

CRYPTOSPORIDIUM

What is Cryptosporidium?

Cryptosporidium infection is caused by microscopic parasites called *Cryptosporidium parvum*. These parasites are found worldwide, thus including New Brunswick. The parasites live in the intestines of infected people and animals, like cattle. The parasites cause gastrointestinal illness and are passed in the feces. Cryptosporidium parasites are one of the most common causes of diarrhea.

What are the symptoms?

Symptoms usually appear two to ten days after a person becomes infected. Most persons who become ill have diarrhea, stomach cramps, nausea, vomiting, and mild fever. Symptoms usually last about two weeks, and may come and go before the illness ends. Some persons who are infected may not have any symptoms but can still spread the bacteria.

How is Cryptosporidium spread?

Cryptosporidium parasites are passed in the feces of infected persons and animals. The parasites can be found in soil, food, water or on surfaces contaminated with feces. The parasites are spread by person to person contact, by animal to person contact, by eating contaminated food, or drinking contaminated water. Cryptosporidium parasites are protected by an outer shell that allows it to survive outside the body for long periods of time. Drinking untreated or improperly treated water is the most common method of transmission.

Some examples of how the parasites can be spread are:

- Drinking untreated water from lakes and streams contaminated with animal feces;
- Swallowing contaminated water while swimming in lakes, streams, swimming pools and hot tubs;
- By touching your mouth with contaminated hands after handling an infected cow or calf.

How is Cryptosporidium infection diagnosed?

Diagnosis of infection is based on assessment of clinical symptoms by a health care provider and laboratory testing of a stool sample.

Who is at risk of Cryptosporidium infection?

Anyone exposed to the parasite can become infected. Young children, the elderly, and persons with weakened immune systems are at greater risk of more serious disease.

How can Cryptosporidium infection be prevented?

Use good environmental management. Flush or discard any stool in the toilet and clean surrounding area using hot water and detergent. A chlorine-based disinfectant is recommended.

Practice good personal hygiene. Wash hands thoroughly with soap and water after using the toilet or changing a diaper; after handling animals or contact with animal feces, after handling raw meats; and before preparing or eating food.

Take food safety precautions. Wash and/or peel all raw vegetables and fruits before eating. Thoroughly cook all meats (meat, poultry and seafood). Prevent contact of cooked foods with raw poultry and other meat. Drink and eat only pasteurized dairy products (milk, cheese, yogurt and ice cream).

Drink properly treated water. Avoid swallowing recreational waters from swimming pools and hot tubs. Do not drink untreated surface water from lakes or streams. Boiling your water for 1 minute will kill all known pathogens like cryptosporidium or E. coli. Test your private well drinking water twice per year for presence of bacteria. An E. coli bacteria test is used as an indicator for fecal contamination in drinking water.

How is Cryptosporidium infection treated?

Persons with diarrhea should: drink plenty of liquids to avoid dehydration; stay home when ill; and practice good personal hygiene like hand washing. Avoid preparing food for others while you have symptoms and for 48 hours after you recover. Consult your health care provider for advice and treatment if you have bloody or severe diarrhea; prescription medicines can be used.

What is the Public Health response?

Health care providers and laboratories are required to confidentially notify cases to Public Health. Public Health staff may investigate to find out how the infection occurred, identify other people who may be at risk of infection, implement control measures, and provide advice as necessary; including exclusion of infected workers in high risk occupations like persons involved in food handling, direct patient care, and care of the young (daycare) or the elderly (institutional settings).

Further Information

Please contact your health care provider, local Public Health office, or Telecare 811.

Useful websites:

Public Health Agency of Canada http://www.phac-aspc.gc.ca

Health Canada http://www.hc-sc.gc.ca