

Cryptosporidium on the Farm

What is *Cryptosporidium*?

Cryptosporidium is a parasite that causes the diarrheal illness cryptosporidiosis. Both the disease and the parasite are often called "Crypto." There are several types of Crypto but one type that causes illness in people is also found in the intestines of cattle.

What are the symptoms?

Symptoms of Crypto can include watery diarrhea, vomiting, stomach cramps, loss of appetite, weight loss, and a slight fever.

People usually get sick about 1 week after ingesting the parasite. The symptoms may go in cycles, with people feeling better for a few days and then feeling worse again before the illness ends.

How long does it last?

In healthy people, symptoms usually last 1-2 weeks. Treatment for Crypto may be available from your health care provider.

How is Crypto spread?

Crypto can be found in water, food, soil, or surfaces that have been contaminated with the feces of infected humans or animals. Crypto can survive outside the body and in the environment for long periods of time, even in swimming pools with adequate levels of chlorine.

People become infected with Crypto by swallowing the parasite. This can happen in several ways:

- Contact with farm animals. Cattle are the most common farm animal to have Crypto.
- Drinking raw milk.
- Swimming in water that has been contaminated by infected humans or animals like lakes, swimming pools or waterparks.

What should I do if I have symptoms?

- Contact your healthcare provider.
- Wash your hands often. Use soap and running water and wash for 20 seconds.
- Do not swim while you have diarrhea. If you are diagnosed with Crypto, you should not swim for 2 weeks after your diarrhea has stopped.

Where is Crypto found on the farm?

The most common source of Crypto on the farm is in calves and their manure. Infection usually appears in calves 1 to 4 weeks old. Calves - like people - get Crypto by swallowing the parasite. Signs of illness in calves are diarrhea (scours), loss of appetite, and weight loss. Adult cows can also be infected but may not show any signs of infection.

Crypto can also be found in goats, sheep, deer, and horses and their manure. The parasite can be found anywhere that fecal contamination occurs, such as animal bedding, food and water containers, and on gates and pens.

How can Crypto be prevented in livestock and the farm environment?

Because adult animals infected with Crypto do not normally show any signs of illness, it is not practical to identify and remove infected animals. It is more likely that a calf will be infected with Crypto and have diarrhea. If an animal does have diarrhea, it is important to isolate the sick animal so that it cannot spread Crypto or other diseases to the rest of the herd. Sick animals may continue to have Crypto in their feces for weeks after they are no longer sick.

- Good hygiene and sanitation practices can decrease the levels of Crypto found on the farm.
- Design feeders and waterers to keep manure out.
- Work with a veterinarian to diagnose and treat sick animals.

How can I prevent the spread of Crypto and other germs from animals to humans?

- **Wash your hands** with soap and running water for 20 seconds before eating or drinking, especially after working on the farm or handling materials that might be contaminated with manure.
- If no running water and soap is available, hand sanitizer may be used until you are able to wash your hands with soap and water.
- Avoid eating or drinking in barns or other areas where animals are housed.
- Wear dedicated clothing or coveralls and shoes when out in the barn. Remove barn clothing and shoes prior to entering the main part of the house to keep manure out of the house.
- Inform visitors to the farm of the importance of hand washing for preventing infections with Crypto and other germs.
- People with weakened immune systems (children < 5 years, people > 65 years, pregnant woman, and people with certain medical conditions) should avoid the barn and other animal areas if possible. People with weakened immune systems may stay sick for longer and have a harder time getting rid of the infection than those with a healthy immune system.
- Keep house pets out of the barn to keep them from becoming infected or tracking manure into the house.
- Provide play areas for children that are located away from calf housing or other areas of the farm that may be heavily contaminated with manure.
- Do not drink raw milk.
- If the farm has well water, it is a good idea to test the water once a year for total coliform bacteria. These bacteria do not cause any illness but their presence indicates that contamination has found its way into the well and disease causing organisms may also be present.

For more information, please visit the Minnesota Department of Health website at www.health.state.mn.us or contact Carrie Klumb at 651-201-5414. For more information on the Upper Midwest Agricultural Safety and Health (UMASH) Center, please visit the website at www.umash.umn.edu.