

GIARDIASIS FACT SHEET

Overview

Giardiasis is a protozoan infection which causes acute, diarrheal illness. *Giardia*, a flagellate protozoan, is a microscopic parasite that feeds off the human or animal host once ingested. This microscopic parasite lives in the intestines of the host and can be passed in the feces. *Giardia* has been found in wild and domesticated animals, such as the beaver, and water sources can be contaminated from these animal sources.

Signs and Symptoms

Symptoms can begin three to 25 days after exposure; however, onset is typically within 10 days after exposure. Typical symptoms of giardiasis include diarrhea, gas, greasy stool, abdominal/stomach cramps, nausea, vomiting, and potential dehydration. Less common symptoms include itchy skin, hives, and swelling in the eyes or joints. Symptoms can last one to two weeks. Asymptomatic infection can occur. Children may be at most risk for giardiasis complications as prolonged infection may lead to malnutrition and developmental delays in physical and mental growth.

Causes and Transmission

A person can become ill with giardiasis from ingestion of food or water contaminated with *Giardia* cysts. A person infected with giardiasis may have *Giardia* cysts in their stool. If that person does not wash their hands properly after defecation, that person may contaminate surfaces they touch. If others touch those contaminated surfaces, and then touch their mouth, this can result in fecal-oral transmission. Sexual activity that involves anal-oral contact can also spread the parasite. *Giardia* outside the body can survive for weeks or months.

The risk of humans acquiring *Giardia* infection from dogs or cats is minimal. The type of *Giardia* that infects humans is typically not the same type that infects dogs and cats.

Risk Factors

Anyone can get giardiasis. Those at greater risk include:

- Infants or children in a childcare environment, particularly those who are still in diapers;
- Household contacts or caregivers of people with giardiasis;
- People who consume water (even ice) from untreated water sources (lakes, streams) where *Giardia* may be present;

- Campers who do not implement good hand hygiene or consume untreated water;
- Swimmers who swallow recreational water which might contain *Giardia*; and
- Sexual contact that might include exposure to human feces.

Complications

Children and pregnant women are most susceptible to dehydration as a result of infection with *Giardia*. 2

Tests and Diagnosis

A healthcare provider may ask for multiple stool (feces) specimen for examination and diagnosis of giardiasis. Several stool specimens may be requested over a period of a few days, as the *Giardia* cysts may be excreted in stool sporadically. An ova and parasite examination can identify *Giardia* cysts in stool, as can a newer antigen rapid test.

Treatments

A healthcare provider may prescribe a medication to treat *Giardia* infection such as metronidazole, tinidazole, or nitazoxanide. Other treatments may be considered for children or pregnant women. In some instances, giardiasis can be self-resolving.

Prevention

These steps can help control and prevent the spread of giardiasis:

- Wash your hands, especially before eating and after use of the bathroom.
- Do not drink water that may be contaminated by human or animal feces.
- Do not eat foods that may be contaminated with human or animal feces.
- Avoid contact with feces during sex.

Disease Patterns

Giardiasis is a global disease. It infects nearly two percent of adults and six percent to eight percent of children in developed countries worldwide. Nearly 33 percent of people in developing countries have had giardiasis. In the United States, *Giardia* infection is the most common intestinal parasitic disease affecting humans. *Giardia* infection tends to be higher in late summer. Each year, between 650-1100 cases of giardiasis are reported to the Pennsylvania Department of Health.

Additional Information

Food handlers who develop giardiasis, or any other diarrheal illness, should be excluded from duties involving food preparation. Additionally, infants or children who cannot control their bowel habits should be excluded from child care settings when experiencing diarrheal episodes. Persons in these high-risk settings for transmission should be excluded until *Giardia* cysts are no longer present in their stool. Persons who are not in high-risk settings for spreading the parasite may

return to their everyday activities with strong adherence to hand hygiene when using the toilet. Antibiotic treatment can speed up recovery. Please consult your local health department for more information.

Centers for Disease Control and Prevention: <http://www.cdc.gov/parasites/giardia/>

This fact sheet provides general information. Please contact your physician for specific clinical information.

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