

Giardiasis

Reporting Obligations

Giardiasis is designated as a disease of public health significance and is reportable under the Ontario Health Protection and Promotion Act. Report all suspect and confirmed cases within **one business day** to the health unit.

REPORTING FORM

Epidemiology

Aetiologic Agent:

Giardiasis is caused by the protozoa, *Giardia lamblia* (also known as *G. intestinalis* or *G. duodenalis*). The organism is found in two forms, a pear-shaped trophozoite and an ovoid cyst. The trophozoite is relatively fragile and dies when excreted from the body. The cyst form, which is environmentally resistant, thrives in warm, still bodies of water such as ponds and stagnant lakes. Additionally, it can be found in fecally contaminated surfaces and food items.

Clinical Presentation:

Symptoms may include a) acute, self-limiting diarrhea, b) chronic diarrhea, steatorrhea, abdominal cramps, bloating, frequent loose and pale greasy stools, fatigue, and weight loss. There is usually no extraintestinal invasion, but reactive arthritis and, in severe giardiasis, damage to duodenal and jejunal mucosal cells may occur. Persons may also be asymptomatic.

Modes of transmission:

Transmission is fecal-oral, most commonly through the ingestion of contaminated water or by direct person-to-person contact. Anal-oral contact and transmission through food vehicles and fecally contaminated recreational and drinking water may also occur.

Incubation Period:

Usually 3 – 25 days or longer; median 7 – 10 days.

Period of Communicability:

Duration of cyst excretion is variable but can range from weeks to months. Giardiasis is communicable for as long as the infected person excretes cysts.

Risk Factors/Susceptibility

- Children less than 5 years of age and adults
- 25-39 years of age
- Child that attends childcare and childcare workers
- Recreational water contact, especially surface water (lakes, rivers, ponds) where beavers are found, as beavers are a natural host

- Persons with HIV infection may have more serious and prolonged illness
- Poor hand hygiene
- Travel outside of province/country
- Consumption of potentially contaminated water

Diagnosis & Laboratory Testing

Diagnosis is made by microscopic examination of clinical specimens (e.g., stool, duodenal fluid, small bowel biopsy) for *G. lamblia* cysts or trophozoites, or by Giardia immunoassays for *G. lamblia* antigen. Three specimens taken 2-3 days apart will identify 80-90% of infections.

TESTING INFORMATION & REQUISITION

Treatment & Case Management

Treatment is as prescribed by the attending health care provider.

Inform patient that symptomatic cases will be excluded from conducting activities in high-risk settings such as the food industry, healthcare, or daycare until symptom free for 24 hours, OR symptom free for 48 hours after discontinuing use of anti-diarrheal medication.

Cases should not use recreational water venues (swimming pools, lakes, and rivers) for 2 weeks after symptoms resolve. Assess household members and close contacts for symptoms.

Provide education about the illness and how to prevent the spread of infection (proper hand hygiene after toileting or diapering and before handling food; avoid consumption of surface water without prior treatment; regular testing of private water samples).

Public Health will follow up as needed.

Patient Information

PATIENT FACT SHEET

References

1. [Ministry of Health, Infectious Diseases Protocol - Ontario Public Health Standards, 2022.](#)

Additional Resources

1. Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.
2. [Simcoe Muskoka HealthSTATS: Giardia](#)
3. [PHO. "Giardiasis", Dec 2022.](#)