What is cryptosporidiosis?

Cryptosporidiosis (also referred to as “Crypto”) is a diarrheal disease caused by a parasite called \textit{Cryptosporidium parvum}.

Who gets cryptosporidiosis?

Anyone can get cryptosporidiosis, but it is more common in persons who are under two years of age, travel, work with animals, or are in close personal contact with someone who has this disease. People with weakened immune systems, such as people with HIV infection or those receiving chemotherapy, are more susceptible to the disease. \textit{Cryptosporidium} has also been responsible for outbreaks in children and staff in child care centers.

Where is \textit{Cryptosporidium} found?

\textit{Cryptosporidium parvum} is found worldwide, including the United States. It typically infects the small intestine of humans and animals. Any dog, cat, farm animal or wild animal, including birds, fish, and reptiles, can become infected, though calves are the most likely animal to be infected. When a person or animal is infected, the parasite reproduces and forms microscopic egg-like structures (oocysts) that are passed in the feces (stool) of the infected person or animal. Oocysts are shed in the stool from the time symptoms begin until several weeks after symptoms have stopped. Human sewage is treated to remove disease-causing organisms including \textit{Cryptosporidium}. Feces of infected animals can be present in the soil or washed into streams and lakes. The oocysts can survive six months or more in water, and are very resistant to disinfectants. The oocysts can contaminate surface water used for drinking, irrigation, or recreation.

How is cryptosporidiosis spread?

\textit{Cryptosporidium} is found in the intestines of infected humans and animals and is shed in stool. People or animals can become infected after swallowing the parasite when eating contaminated food, handling objects contaminated with fecal matter, or after coming into contact with the stool of a person or animal that is infected. Unwashed hands can transfer the parasite to the mouth, infecting the person. Persons can also become infected by swallowing water that has been contaminated with the parasite in streams, rivers, lakes, or swimming pools.

What are the symptoms of cryptosporidiosis?

Cryptosporidiosis causes watery diarrhea and abdominal cramping. Vomiting and low-grade fever may occur. Symptoms can last one to two weeks. Some people can be infected but not have any symptoms of the disease. In persons with weakened immune systems, cryptosporidiosis can cause severe, life-threatening diarrhea. Persons at the greatest risk for severe illness include those with HIV infection, those receiving chemotherapy for cancer, or those who are taking drugs that suppress their immune system.

How soon after exposure do symptoms appear?

Symptoms usually develop two to ten days after exposure, with an average of seven days.
How is cryptosporidiosis diagnosed?
Cryptosporidiosis is diagnosed by examining stool samples under the microscope or by using molecular tests (e.g., polymerase chain reaction (PCR)) in the laboratory.

What is the treatment for cryptosporidiosis?
People with healthy immune systems usually recover without any medication. People with diarrhea should drink plenty of fluids to help prevent dehydration. Cryptosporidiosis is sometimes treated with anti-parasitic medication. Your healthcare provider will determine whether treatment is necessary.

How can cryptosporidiosis be prevented?
- Avoid water or food that may be contaminated, including unpasteurized milk. Do not drink water directly from streams, lakes, springs or any unknown water source. If you suspect your drinking water is unsafe, bring it to a rolling boil for one minute before using.
- Always wash hands with soap and water after using the toilet or changing diapers, before handling food, after handling manure from animals (especially from calves with diarrhea), and after gardening or other direct contact with soil.
- If you work in a child care center where you change children’s diapers, wash hands properly between each child and before handling food. If you use gloves, change gloves and wash hands between each child.
- If you take care of patients with cryptosporidiosis, wash hands after bathing patients, emptying bedpans, changing soiled linen, or whenever you come into contact with the patient’s stools.
- If you have cryptosporidiosis, wash your hands often to prevent spreading the disease to other members of your household.
- Persons with diarrhea should not use public swimming facilities while ill and for several weeks after symptoms have stopped.

Should people with cryptosporidiosis be excluded from school or work?
Because Cryptosporidium is passed in the stool, children and staff in child care centers, health care workers, and foodhandlers should not go to school or work while they have diarrhea. After diarrhea ends, persons may return to work or school, but they should carefully wash their hands after using the toilet. Cryptosporidium can still be passed in the stool for weeks after symptoms have stopped.

How can I learn more about cryptosporidiosis?
- If you have concerns about cryptosporidiosis, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at http://www.vdh.virginia.gov/local-health-districts/.
- Visit the Centers for Disease Control and Prevention website at http://www.cdc.gov/parasites/crypto/.

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