

Appendix A: Disease-Specific Chapters

Chapter: Ophthalmia neonatorum

Effective: December 2018

Ophthalmia neonatorum

Communicable

Virulent

**Health Protection and Promotion Act:
Ontario Regulation 135/18 (Designation of Diseases)
Regulation 557 (Communicable Diseases – General)**

1.0 Aetiologic Agent

Eye infection of newborn infant acquired during birth and caused by a maternal infection with *Neisseria gonorrhoeae* (*N. gonorrhoea*), and/or *Chlamydia trachomatis* (*C. trachomatis*).¹

2.0 Case Definition

2.1 Surveillance Case Definition

Refer to [Appendix B](#) for Case Definitions.

2.2 Outbreak Case Definition

Not applicable

3.0 Identification

3.1 Clinical Presentation

Acute, inflammatory condition of the eye, occurring within 3 weeks of life. Signs and symptoms include, purulent conjunctivitis, and swollen red eyelids.¹

3.2 Diagnosis

See [Appendix B](#) for diagnostic criteria relevant to the Case Definitions.

4.0 Epidemiology

4.1 Occurrence

Varies widely according to prevalence of maternal infection and prenatal screening coverage; infrequent where eye prophylaxis is adequate.¹

Cases of ophthalmia neonatorum have fluctuated in the province of Ontario over the years, and continue to remain fairly low. Between 2013 and 2017, an average of 3 cases were reported each year.*

* Data included in the epidemiological summary are from January 1, 2013 to December 31, 2017. Data were extracted from Query on February 7, 2018 and therefore are considered preliminary.

Please refer to Public Health Ontario's (PHO) Reportable Disease Trends in Ontario reporting tool and other reports for the most up-to-date information on infectious disease trends in Ontario.

<http://www.publichealthontario.ca/en/DataAndAnalytics/Pages/DataReports.aspx>

For additional national and international epidemiological information, please refer to the Public Health Agency of Canada and the World Health Organization.

4.2 Reservoir

Infected maternal genital tract.¹

4.3 Modes of Transmission

Contact with the infected birth canal during childbirth.¹

4.4 Incubation Period

Usually 1-5 days for gonococcal infection; 5-14 days for chlamydial infection.¹

4.5 Period of Communicability

While discharge persists, if untreated; no longer communicable after 24 hours of treatment (1).

4.6 Host Susceptibility and Resistance

Susceptibility is general.¹ Infants at increased risk for gonococcal ophthalmia are those whose mothers are at risk for sexually transmitted infections (STIs).²

5.0 Reporting Requirements

As per Requirement #3 of the "Reporting of Infectious Diseases" section of the *Infectious Diseases Protocol, 2018* (or as current), the minimum data elements to be reported for each case are specified in the following:

- *Ontario Regulation 569* (Reports) under the *Health Protection and Promotion Act* (HPPA);³
- The iPHIS User Guides published by PHO; and
- Bulletins and directives issued by PHO.

6.0 Prevention and Control Measures

6.1 Personal Prevention Measures

Preventative measures:

- Screening and treatment of maternal infection;^{1,2}
- The use of an established, effective preparation for protection of babies' eyes at birth is mandated in *Ontario Regulation 557* under the HPPA - "Eyes of New-Born".⁴

Effective January 1, 2019, an amendment to *Ontario Regulation 557 (Communicable Diseases – General)* allows parents to opt-out of the mandatory prophylactic eye treatment administered to all infants at birth to prevent disease transmission. The amendment to the Regulation stipulates that an opt-out request, made by a parent in writing to their healthcare professional, may only be granted if the healthcare professional attending at the birth of the child is satisfied that:

- The parent of the child making the request has received information on the benefits and risks of administration of the ophthalmic agent as part of their routine prenatal care
- The parent has received information on the likely consequences of non-administration of the ophthalmic agent as part of their routine prenatal care; and
- An assessment has been done, as part of their routine prenatal care, to confirm there is no serious risk of transmission to the child of an infectious agent that might cause ophthalmia neonatorum.⁴

6.2 Infection Prevention and Control Strategies

Contact isolation for the first 24 hours after treatment.¹

6.3 Management of Cases

In addition to the requirements set out in the Requirement #2 of the “Management of Infectious Diseases – Sporadic Cases” and “Investigation and Management of Infectious Diseases Outbreaks” sections of the *Infectious Diseases Protocol, 2018* (or as current), the board of health shall investigate cases to determine the source of infection. Refer to Section 5: Reporting Requirements above for relevant data to be collected during case investigation.

Treatment is under the direction of the attending health care provider. Mother and infant should also be treated for appropriate infection.¹

6.4 Management of Contacts

See above, Management of Cases.

6.5 Management of Outbreaks

Not applicable

7.0 References

1. Heymann DL, editor. *Control of Communicable Diseases Manual*. 20 ed. Washington, D.C: American Public Health Association; 2015.
2. Moore DL, MacDonald NE. Preventing ophthalmia neonatorum. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2015;26(3):122-5.
3. Reports, O Reg 569/18. Available from: <https://www.ontario.ca/laws/regulation/900569>

4. Communicable Diseases - General, O Reg 557/18. Available from:
<https://www.ontario.ca/laws/regulation/900557>

8.0 Document History

Table 1: History of Revisions

Revision Date	Document Section	Description of Revisions
December 2018	General	Minor revisions were made to support the regulation change to Diseases of Public Health Significance, Ophthalmia neonatorum is designated a disease of public health significance and is no longer classified as communicable. Common text included in all Disease Specific chapters: Surveillance Case Definition, Diagnosis, Reporting Requirements, and Management of Cases. The epidemiology section and references were updated and Section 8.0 Additional Resources was deleted.
December 2018	4.1 Occurrence	First sentence added: prenatal screening coverage.
December 2018	4.4 Incubation Period	Incubation period for chlamydial infection updated from 5-12 days to 5-14 days.
December 2018	4.6 Host Susceptibility and Resistance	Added: "Infants at increased risk for gonococcal ophthalmia are those whose mothers are at risk for sexually transmitted infections (STIs)."

