

Appendix A: Disease-Specific Chapters

Chapter: Acquired Immunodeficiency Syndrome (AIDS)

Acquired Immunodeficiency Syndrome (AIDS)

- Communicable
 Virulent

**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:	<p>The human immunodeficiency virus (HIV) is a retrovirus of which two types have been identified: type 1 (HIV-1) and type 2 (HIV-2). They are serologically and geographically distinct but have similar epidemiological characteristics (1).</p> <p>The pathogenicity of HIV-2 may be lower than that of HIV-1; they have genotypic and phenotypic differences. HIV-2 has lower disease progression and lower rates of mother-to-child transmission (1).</p>
2) Case Definition:	
Surveillance Case Definition	See Appendix B
Outbreak Case Definition	Not applicable
3) Identification:	
Clinical Presentation	<p>AIDS is a severe, life threatening clinical condition and is advanced HIV related disease. This syndrome represents the late clinical stage of HIV infection resulting from progressive damage to the immune system, leading to one or more of many opportunistic infections and cancers of which bacterial pneumonia is one of the common presentations (1).</p> <p>Symptoms of acute HIV infection while difficult to diagnose and non specific and may include fever, arthralgia or myalgia, rash, lymphadenopathy, sore throat, fatigue, headache, oral ulcers and or genital ulcers, weight loss, nausea, vomiting or diarrhea (2).</p> <p>AIDS defining conditions include: (2)</p> <ul style="list-style-type: none">• <i>Bacterial pneumonia (recurrent)*</i>• <i>Candidiasis (bronchi, trachea or lungs)</i>• <i>Candidiasis (esophageal)[†]</i>• <i>Cervical cancer (invasive)*</i>• <i>Coccidioidomycosis (disseminated or extrapulmonary)*</i>• <i>Cryptococcosis (extrapulmonary)</i>• <i>Cryptosporidiosis chronic intestinal (> 1 month duration)</i>

	<ul style="list-style-type: none"> • <i>Cytomegalovirus diseases (other than in liver, spleen or nodes)</i> • <i>Cytomegalovirus retinitis (with loss of vision)* †</i> • <i>Encephalopathy, HIV-related (dementia)*</i> • <i>Herpes simplex: chronic ulcer(s) (> 1 month duration) or bronchitis, pneumonitis or esophagitis</i> • <i>Histoplasmosis (disseminated or extrapulmonary)*</i> • <i>Isosporiasis, chronic intestinal (> 1 month duration)*</i> • <i>Kaposi's sarcoma†</i> • <i>Lymphoma, Burkitt's (or equivalent term)*</i> • <i>Lymphoma, immunoblastic (or equivalent term)*</i> • <i>Lymphoma (primary in brain)</i> • <i>Mycobacterium avium complex or M. kansasii (disseminated or extrapulmonary)*</i> • <i>Mycobacterium of other species or unidentified species*†</i> • <i>M. tuberculosis (disseminated or extrapulmonary)*</i> • <i>M. tuberculosis (pulmonary)*</i> <p><i>Pneumocystis jirovecii pneumonia (formerly carinii)</i></p> <ul style="list-style-type: none"> • <i>carinii pneumonia†,*</i> • <i>Progressive multifocal leukoencephalopathy</i> • <i>Salmonella septicemia (recurrent)*</i> • <i>Toxoplasmosis of brain†</i> • <i>Wasting syndrome due to HIV*</i> <p><i>For pediatric cases only (< 15 years old)</i></p> <ul style="list-style-type: none"> • <i>Bacterial infections (multiple or recurrent, excluding recurrent bacterial pneumonia)*</i> • <i>Lymphoid interstitial pneumonia and/or pulmonary lymphoid hyperplasia†</i> <p style="margin-left: 40px;">* Must have laboratory evidence of HIV infection † May be diagnosed presumptively if laboratory evidence of HIV infection is present ‡ This has been renamed as <i>Pneumocystis jirovecii</i></p>
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Diagnosis	See Appendix B
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4) Epidemiology:	
Occurrence	AIDS was first reported in 1981 (1). The Public Health Agency of Canada, 2007, list of HIV Endemic Countries includes: 71 African, Caribbean, Asian, and Central/South American countries.
Reservoir	Humans (1)
Modes of Transmission	Person to person transmission through unprotected sexual intercourse; contact with infected body fluids such as sexual fluids, blood, and breast milk; CSF; the use of HIV-contaminated needles and syringes and some drug paraphernalia, including sharing by injection drug users; transfusion of infected blood or its components, organ and tissue transplants and mother to child transmission and contact of abraded skin or mucosa with body secretions such as

