

Appendix A: Disease-Specific Chapters

Chapter: Cytomegalovirus infection, congenital

Cytomegalovirus infection, congenital

- 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:	Human (beta) herpesvirus 5 (human cytomegalovirus (CMV), a member of the sub family Betaherpesvirus of the family Herpesviridae, and it includes 4 major genotypes and many strains (1).
2) Case Definition:	
Surveillance Case Definition	See Appendix B
Outbreak Case Definition	Not applicable
3) Identification:	
Clinical Presentation	Infected infants may have signs and symptoms of severe generalized infection, especially of the CNS and liver; lethargy, convulsions, jaundice, petechiae, purpura, hepatosplenomegaly, chorioretinitis, intracerebral calcifications and pulmonary infiltrates can occur leading to intra-utero death. Survivors may exhibit mental retardation, microcephaly, motor disabilities, hearing loss and evidence of chronic liver disease (1, 2).
Diagnosis	See Appendix B Note: Diagnostic confirmation is required to determine if acquired or congenital.
4) Epidemiology:	
Occurrence	Cases of Cytomegalovirus have fluctuated in the province of Ontario over the years and continue to remain fairly low, with approximately 6 cases per year.
Reservoir	Humans are only known reservoir for human CMV (1).
Modes of Transmission	Intimate contact with the virus through transplacental contact during intrauterine life.

Incubation Period	Perinatal infection develops 3-12 weeks after delivery (1).
Period of Communicability	Following neonatal infection, the virus is excreted for 5-6 years.
Susceptibility and Resistance	Universal.

5) Reporting Requirements:

To local Board of Health	<p>Confirmed and suspect 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.</p> <p>Only congenital CMV is reportable.</p>
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 (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.

6) Prevention and Control Measures:

Personal Prevention Measures	Hand hygiene and routine practices are essential preventive measures for women of child bearing age who work in hospitals, especially delivery and pediatric wards, day care centres and preschools (1).
Infection Prevention and Control Strategies	Reportable for prevalence purposes only.
Management of Cases	<p>CMV is only reportable for prevalence purposes; there is no case management. Refer to Regulation 569 under the HPPA for relevant data to collect and include the following:</p> <ul style="list-style-type: none"> • Confirm the diagnosis as per case definition
Management of Contacts	Due to the high prevalence of asymptomatic shedders in the population, there is no partner notification for CMV.

Management of Outbreaks	Not applicable (1)
7) References	<p>(1) Heymann D, editor. Control of communicable diseases manual. 18th ed. Washington: American Public Health Association; 2004.</p> <p>(2) Pickering LK, Baker CJ, Long SS, McMillan JA, editors. Red book: 2006 report of the Committee on Infectious Diseases. 27th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2006. Section 3, Summaries of infectious diseases; p. 273-7.</p> <p>(3) Ministry of Health and Long-Term Care. Timely entry of cases. iPHIS Bulletin. 2007 May 11;17.</p>
8) Additional Resources	<p><i>Health Protection and Promotion Act</i>, R.S.O. 1990, c. H.7. Available from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h07_e.htm.</p>

