

Ontario Public Health Standards:
Requirements for Programs, Services and Accountability

Infectious Disease Protocol

Appendix 1:

Case Definitions and Disease-Specific Information

Disease: Gastroenteritis Outbreaks in Institutions and Public Hospitals

Effective: May 2022

Gastroenteritis Outbreaks in Institutions and Public Hospitals

☒ Communicable

☐ Virulent

[Health Protection and Promotion Act](#) (HPPA)

[Ontario Regulation \(O. Reg.\) 135/18](#) (Designation of Diseases)

Provincial Reporting Requirements

☒ Confirmed outbreaks

☐ Probable case

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:

- [O. Reg. 569](#) (Reports) under the HPPA;³
- The iPHIS User Guides published by Public Health Ontario (PHO); and
- Bulletins and directives issued by PHO.

Type of Surveillance

Outbreak summary data

Case Definition

Confirmed Outbreak Definition

Two or more cases meeting the case definition with a common epidemiological link (e.g., specific unit or floor, same caregiver) with initial onset within a 48-hour period.

Suspect Outbreak Definition

If an outbreak is suspected, notify the local board of health to support with the investigation and management.

The case definition in an outbreak is dependent on the presenting signs and symptoms and circumstances. It may vary between outbreaks and also vary during an outbreak.

Symptoms must not be attributed to another cause (e.g., medication side effects, laxatives, diet or prior medical condition) and are not present or incubating upon admission and **at least one** of the following must be met:

- **Two or more** episodes of diarrhea (i.e., loose/watery bowel movements) within a 24-hour period

OR

- **Two or more** episodes of vomiting within a 24-hour period;

OR

- **One or more** episodes of diarrhea AND one or more episodes of vomiting within a 24-hour period.

Outbreak Case Definition

The outbreak case definition varies with the outbreak under investigation. Please refer to the *Infectious Diseases Protocol, 2018* (or as current) for guidance in developing an outbreak case definition as needed.

The outbreak case definitions are established to reflect the disease and circumstances of the outbreak under investigation. The outbreak case definitions should be developed for each individual outbreak based on its characteristics, reviewed during the course of the outbreak, and modified if necessary, to ensure that the majority of cases are captured by the definition. The case definitions should be created in consideration of the outbreak definitions.

Outbreak cases may be classified by levels of probability (i.e., confirmed and/or probable).

Clinical Information

Clinical Evidence

Clinically compatible signs and symptoms depend upon aetiologic agent and may include nausea, vomiting, diarrhea, abdominal pain or tenderness.

Clinical Presentation

The clinical presentation is dependent on aetiology; however, the most common presentation of gastroenteritis is, but is not limited to, abdominal pain, vomiting, diarrhea^{*} that is unusual or different for the patient/resident without other recognized aetiology, along with nausea, headache, chills, fever and/or myalgia.

Laboratory Evidence

Laboratory Confirmation

- Confirmation of an outbreak of gastroenteritis is not dependent on laboratory confirmation.

Approved/Validated Tests

- Given the variability of aetiologic agent, consult with laboratory about appropriate testing methodologies.

Laboratory diagnosis depends on the aetiologic agent.

Clinical specimens should be collected from symptomatic cases early in the course of clinical illness to increase the likelihood of detecting a causative agent.

For institutions and public hospitals who implement a food retention policy, 200 grams of potentially hazardous food samples from each meal, frozen at or below -

^{*} Diarrhea is defined as loose/watery stool that conforms to the shape of its container.

18°C, for 10 days can be submitted to the laboratory for testing if a bacterial pathogen is suspected.¹ If the causative agent of the outbreak is suspected or confirmed to be caused by norovirus, laboratory testing of food retention samples is not recommended.

For further information about human diagnostic testing, contact the [Public Health Ontario Laboratories](#).

For more information regarding specimen collection and testing, please refer to the [Public Health Inspector's Guide to Environmental Microbiology Laboratory Testing](#).

Case Management

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 Provincial Reporting Requirements above for relevant data to be collected during case investigation.

The board of health should also refer to the [Control of Gastroenteritis Outbreaks in Long-Term Care Homes \(2018, or as current\)](#).¹

If the outbreak is caused by a specific disease of public health significance, (e.g., salmonellosis) refer also to the relevant disease-specific appendix.

Contact Management

Conduct surveillance of residents/patients and staff for development of symptoms.

Implement control measures for visitors in the institution or public hospital during an outbreak. For more information on management of contacts, please refer to *Control of Gastroenteritis Outbreaks in Long-Term Care Homes (2018, or as current)*.¹

Outbreak Management

Please see the *Infectious Diseases Protocol, 2018* (or as current) for the public

health management of outbreaks or clusters in order to identify the source of illness, manage the outbreak and limit secondary spread.

