

GIARDIASIS

Case definition

CONFIRMED CASE

Laboratory confirmation of infection, with or without symptoms, from stool, duodenal fluid or small bowel biopsy specimen:

- demonstration of *Giardia lamblia*
- OR**
- demonstration of *Giardia lamblia* antigen.

PROBABLE CASE

Evidence of clinical illness in a person who is epidemiologically linked to a confirmed case.

Causative agent

Giardia lamblia, a protozoan.

Source

Stool of infected human or animals.

Incubation

3-25 days or longer, median 7-10 days.

Transmission

Fecal-oral transmission from fecally contaminated drinking and recreational water and, less often, fecally contaminated food.

Communicability

Communicable for as long as the infected person excretes cysts. Duration of the excretion of cysts may last for prolonged periods of 12-14 months. Excreted cysts may remain infectious for months in a moist environment.

Symptoms

Can be asymptomatic. Symptoms include diarrhea, greasy stools, abdominal cramps, bloating, weight loss, fatigue or malabsorption.

Diagnostic testing

Stool, duodenal aspirate for enzyme immunoassay

Treatment

Some infections are self-limited and treatment is not required.

- Rehydration if necessary
- Metronidazole (Flagyl) and tinidazole are the drugs of choice. Health care providers should consult their drug reference guidelines for appropriate dosing of the medication.

PUBLIC HEALTH MANAGEMENT & RESPONSE

Case management

- Contact the primary care provider to obtain clinical information about the case.
- Interview the case, review clinical information, determine food history, activities and employment and identify possible source of exposure.
- Identify contact[s] who have had exposure to the case during the period of communicability.
- If the case identifies drinking water or recreational water as a potential source and an inspection is required, contact Nova Scotia Environment (NSE). Discuss the concern with the Medical Officer of Health prior to contacting the NSE District Manager for the region.
- If the case identifies a local food establishment (including an institutional setting) as a potential source, contact Nova Scotia Environment.
- Document the information on the [Enteric Case Report Form](#), the [Nova Scotia Notifiable Disease Surveillance Case Report Form](#) the [Giardiasis Case Report Form](#) and the [Travel Case Report Form](#) [if travel-related] or designated electronic information system.

Exclusion

Exclude cases in the risk groups below:

Risk Group	Criteria for Exclusion
Food handlers	Until symptoms have stopped and client's bowel function returns to their normal state
Health care or other staff who have contact with susceptible persons	Until symptoms have stopped and client's bowel function returns to their normal state
Child care staff and children attending child care	Until symptom-free for 24 hours
Case contacts who are in special risk groups	<i>Symptomatic:</i> Until symptoms have stopped and client's bowel function returns to their normal state. <i>Asymptomatic:</i> No exclusion required

Education

- Ensure that cases belonging to a risk group are aware of exclusion criteria.
- Inform the case about the potential to infect contacts and provide information on how to minimize transmission to others, including household and close contacts. Close contacts experiencing symptoms should seek medical attention.
- Educate parents, guardians, staff and cases about the importance of hand hygiene, especially before preparing food and eating, after toileting, after changing diapers, and after handling an animal or its waste.
- Instruct case to refrain from recreational water activities (e.g. swimming) while symptomatic.
- Educate on safe drinking-water sources.
- Educate hikers and campers on safe drinking-water practices. Boiling, chemical disinfection, and filtration are all methods to make water safe for drinking.

Outbreak response

Consult the [*Guidelines for Communicable Disease Prevention and Control for Child Care Settings*](#) if an outbreak is suspected in a child care setting.

Surveillance forms

novascotia.ca/dhw/populationhealth/surveillanceguidelines/NS_Notifiable_Disease_Surveillance_Case_Report_Form.docx

novascotia.ca/dhw/populationhealth/surveillanceguidelines/Enteric_Case_Report_Form.pdf

novascotia.ca/dhw/populationhealth/surveillanceguidelines/Giardiasis_Case_Report_Form.pdf

novascotia.ca/dhw/populationhealth/surveillanceguidelines/Sporadic_Com_Dis_in_Ret_Trav.pdf

General Information Sheet

REFERENCES

Public Health Agency of Canada. (2009). Case Definitions for Communicable Diseases under National Surveillance. *CCDR 2009*; 3552, 1-123. Retrieved from phac-aspc.gc.ca/publicat/ccdr-rmtc/09pdf/35s2-eng.pdf

Control of Communicable Diseases Manual, 20th edition. 2014. David L. Heymann, editor. American Public Health Association.

Infection Control in the Child Care Center and Preschool, 8th edition. 2012. Leigh B. Grossman, editor.

Report of the Committee on Infectious Diseases, 2015. American Academy of Pediatrics.

cdha.nshealth.ca/pathology-laboratory-medicine

[Provincial Microbiology Users Manual](#)