



# Giardiasis

## What is giardiasis?

The most common intestinal infection caused by a parasite (*Giardia duodenalis*) in the United States. This parasite is often found in streams, springs, ponds, lakes, and other natural bodies of water.

## What are the signs or symptoms?

- Acute watery diarrhea.
- Excessive gas (flatulence).
- Distended and painful abdomen.
- Decreased appetite.
- Weight loss.
- Many individuals are infected and infectious without signs or symptoms.
- Some individuals may have symptoms that last for weeks to months.

## What are the incubation and contagious periods?

- Incubation period: 1 to 3 weeks.
- Contagious period: Highly variable but can be months. Most contagious during diarrhea phase.

## How is it spread?

- Fecal-oral route: Contact with feces of children who are infected. This generally involves an infected child contaminating their own fingers and then touching an object that another child touches. The child who touched the contaminated surface then puts their fingers into their own mouth or another person's mouth.
- Ingestion of contaminated water (from people or animals) or food. Drinking water from an untreated source or playing or swimming in water contaminated with human or animal feces.
- Water tables and other water play have been associated with outbreaks of giardiasis in early childhood education (ECE) facilities.

## How do you control it?

- Use good hand-hygiene technique at all the times listed in Chapter 2, especially after toilet use or handling soiled diapers and before anything to do with food preparation or eating.
- Ensure proper surface disinfection that includes cleaning and rinsing of surfaces that may have become contaminated with stool (feces) with detergent and water and application of a US

Environmental Protection Agency–registered disinfectant according to the instructions on the product label.

- Ensure proper cooking and storage of food.
- Exclude infected staff members who handle food.
- Exclusion for specific types of symptoms (see the section Exclude from educational setting?).

**Note:** Treatment and exclusion of carriers (individuals who have the parasite but are not sick) is not effective for outbreak control.

## What are the roles of the educator and the family?

- Usually, educators will not know a child has a *Giardia* infection because the condition is not distinguishable from other common forms of watery diarrhea. The following recommendations apply for a child with diarrhea from any cause (see Diarrhea Quick Reference Sheet):
  - Report the condition to the staff member designated by the ECE program or school for decision-making and action related to care of ill children and staff members. That person, in turn, alerts possibly exposed family and staff members to watch for symptoms and notifies the Child Care Health Consultant.
  - Ensure staff members follow the control measures listed in the section How do you control it?
  - Report outbreaks of diarrhea (more than 2 children and/or staff members in the group) to the Child Care Health Consultant, who may report to the local health department.
- If a child has a known *Giardia* infection
  - Follow the advice of the child's health professional.
  - Report the infection to the local health department, as the health professional who makes the diagnosis may not report that the infected child is a participant in an ECE program or school, and this could lead to delay in controlling the spread of the disease.
  - Reeducate staff members to ensure strict and frequent handwashing, diapering, toileting, food handling, and cleaning and disinfection procedures.
  - In an outbreak, follow the directions of the local health department.
- Administer medication as prescribed. Some infections are self-limited and treatment is not required.

## Exclude from educational setting?

### Yes, if

- The local health department determines exclusion is needed to control an outbreak.
- Stool is not contained in the diaper for diapered children.
- Diarrhea is causing “accidents” for toilet-trained children.
- Stool frequency exceeds 2 stools above normal for that child during the time the child is in the program because this may cause too much work for educators and make it difficult for them to maintain sanitary conditions.
- There is blood or mucus in stool.
- The ill child’s stool is all black.
- The child has a dry mouth, no tears, or no urine output in 8 hours (suggesting the child’s diarrhea may be causing dehydration).
- The child is unable to participate and staff members determine they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

## Readmit to educational setting?

### Yes, when all the following criteria are met:

- Once diapered children have their stool contained by the diaper (even if the stools remain loose) and when toilet-trained children do not have toileting accidents
- Once stool frequency is no more than 2 stools above normal for that child during the time the child is in the program, even if the stools remain loose
- When the child is able to participate and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group

## Comments

- *Giardia* organisms are common in the stools of young children in ECE programs and schools.
- Outbreaks in educational settings may occur.
- For educators and children without symptoms (ie, recently recovered or exposed), testing stool cultures, treatment, and exclusion are not necessary.
- Negative *Giardia* stool test results are not required for readmission to an educational setting.

