

Giardiasis

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 or abdominal cramps, upset stomach, vomiting, nausea and dehydration. Other, less common symptoms include itchy skin, hives, and swelling of the eye and joints. In children, severe giardiasis might delay physical and mental growth, slow development, and cause malnutrition. Sometimes, the symptoms of giardiasis 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 water or recreational water) or person to person transmission (the parasite passes from stools or soiled fingers of one person 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. Persons who are more likely to become infected with *Giardia* include children attending day care; child care workers; parents or caretakers of infected children; backpackers, hikers, and campers who drink unfiltered, untreated water; people who drink from shallow wells; persons with history of travel to areas where the disease is common and persons exposed to human feces through sexual contact.

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.

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

Treatment Recommendations

- If symptoms are noted, the child should be referred to their primary care provider.
- Several drugs can be used to treat *Giardia* infections.

Exclusions

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

Reporting Requirements

- *Giardia* 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