

# Appendix A: Disease-Specific Chapters

**Chapter: Food poisoning, all causes**

Effective: February 2019

# Food poisoning, all causes

Communicable

Virulent

**Health Protection and Promotion Act:  
O. Reg. 135/18 (Designation of Diseases)**

## 1.0 Aetiologic Agent

Food poisoning, also called foodborne illness, is illnesses that are acquired through the consumption of contaminated food or water, but are not directly specified by *Regulation 135/18* as a Disease of Public Health Significance.<sup>1</sup> Food poisoning includes foodborne infections and intoxications caused by *Staphylococcus aureus*, *Bacillus cereus*, *Clostridium perfringens*, scombroid fish poisoning and ciguatera fish poisoning.<sup>2</sup> However, other agents such as heavy metals, chemicals, toxins, parasites, fungi, and viruses such as noroviruses and rotaviruses may also be reported here.

## 2.0 Case Definition

### 2.1 Surveillance Case Definition

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

### 2.2 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).

## 3.0 Identification

### 3.1 Clinical Presentation

Symptoms vary depending on the causative agent. Symptoms may include vomiting, nausea, abdominal pain, and diarrhea.

### 3.2 Diagnosis

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

For further information about human diagnostic testing, contact the Public Health Ontario Laboratories or refer to the Public Health Ontario Laboratory Services webpage: <http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/default.aspx>

## 4.0 Epidemiology

### 4.1 Occurrence

Food poisoning is widespread. It is most often sporadic in occurrence, with cases occurring throughout the year from various sources.

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

Not applicable.<sup>2</sup>

### 4.3 Modes of Transmission

Foodborne or waterborne.

### 4.4 Incubation Period

Typically short, (30 minutes to 24 hours), but may be longer, depending on the agent.

### 4.5 Period of Communicability

Varies, depending on the agent.

### 4.6 Host Susceptibility and Resistance

General susceptibility.<sup>2</sup>

## 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);<sup>3</sup>
- 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

Prevention Measures:

- Maintain good personal hygiene, including hand washing after using sanitary facilities and before handling food;
- Use foods from inspected/approved sources;
- Prevent cross-contamination between raw and ready-to-eat foods during food preparation, and storage;
- Store foods either at or below 4°C or at or above 60°C; and
- Cook and reheat food thoroughly to the appropriate temperatures. For temperatures, see the Ministry of Health and Long-Term Care (ministry)'s 'Food Safety: Cook' publication available at <http://www.health.gov.on.ca/en/public/programs/publichealth/foodsafety/cook.aspx#4>

For more food safety prevention measures, please see the ministry's food safety frequently asked questions available from:

<http://www.health.gov.on.ca/en/public/programs/publichealth/foodsafety/faq.aspx>

### 6.2 Infection Prevention and Control Strategies

Refer to PHO's website at [www.publichealthontario.ca](http://www.publichealthontario.ca) to search for the most up-to-date information on Infection Prevention and Control.

### 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.

Investigate and obtain history of food items eaten during the suspected incubation period (based on symptoms presented) and the location where food was obtained.

Identify other persons with similar exposure. For ill persons, obtain information on symptoms, onset date and hour, duration of illness, and any medical treatment or tests performed.

Collect relevant stool specimens and food specimens for testing.

Advise symptomatic contacts and cases to seek appropriate medical consultation.

Educate cases on modes of transmission (if the agent can be transmitted further), and proper hand hygiene practices to prevent secondary spread.

Exclusion Criteria:

- Exclude symptomatic food handlers, healthcare providers,\* and day care staff and attendees until symptom free for 24 hours, OR symptom free for 48 hours after discontinuing use of anti-diarrheal medication.

The rationale for exclusion for 48 hours after discontinuing the use of **anti-diarrheal** medication is to ensure that diarrhea does not return after the anti-diarrheal medication has been discontinued. In the event that **antibiotics** are used, the person should be excluded until symptom free for 24 hours.

**Note:** Treatment recommendations are under the direction of the attending health care provider.

If seafood (e.g., for scombroid and ciguatera fish poisoning) or a federally regulated food item is identified as the source of the illness, notify the Ministry of Natural Resources (MNR) or the Canadian Food Inspection Agency (CFIA), as appropriate.

## 6.4 Management of Contacts

Assess household and other contacts for symptoms and if symptomatic advise to seek medical care. Management of symptomatic contacts is the same as for cases.

## 6.5 Management of Outbreaks

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.

Two or more cases linked by time, common exposure, and/or place are suggestive of an outbreak.

For more information regarding specimen collection and testing, please see the Public Health Inspector's Guide to the Principles and Practices of Environmental Microbiology, 5<sup>th</sup> Edition (or as current).<sup>4</sup>

Refer to Ontario's Foodborne Illness Outbreak Response Protocol (ON-FIORP) 2013 (or as current) for multi-jurisdictional foodborne outbreaks which require the response of more than two Parties (as defined in ON-FIORP) to carry out an investigation. The ON-FIORP can be found here: <http://health.gov.on.ca/en/pro/programs/publichealth/enviro/>

## 7.0 References

1. Health Protection and Promotion Act, O. Reg. 135/18, Designation of Diseases, (2018). Available from: <https://www.ontario.ca/laws/regulation/180135>
2. Heymann DL, editor. Control of Communicable Diseases Manual. 20 ed. Washington, D.C: American Public Health Association; 2015.

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\* If the healthcare setting is a hospital, use the "Enteric Diseases Surveillance Protocol for Ontario Hospitals" (OHA and OMA Joint Communicable Diseases Surveillance Protocols Committee, 2017 or as current) for exclusion criteria: <https://www.oha.com/labour-relations-and-human-resources/health-and-safety/communicable-diseases-surveillance-protocols>

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 Agency for Health Protection and Promotion (Public Health Ontario). Public Health Inspector’s Guide to Environmental Microbiology Laboratory Testing. 5<sup>th</sup> ed. Toronto, ON: Queen's Printer for Ontario; 2017. Available from: <https://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/PHIGuide.aspx>

## 8.0 Document History

**Table 1: History of Revisions**

<b>Revision Date</b>	<b>Document Section</b>	<b>Description of Revisions</b>
March 2017	General	New Template
March 2017	6.3 Management of Cases	“Enteric Diseases Surveillance Protocol for Ontario Hospitals” reference updated
March 2017	7.0 References	Updated
March 2017	9.0 Document History	Updated
February 2019	General	Minor revisions were made to support the regulation change to Diseases of Public Health Significance. Common text included in all Disease Specific chapters: Surveillance Case Definition, Outbreak Case Definition, Diagnosis, Reporting Requirements, Management of Cases and Management of Outbreaks. The epidemiology section and references were updated and Section 8.0 Additional Resources was deleted.

