

## **What is giardiasis?**

Giardiasis is a gastrointestinal infection caused by the water-borne parasite *Giardia lamblia*. *Giardia* can be found in two life cycle stages, a cyst and a trophozoite.

## **What is a Cyst?**

A cyst is a thick protective wall that surrounds the *Giardia* cell. When *Giardia* makes the protective wall the cell then goes into a dormant or resting stage. In the resting stage the *Giardia* cyst is protected from temperature changes, pollution, and food or water shortages. The *Giardia* cyst can survive for a long time in the water or on other surfaces without food and water. The *Giardia* cyst is the infective stage of the organism and is responsible for transmission of the disease.

## **What is a Trophozoite?**

After a person swallows a *Giardia* cyst the parasite comes out of the cyst and becomes a trophozoite. The trophozoite lives, feeds and reproduces in the intestines.

## **How do people get infected with *Giardia*?**

A person has to eat or drink the *Giardia lamblia* cyst form. Drinking directly from contaminated lakes or streams can cause illness, even if the water appears clean. Infection can occur after ingestions of as few as 10-25 cysts. Once an animal or person has been infected with *Giardia* the parasite lives in the intestine and is passed into the environment in the stool. Both cysts and trophozoites can be found in the feces. Ingestion of one or more cysts may cause disease.

Refer to [http://health.utah.gov/epi/fact\\_sheets/recreationaldrinkingwater.pdf](http://health.utah.gov/epi/fact_sheets/recreationaldrinkingwater.pdf) "Recreational and Drinking Water Waterborne Disease Prevention" to learn more about preventing a giardiasis infection.

## **Where is *Giardia* found?**

Giardiasis affects all age groups in humans, and *Giardia* cysts can be found in dogs, beavers and other domestic and wild animals. *Giardia* is found in soil, food, water, or surfaces that have been contaminated with the feces from infected humans or animals. Giardiasis has a worldwide distribution and, *Giardia* is the most common intestinal parasite identified by public health laboratories in the United States.

## **What are the symptoms of giardiasis?**

The most common symptoms of giardiasis are diarrhea with loose and pale greasy stools, gas, or flatulence, stomach cramps, bloating, weight loss, and fatigue. Fever and vomiting are rare.

Many people who become infected with *Giardia* do not have symptoms. People who do not have symptoms can still cause infection. Young children and pregnant women may be more likely to get dehydrated from diarrhea and should drink plenty of fluids while ill. Some people who become infected develop a chronic syndrome of diarrhea, malabsorption, and weight loss.

## **How soon do symptoms appear?**

After you eat or drink a *Giardia* cyst it may take 1– 4 weeks before you get sick. Diarrhea usually begins within seven to ten days, but may be as early as five days or as late as 25 days after infection with *Giardia*.

### **Who gets giardiasis?**

Persons who drink untreated contaminated water are at highest risk for getting giardiasis. Giardiasis occurs throughout all age groups, although the prevalence is higher in children than adults. People who are immunocompromised can be at risk for developing chronic, symptomatic infections.

### **How is *Giardia* spread?**

Most community-wide epidemics have resulted from a contaminated water supply. Person-to-person transmission has been known to occur in childcare centers and in institutions for people with developmental disabilities. Staff and family members in contact with infected people in these settings can become infected as well.

### **How long can an infected person spread *Giardia*?**

The disease can be spread throughout the duration of illness. Treatment time varies depending on the drug prescribed.

### **How is *Giardia* diagnosed?**

Your health care provider will ask you to submit stool samples to check for the parasite. *Giardia* can be difficult to diagnose, so your provider may ask you to submit several stool samples over several days.

### **How is giardiasis treated?**

Several effective prescription drugs are available to treat *Giardia*. Treatment time varies depending on the drug prescribed.

### **Does everyone infected with *Giardia* need to be treated?**

No. Some people recover without treatment. Usually only persons with diarrhea require treatment.

### **Should an infected person be excluded from work or school?**

People with diarrhea (especially children in daycare centers or food handlers) should not go to daycare, school or work. They may return when diarrhea stops.

### **What can be done to stop the spread of giardiasis?**

Some general guidelines are:

1. Carefully wash hands after using the toilet or changing diapers. Refer to [http://health.utah.gov/epi/fact\\_sheets/handwash.html](http://health.utah.gov/epi/fact_sheets/handwash.html) for good hand washing techniques.
2. Dispose of animal waste properly so water sources will not be infected.
3. Do not drink water that has not been properly treated.
4. Wash all fruits and vegetables thoroughly before eating.

Additional information regarding prevention of waterborne diseases, including giardiasis, is available

at: [http://health.utah.gov/epi/fact\\_sheets/recreationaldrinkingwater.pdf](http://health.utah.gov/epi/fact_sheets/recreationaldrinkingwater.pdf)

**Where can I get more information?**

- Your personal doctor
- Your local health department, listed in your telephone directory
- The Utah Department of Health, Bureau of Epidemiology (801) 538-6191
- The Center for Disease Control and Prevention (CDC) at [http://www.cdc.gov/ncidod/dpd/parasites/giardiasis/factsht\\_giardia.htm](http://www.cdc.gov/ncidod/dpd/parasites/giardiasis/factsht_giardia.htm)

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