Prevention and Control Measures

Personal Prevention Measures and Infection Prevention and Control Strategies

For personal prevention measures and infection prevention and control (IPAC) strategies, please refer to:

- [Institutional/Facility Outbreak Management Protocol, 2018 \(or as current\)](#);⁴
- Control of Gastroenteritis Outbreaks in Long-Term Care Homes (2018, or as current);¹
- [PHO's website](#) at to search for the most up-to-date information on IPAC.

Disease Characteristics

Aetiologic Agent - Gastrointestinal illness is caused by a variety of pathogens that affect the gastrointestinal tract and is typically acquired through consuming contaminated food, or water, or contact with infected animals, environments, or people.

Gastrointestinal illness outbreaks in health care facilities are most frequently caused by viruses such as noroviruses, and rotaviruses; however, bacteria and other pathogens may cause outbreaks as well.

Note that *Clostridium difficile* Infection (CDI) outbreaks in public hospitals are a separate disease of public health significance with a supporting Appendix under the *Infectious Diseases Protocol, 2018* (or as current). CDI outbreaks in other institutions are covered by the Control of Gastroenteritis Outbreaks in Long-Term Care Homes (2018, or as current) reference document.¹

Modes of Transmission - Primarily transmitted through fecal-oral route. May also be transmitted from person-to-person, foodborne, waterborne, and droplet contact of

vomit (for norovirus). Transmission may also occur through contact with contaminated fomites.¹

Incubation Period – Varies, depending on the agent.

Period of Communicability - Varies, depending on the agent.

Reservoir - Varies, depending on the agent; frequently humans.

Host Susceptibility and Resistance - All persons are susceptible.²

Please refer to [PHO's Reportable Disease Trends in Ontario reporting tool](#) for the most up-to-date information on infectious disease trends in Ontario.

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

Comments

- The board of health shall declare whether an outbreak is over, in consultation with the institution/facility. Rationale for declaring or not declaring an outbreak and declaring an outbreak over should be documented.
- In the event of a disagreement between the institution and the medical officer of health (MOH), the MOH has the authority to determine if an outbreak of a communicable disease exists, for purposes of exercising statutory powers under the HPPA. Once an outbreak is declared, it is reported to the Ministry through the integrated Public Health Information System (iPHIS).
- The board of health shall declare whether an outbreak is over, in consultation with the institution/facility. Rationale for declaring or not declaring an outbreak and declaring an outbreak over should be documented.
- Issuing a media release to the public is the responsibility of the institution or health facility. Should there be a public health risk to the general population, a joint media alert may be issued, or the board of health may issue an alert on behalf of the institution or health facility with their knowledge.
- For more information, please consult Investigation and Management of Infectious Diseases Outbreaks in the *Infectious Diseases Protocol, 2018* (or as

current) and the *Institutional/Facility Outbreak Management Protocol, 2018* (or as current).

References

1. Ontario, Ministry of Health and Long-Term Care. Control of Gastroenteritis Outbreaks in Long-Term Care Homes. Toronto, ON: Queen's Printer for Ontario; 2018. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/reference.aspx
2. Heymann DL, editor. Control of Communicable Diseases Manual. 20 ed. Washington, D.C: American Public Health Association; 2015.
3. Health Protection and Promotion Act, R.S.O. 1990, Reg. 569, Reports, (2018). Available from: <https://www.ontario.ca/laws/regulation/900569>
4. Ontario, Ministry of Health and Long-Term Care. Institutional/Facility Outbreak Management Protocol, 2018. Toronto, ON: Queen's Printer for Ontario; 2018. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/protocolguidelines.aspx

Case Definition Sources

Heymann DL, editor. Control of Communicable Diseases Manual. 20 ed. Washington, D.C: American Public Health Association; 2015.

Ontario, Ministry of Health and Long-Term Care. Control of Gastroenteritis Outbreaks in Long-Term Care Homes. Toronto, ON: Queen's Printer for Ontario; 2018. Available from:

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Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best Practices for Surveillance of Health Care-associated Infections in Patient and Resident Populations. Toronto, ON: Queen's Printer for Ontario; 2014. Available from: <https://www.publichealthontario.ca/-/media/documents/B/2014/bp-hai-surveillance.pdf>

Document History

Revision Date	Document Section	Description of Revisions
April 2022	Entire Document	New template. Appendix A and B merged. No material content changes.
April 2022	Epidemiology: Occurrence section	Removed.
April 2022	ICD Codes	Removed.