

Appendix A: Disease-Specific Chapters

Chapter: Hepatitis D (Delta hepatitis)

Hepatitis D (Delta hepatitis)

- 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:	Hepatitis D virus (HDV) is a virus-like particle consisting of a coat of hepatitis B virus surface antigen and a unique internal antigen, the delta antigen (2).
2) Case Definition:	
Surveillance Case Definition	See Appendix B
Outbreak Case Definition	<p>The outbreak case definition varies with the outbreak under investigation. Consideration should be given to the following in establishing an outbreak case definition:</p> <ol style="list-style-type: none">1. Clinical, laboratory and/or epidemiological criteria2. A time frame for occurrence3. A geographic location(s) or place(s) where cases live or became ill/exposed4. Special attributes of cases (e.g. age, underlying conditions) <p>Cases should also be classified by levels of probability (i.e. confirmed, probable or suspect).</p>
3) Identification:	
Clinical Presentation	Signs and symptoms resemble those of hepatitis B infection (anorexia, fatigue, vague abdominal discomfort, joint pain, fever and jaundice) and are always associated with the coexistence of the hepatitis B virus infection. Delta virus may occur in persons with chronic HBV infection or as a super infection (1, 2).
Diagnosis	See Appendix B
4) Epidemiology:	
Occurrence	<p>HDV infection occurs worldwide, epidemically and endemically in countries that have a high incidence of hepatitis B infection (1, 2).</p> <p>Hepatitis D occurs very rarely in Ontario.</p>

Reservoir	Humans infected with hepatitis B act as a reservoir because HDV is unable to infect a cell by itself and requires co-infection with HBV to undergo complete replication (2).
Modes of Transmission	Thought to be similar as for hepatitis B (via blood, blood products, saliva, CSF, pleural, peritoneal, semen and vaginal secretions and any other fluid containing blood) (1).
Incubation Period	Approximately 2-8 weeks
Period of Communicability	Blood is potentially infectious during all phases of active delta hepatitis infection; peak infectivity probably occurs just prior to onset of acute illness, when particles containing the delta antigen are readily detected in the blood (1).
Susceptibility and Resistance	All persons susceptible to hepatitis B infection or those who have chronic hepatitis B 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.
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:

REFER TO THE CHAPTER ON HEPATITIS B FOR THE FOLLOWING SECTIONS

Personal Prevention Measures	
Infection Prevention and Control Strategies	

Management of Cases	
Management of Contacts	
Management of Outbreaks	
7) References	<p>(1) Heymann D, editor. Control of communicable diseases manual. 18th ed. Washington: American Public Health Association; 2004.</p> <p>(2) Victorian Government Department of Human Services, Communicable Diseases Section. The blue book: guidelines for the control of infectious diseases. Melbourne: State of Victoria Department of Human Services; 2005. Available from http://www.health.vic.gov.au/_data/assets/pdf_file/0003/19902/blue_book.pdf.</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>Canadian Liver Foundation [Internet]. Ottawa: Canadian Liver Foundation; 2009 [cited 2009 Feb 1]. Available from http://www.liver.ca/Home.aspx</p> <p>World Health Organization, Department of Communicable Diseases Surveillance and Response. Hepatitis Delta. Geneva: World Health Organization; 2001. Available from http://www.who.int/csr/disease/hepatitis/HepatitisD_whocdscsrncs2001_1.pdf.</p> <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>

