

# Cyclosporiasis

## Reporting Obligations

Cyclosporiasis 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:

*Cyclospora cayetanensis* is a coccidian protozoan; oocysts (rather than cysts) are passed in stools and become infectious days to weeks following excretion.

### Clinical Presentation:

Watery diarrhea is the most common symptom and can be profuse and protracted. Anorexia, nausea, vomiting, substantial weight loss, flatulence, abdominal cramping, myalgia, and prolonged fatigue also can occur. Low grade fever occurs in approximately 50% of patients. Biliary tract disease also has been reported. Infection usually is self-limited, but untreated people may have remitting, relapsing symptoms for weeks to months. Asymptomatic infection has been documented most commonly in settings where Cyclosporiasis is endemic.

### Modes of transmission:

Both foodborne and waterborne outbreaks have been reported. Most of the outbreaks in the United States and Canada have been associated with consumption of imported fresh produce including Guatemalan raspberries and Thai basil. Investigations done by the Canadian Food Inspection Agency in the early 2000's indicated that fresh fruits and vegetables (berries, basil and mesclun lettuce) were sources of *Cyclospora* infection. *Cyclospora* is not naturally found in or on fresh fruits and vegetables, or any other foods. However, it is suspected that food contamination occurs during cultivation, harvest, packaging, or transportation through contact with contaminated water or infected workers.

Direct person-to-person transmission is unlikely, as excreted oocysts take days to weeks under favorable environmental conditions to sporulate and become infective. The oocysts are resistant to most disinfectants used in food and water processing and can remain viable for prolonged periods in cool, moist environments.

### Incubation Period:

Incubation period is approximately 7 days and ranges from 2 to 14 days.

### Period of Communicability:

Direct person-to-person transmission is unlikely. Low-level

shedding of oocysts is common, even in persons who are symptomatic. Excreted oocysts take days to weeks under favorable environmental conditions to sporulate and become infective.

## Risk Factors/Susceptibility

- Consumption of fresh herbs, berries, raw produce, potentially contaminated water
- Recreational water contact
- Travel outside the province in seven days preceding illness

## Diagnosis & Laboratory Testing

Diagnosis by demonstration of *Cyclospora cayetanensis* oocysts (by morphologic criteria) or *Cyclospora* deoxyribonucleic acid (DNA), by polymerase chain reaction (PCR) from an appropriate clinical specimen (e.g., stool, duodenal/jejuna aspirate, small bowel biopsy).

### TESTING INFORMATION & REQUISITION

## Treatment & Case Management

Treatment is under the direction of the attending health care provider.

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 antidiarrheal 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.

Provide education about the illness, hand hygiene, safe food handling and on preventing the spread of infection. This includes washing hands after using sanitary facilities and before handling food; washing fresh fruits and vegetables; avoiding foods from questionable sources such as roadside vendors when travelling and avoiding consumption of surface water without prior treatment.

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. [Simcoe Muskoka HealthSTATS: Cyclosporiasis](#)
2. [CDC. "Parasites—Cyclosporiasis"](#)
3. [Public Health Ontario. "Cyclosporiasis". Dec 2022.](#)