

# SOUTH DAKOTA PUBLIC HEALTH LABORATORY

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# **Diseases Fact Sheet - Cryptosporidiosis**

# **South Dakota Department of Health**

Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

#### What is it?

Cryptosporidiosis is an intestinal illness caused by a microscopic parasite called Cryptosporidium. This organism has long been recognized as a parasite of a wide variety of vertebrates but it was not noted to cause disease in man until 1976. Since then, it has been identified as a cause of sporadic human gastrointestinal disease as well as large common source outbreaks, particularly water-borne outbreaks.

## Who gets cryptosporidiosis?

Anyone can get cryptosporidiosis, but there are some groups of people who are at increased risk for getting it such as children and care providers at day care centers, people who drink contaminated water, people exposed to human feces through sexual contact or while caring for a person with cryptosporidiosis, and people that work closely with animals, especially domestic animals.

#### How is the parasite spread?

A person can become infected by drinking water that contains cysts (eggs), by eating food contaminated with cysts, by having direct hand contact with stools from infected animals or humans; or by hand-to-mouth transfer of cysts from surfaces that may have become contaminated with stool from an infected animal or person. It takes very few cysts to cause an infection.

#### What are the symptoms of cryptosporidiosis?

The major symptoms are abdominal cramps and watery diarrhea. Less commonly, there are nausea, vomiting, fatigue and low grade fever. These may lead to weight loss and dehydration.

In otherwise healthy people, these symptoms usually last one to two weeks. In persons with weakened immune systems (such as persons who are HIV infected, persons undergoing cancer treatment, or who have had an organ or bone marrow transplant) the illness can be very severe and persist for weeks to months.



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## How soon do symptoms appear?

The incubation period for cryptosporidiosis ranges from two to 12 days and averages about seven days.

## How long can an infected person carry the parasite?

Carriage tends to wax and wane over a period of two to four weeks in people with healthy immune systems. Due to immunodeficiency, AIDS patients have difficulty clearing their infections, the parasite tends to persist for months and produces severe disease that contributes to death. In other groups of immunodeficient patients, onset of illness can be explosive, but tends to last only slightly longer than in otherwise healthy people.

#### Where are Cryptosporidium parasites found?

Cryptosporidium has been found in infected people (with or without symptoms) and domestic animals, particularly cattle; contaminated drinking water and recreational waters.

#### How is cryptosporidiosis treated?

Many people recover from illness without any treatment. Drinking plenty of fluids and electrolyte replacement is often all that is needed to prevent dehydration. If your healthcare provider decides that treatment is needed, you may be prescribed a medication called nitazoxanide. It is unclear how beneficial this treatment is for people with weakened immune systems. Talk with your healthcare provider if you have questions about treatment options.

## What can be done to prevent the spread of cryptosporidiosis?

Washing hands is the most effective means of preventing transmission; especially after using the toilet, changing diapers, gardening, handling pets or other animals, caring for infected persons, and before handling or eating food.

Avoid drinking directly from rivers or lakes. Boil water for one minute if unsure about the safety of a water supply. Comply with water advisories issued by authorities. Avoid drinking unpasteurized milk or eating milk products that are unpasteurized.

Avoid sexual practices that could result in contact with feces. HIV infected or otherwise immunosuppressed persons should consider additional precautions to prevent exposure such as, avoid swallowing water or even immersing the face when swimming; avoid contact with animals under six months of age, strays and animals with diarrhea. HIV infected persons may elect to take independent action to minimize the risk of waterborne cryptosporidiosis by boiling for one minute water intended for drinking or making ice. When eating out, consider alternatives to drinks made with cold tap water or drink bottled water.



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# **Related Sites:**

• Centers for Disease Control and Prevention