

# Cryptosporidiosis

This fact sheet is for informational purposes only. It is not intended to take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

## What is cryptosporidiosis?

Cryptosporidiosis (krip-toh-spo-ri-dee-oh-sus) is a diarrheal disease caused by microscopic parasites, *Cryptosporidium*, that can live in the intestines of many mammals, including humans. Although there are many species of *Cryptosporidium*, only one species, *Cryptosporidium parvum*, is thought to cause infection in humans.

During the past 20 years, *cryptosporidium* infection has become recognized as a common cause of waterborne disease in humans.

## How common is cryptosporidiosis?

In Ontario, between 2003 and 2009, there was an average of two to three confirmed cases of cryptosporidiosis reported per 100,000 persons each year.<sup>1</sup>

## What are the symptoms of cryptosporidiosis?

Persons infected with *Cryptosporidium* may have a variety of intestinal symptoms, including:

- watery diarrhea or loose stool
- stomach cramps or pain
- dehydration
- nausea
- vomiting
- low-grade fever, and
- weight loss

Symptoms of cryptosporidiosis usually begin anywhere from one to 12 days (average of seven days) after becoming infected. The symptoms generally last 10 to 14 days, although occasionally they may last longer.

Persons infected with *Cryptosporidium* may not have any symptoms. These asymptomatic individuals can still pass the disease on to others.

*Cryptosporidium* infection can be life-threatening for individuals with weakened immune systems, such as people with HIV/AIDS, those undergoing chemotherapy treatment or persons taking immunosuppressive medication.

If you have any signs and symptoms of illness, and you have exposure to possible sources of *Cryptosporidium* parasite contact your physician.

## How is cryptosporidiosis spread?

*Cryptosporidium* forms spore- or egg-like cells called oocysts, which can survive outside the body for long periods of time. The oocysts are resistant to heat, cold and chlorine-based disinfectants.

*Cryptosporidium* oocysts are released with the bowel movements of infected humans or animals.

You can become infected by:

- ingesting [contaminated drinking or recreational water](#) (water that is unsafe to drink)
- touching your mouth with contaminated hands

- putting something in your mouth that has come into contact with the droppings of infected animals or stool of infected humans
- eating raw or undercooked food that is contaminated, or
- exposure to feces of an infected individual through sexual contact.

## How is cryptosporidiosis diagnosed and treated?

Cryptosporidiosis is usually diagnosed by examination of stool samples. Patients may be asked to submit multiple stool samples because detection of *Cryptosporidium* can be difficult.

Most people with healthy immune systems will recover without treatment. Treatment of cryptosporidiosis usually involves treating the symptoms only. For example, persons with diarrhea should generally drink lots of liquids to avoid dehydration.

If you think you have cryptosporidiosis you should see your doctor for testing, advice and treatment.

## How can you prevent cryptosporidiosis?

The most important preventative measure is good hygiene.

Practice good [hand hygiene](#). Wash your hands with soap and water:

- after using the toilet
- after changing diapers
- after assisting others with the toilet
- after contact with animals
- after working in the garden, and
- before handling food and consuming food

Avoid drinking water from shallow wells, rivers, lakes or streams. Only drink water that you know is uncontaminated. If you are not sure, treat the water yourself, for example, by boiling for at least five minutes.

Follow any boil water advisory issued by your local authorities.

Peel raw vegetables and fruits before eating. Use uncontaminated water to wash fruits and vegetables.

Avoid swallowing water while swimming in lakes, rivers or pools.

Persons who are infected with *Cryptosporidium* should avoid swimming in recreational water for at least two weeks after diarrhea stops.

Cryptosporidiosis has been associated with camping and travelling. Campers and travellers should be aware if cryptosporidiosis is common in the area they will be visiting. For more information, consult a [travel medicine clinic](#) to assess personal risk and appropriate preventive measures.

## What causes cryptosporidiosis outbreaks?

Community-wide outbreaks have occurred in situations where water treatment plants were unable to fully remove the *Cryptosporidium* oocytes from drinking water, especially during spring time run-off. For example, outbreaks due to *Cryptosporidium*-contaminated municipal water supply have occurred in Ontario (1996), British Columbia (1997) and Saskatchewan (2001).

Outbreaks have also been caused by contamination of recreational water.

## References

1. Ontario Ministry of Health and Long-Term Care, integrated Public Health Information System (iPHIS) database, extracted April 2010.
2. Heymann. D.L. "Control of Communicable Diseases Manual". 19th Edition. 2008. American Public Health Association: Washington D.C.
3. US [Centers for Disease Control and Prevention website](#)
4. [BC Centre for Disease Control](#) website