</p>	
<p>Personal Prevention Measures</p>	<p>Measures:</p> <ul style="list-style-type: none"> • Education about safer sex practices including use of barrier methods; • Early detection of infection by testing of people at risk; • Effective treatment of persons with transmissible syphilis and their contacts (1), and • Prenatal screening for syphilis should continue to be recommended as one of the routine tests provided during a prenatal workup. <p>For more information on prevention measures refer to the ministry document: the <i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current), and the references listed below.</p>
<p>Infection Prevention and Control Strategies</p>	<p>Strategies:</p> <ul style="list-style-type: none"> • Cases should refrain from sexual activity until treatment is completed and lesions disappear; • Identified sexual partners should be examined and treated (1), and • Education of high-risk populations about safer sexual practices and screening. <p>For more information on infection prevention and control measures refer to the ministry document: the <i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current), and the references listed below.</p>

<p>Management of Cases</p>	<p>Investigate the case to determine source of infection. Refer to Ontario Regulation 569 for relevant data to collect.</p> <p>Management depends on the stage of syphilis infection (refer to the resources listed below).</p> <p>If applicable, provide education about the infection and methods of preventing further spread.</p> <p>Benzathine Penicillin G is the drug of choice to treat syphilis (1). Treatment and follow up, repeat serology and the management of complications, is under the direction of the attending health care provider.</p> <p>For more information on case management refer to the ministry document:</p> <p><i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current) and the references listed below.</p>
<p>Management of Contacts</p>	<p>Sexual contacts should be identified and interviewed. The extent of contact tracing depends on the clinical stage of infection (1):</p> <ul style="list-style-type: none"> • For primary syphilis, all sexual contacts during the 3 months preceding onset of symptoms; • For secondary syphilis, contacts during the preceding 6 months; • For early latent syphilis, those of the preceding year; • For late latent syphilis, marital partners and children of infected mothers as appropriate, and • For congenital syphilis, assess the mother and her sexual partners. <p>For management of contacts refer to the <i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current), and the other resources and references listed below.</p>
<p>Management of Outbreaks</p>	<p>Not applicable</p>
<p>7) References</p>	<p>(1) Heymann D, editor. Control of communicable diseases manual. 18th ed. Washington: American Public Health Association; 2004.</p> <p>(2) Public Health Agency of Canada. Canadian guidelines on sexually transmitted infections. Ottawa: Public Health Agency of Canada; 2008. Available from http://www.phac-aspc.gc.ca/std-mts/sti_2006/pdf/Guidelines_Eng_complete_06-26-08.pdf.</p> <p>(3) Ministry of Health and Long-Term Care. Timely entry of cases. <i>iPHIS Bulletin</i>. 2007 May 11;17.</p>
<p>8) Additional Resources</p>	<p>Ministry of Health and Long-Term Care. Sexual health and sexually transmitted infections prevention and control protocol. Toronto:</p>

Queen's Printer for Ontario; 2008. Available from http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/progstds/protocols/sexual_health_sti.pdf. (or as current)

Health Protection and Promotion Act, R.S.O. 1990, c. H.7. Available from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h07_e.htm.

