

Giardiasis
Report to the Maine CDC 1-800-821-5821

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Definition

Giardiasis is caused by a parasite called *Giardia*.

Signs and symptoms

Some persons have no symptoms. Symptoms of *Giardia* infection include: diarrhea, gas, greasy stools that tend to float, stomach cramps, upset stomach, nausea, and dehydration. Symptoms may last 2 to 6 weeks. Sometimes, symptoms might seem to resolve, only to come back again after several days or weeks.

Transmission

Giardia infections are mostly the result of exposure to a contaminated water source (drinking or recreational water) or from person to person (the parasite passes from stools or soiled fingers to the mouth of another person). Transmission can also occur from infected animals to persons. Rarely is *Giardia* transmitted by food, mostly if the food is contaminated by an ill food handler. Swallowing as few as 10 cysts might cause illness. An infected person might shed 1-10 billion cysts daily.

Diagnosis

Giardiasis is diagnosed by clinical symptoms and laboratory tests. Laboratory tests include testing of stool for the presence of *Giardia* cysts or trophozoites or *Giardia* DNA.

Treatment Recommendations

If symptoms are noted, the child should be referred to their healthcare provider. Several drugs can be used to treat *Giardia* infections. They include:

When signs and symptoms are severe or the infection persists, doctors usually treat giardiasis with medications such as:

- Metronidazole (Flagyl). Metronidazole is the most commonly used antibiotic for giardia infection. Side effects may include nausea and a metallic taste in the mouth. Don't drink alcohol while taking this medication.
- Tinidazole (Tindamax). Tinidazole works as well as metronidazole and has many of the same side effects, but it can be given in a single dose.
- Nitazoxanide (Alinia). Because it comes in a liquid form, Nitazoxanide may be easier for children to swallow. Side effects may include nausea, flatulence, yellow eyes and brightly colored yellow urine.

There are no consistently recommended medications for giardiasis in pregnancy because of the potential for adverse drug effects to the baby. If your symptoms are mild, your doctor may recommend delaying treatment until after the first trimester. If treatment is necessary, discuss the best available treatment option with your doctor.

Role of the School Nurse

Prevention

- Provide education to students and staff regarding good hand washing with soap and water
- Provide education to students and staff regarding safe drinking water sources
- Avoid swallowing water when swimming or playing in lakes, ponds, streams, swimming pools, and backyard “kiddie” pools
- If school uses well water, review school policies on water testing

Exclusions

Students should be excluded from school and school activities while symptomatic with diarrhea; and from recreational water related activities for 2 weeks after symptoms have resolved

Reporting Requirements

- *Giardiasis* is a reportable disease – report to 1-800-821-5821

Resources:

- Maine CDC *Giardia* website (including fact sheet)
<http://www.maine.gov/dhhs/boh/ddc/epi/disease/giardia.shtml>
- Maine CDC Recreational Water Illness (RWI) website
<http://www.maine.gov/dhhs/boh/ddc/epi/healthyswimming/index.shtml>
- Maine CDC Well Water <http://wellwater.maine.gov>
- Federal CDC *Giardia* website <http://www.cdc.gov/parasites/giardia/>
- Federal CDC Healthy Swimming website <http://www.cdc.gov/healthywater/swimming/>
- Federal CDC A Guide to Water Filters http://www.cdc.gov/parasites/crypto/gen_info/filters.html