	<p>blood, CSF or semen (1).</p> <p>A more detailed description of HIV transmission is available in the Canadian AIDS Society publication, "HIV Transmission: Guidelines for Assessing Risk – A Resource Guide for Educators, Counsellors and Health Care Providers", 5th ed. 2004; as well as in the other resources and references listed below.</p>
Incubation Period	Variable; time from initial infection to detectable antibodies is usually 1-3 months. The time from HIV infection to diagnosis of AIDS has an observed range of less than one year to 15 years or longer (1).
Period of Communicability	Not known precisely; begins early after onset of HIV infection and presumably extends throughout life. Infectivity during the first months is considered to be high; it increases with viral load, with worsening clinical status and with the presence of other STIs (1).
Susceptibility and Resistance	<p>Unknown, but presumed to be general; race, gender and pregnancy status do not appear to affect susceptibility to HIV infection or AIDS. The presence of other STIs especially if ulcerative increases susceptibility (1).</p> <p>The Ontario Advisory Committee on HIV/AIDS (OACHA) has identified four populations at greatest risk of acquiring HIV/AIDS in Ontario, including gay and bisexual men, African and Caribbean Ontarians, Aboriginal Ontarians and people who use injection drugs.</p>

5) Reporting Requirements:

To local Board of Health	Laboratory confirmed cases of HIV infection 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.
To Public Health Division (PHD)	<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 (4).</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.

6) Prevention and Control Measures:

Personal Prevention Measures	<p>Measures include: (2)</p> <p>Provide education to persons about transmission, safer sex/drug practices, including proper use of barrier methods and risk reduction with IUD. Persons with known risk behaviors should be offered HIV testing, with appropriate pre and post counseling, and referral if necessary. Counselling should be age appropriate and individualized to the person being tested.</p> <ul style="list-style-type: none">• Provide education to persons presenting with concerns about HIV infection about safer sexual practices and proper use of barrier methods and risk reduction• Persons with known risk behaviours should be offered HIV testing, counselling and diagnosis <p>For more information on counselling and education refer to the <i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current) and, the <i>Canadian Guidelines on Sexually Transmitted Infections</i>, Public Health Agency of Canada, 2008 edition or as current.</p> <p>More information is available in the resources and references listed below.</p>
Infection Prevention and Control Strategies	<p>Strategies include:</p> <ul style="list-style-type: none">• At the time of diagnostic testing for HIV, review and monitor prevention practices• Identify barriers to prevention practices and the means to overcome them• Routine practices are recommended for hospitalized cases (2) <p>For more information on infection prevention and control strategies refer to the <i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current) and, the <i>Canadian Guidelines on Sexually Transmitted Infections</i>, Public Health Agency of Canada, 2008 edition or as current.</p>
Management of Cases	<p>Primary focus of HIV/AIDS case management is to counsel regarding ongoing transmission risks and to carry out partner notification (3).</p> <p>For case management refer to the following documents:</p> <p><i>Sexual Health and Sexually Transmitted Infections Prevention and Control Protocol, 2008</i> (or as current)</p> <p><i>Canadian Guidelines on Sexually Transmitted Infections</i>, Public Health Agency of Canada, 2008 edition or as current</p>
Management of Contacts	<p>For contact 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</p> <p><i>Canadian Guidelines on Sexually Transmitted Infections</i>, Public Health Agency of Canada, 2008 edition or as current</p>
Management of Outbreaks	Not Applicable
7) References	<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. Say yes to knowing: HIV/AIDS in Ontario. Toronto: Queen's Printer for Ontario; 2008. Available from http://www.health.gov.on.ca/english/providers/pub/aids/comm_materials/sayyes_brochure.pdf.</p> <p>(4) Ministry of Health and Long-Term Care. Timely entry of cases. iPHIS Bulletin. 2007 May 11;17.</p>
8) Additional Resources	<p>Ministry of Health and Long-Term Care. Sexual health and sexually transmitted infections prevention and control protocol. Toronto: 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)</p> <p>Canadian AIDS Society. HIV transmission: guidelines for assessing risk. A resource guide for educators, counsellors and health care providers. 5th ed. Ottawa: Canadian AIDS Society; 2004. Available from http://www.cdnaids.ca/web/repguide.nsf/65d569a62d6d8804852571c4006cf905/45a115ebbcba2586852570210054fc3e/\$FILE/HIV%20TRANSMISSION%20Guidelines%20for%20assessing%20risk.pdf.</p> <p>Remis RS, Swantee C, Schiedel L, Liu J. Report on HIV/AIDS in Ontario 2006. Toronto: Queen's Printer for Ontario; 2008. Available from http://www.phs.utoronto.ca/ohemu/doc/PHERO2006_report_final.pdf.</p> <p>Steering Committee on Infection Control Guidelines. Prevention and control of occupational infections in health care. An infection control guideline. Can Commun Dis Rep. 2002 Mar;28 Suppl 1:1-264. Available from http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/02pdf/28s1e.pdf.</p> <p><i>Health Protection and Promotion Act</i>, R.S.O. 1990, c. H.7. Available from http://www.e-</p>

