

CRYPTOSPORIDIOSIS Q&A

What is cryptosporidiosis?

Cryptosporidiosis is a disease caused by the parasite *Cryptosporidium parvum*, which was first recognized as causing disease in humans in 1976. Few people had heard of cryptosporidiosis until 1993, when over 400,000 people in Milwaukee, Wisconsin became ill with diarrhea after drinking water contaminated with the parasite. The *Cryptosporidium* parasite is protected by an outer shell that allows it to survive outside the body for long periods of time and makes it very resistant to chlorine-based disinfectants.

Who gets cryptosporidiosis?

Persons at increased risk for cryptosporidiosis include persons drinking or swimming in contaminated water, or persons who might come in direct contact with feces while caring for a person infected with cryptosporidiosis at home or in a medical facility. In addition, child care workers, children in diapers who attend day care centers, persons exposed to human feces by sexual contact, people who attend petting zoos, and veterinarians that take care of sick animals, especially cows and cattle, are at risk. Persons with weakened immune systems are at risk of severe disease. Examples include those with HIV/AIDS; cancer and transplant patients who are taking certain immunosuppressive drugs; and those with inherited diseases that affect the immune system.

How is cryptosporidiosis spread?

Cryptosporidiosis is spread through the contaminated stool of infected persons or animals. Humans become infected when they swallow the *Cryptosporidium* parasite, which is too small to be seen with the naked eye. Contaminated water, raw or undercooked food, and unpasteurized milk may be sources. Hand-to-mouth transfer of oocysts from surfaces that may have become contaminated with stool can also transmit the disease.

What are the symptoms of cryptosporidiosis?

Although some persons may not have symptoms, others have watery diarrhea, stomach cramps, nausea,

and slight fever. These symptoms may lead to weight loss and dehydration. In otherwise healthy persons, these symptoms usually last about 3-4 days, but can last up to 2 weeks. In persons with suppressed immune systems, the infection may continue and become life-threatening.

How soon do symptoms appear after exposure?

The average is about 6-7 days, with a range of 1-14 days.

When and for how long is a person able to spread *Cryptosporidium*?

Infectious oocysts, an egg-like form of the parasite, appear in the stool at the same time as symptoms. Oocysts continue to be excreted in the stool for up to 2 months after symptoms go away. They may continue to be infectious outside the body for 2-6 months in a moist environment.

How can a person find out if they have cryptosporidiosis?

See a physician. Since the routine stool examination used for most parasites usually fails to detect *Cryptosporidium*, a stool specimen should be examined using stains/tests available especially for this parasite. It is important for persons with a poorly functioning immune system to seek medical attention early in the course of their disease.

What is the treatment for cryptosporidiosis?

No effective cure is presently available for cryptosporidiosis. People who have normal immune systems improve without taking antibiotic or antiparasitic medications. The treatment recommended for this diarrheal illness is to drink plenty of fluids and to get extra rest. Physicians may prescribe medication to slow the diarrhea during recovery. For

people with weakened immune systems experimental medications are sometimes prescribed and nutritional support is often given.

How can cryptosporidiosis be prevented?

- Avoid water or food that may be contaminated
- Wash hands after using the toilet and before handling food
- If you work in a child care center where you change diapers, be sure to wash your hands thoroughly with plenty of soap and warm water after every diaper change, even if you wear gloves
- During community-wide outbreaks caused by contaminated drinking water, boil drinking water for 1 minute to kill the *Cryptosporidium* parasite. Allow water to cool before drinking it.
- Persons with weakened immune systems, particularly HIV-infected persons, should avoid drinking water directly from swimming pools, lakes or rivers, avoid unpasteurized milk or milk products, avoid exposure to calves, lambs, and places where these animals are raised, and wash hands after contact with pets and soil. They should discuss with their physicians whether it would be better to additionally treat their drinking water from the tap by boiling or using special filters or drink bottled water. Because any sexual activity that brings a person in contact with the feces of an infected partner greatly increases the risk for cryptosporidiosis, HIV-infected persons and AIDS patients should follow “safer sex” guidelines and avoid sexual practices that may result in contact with feces.
- If you are a caregiver for cryptosporidiosis patients, wash hands after bathing patients, emptying bedpans, changing soiled linen, or otherwise coming in contact with the stools of patients.
- If you have frequent contact with animals (e.g., work in a petting zoo, or as a veterinarian, especially after caring for sick calves), wash your hands frequently.
- If you have cryptosporidiosis, wash your hands often to prevent spreading the disease to other members of your household.

Where can I get additional information on cryptosporidiosis?

Contact the Georgia Division of Public Health, Epidemiology Branch, by email at gaepinfo@dhr.state.ga.us. The following web sites may be useful:

- CDC Cryptosporidiosis Fact Sheet – http://www.cdc.gov/ncidod/dpd/parasites/cryptosporidiosis/factsht_cryptosporidiosis.htm
- FDA Bad Bug Book – <http://vm.cfsan.fda.gov/~mow/chap24.html>