How does Giardia cause illness?

In the environment, Giardia is found primarily in ground water (springs, lakes, ponds, and streams) in the form of microscopic cysts. Giardia infection can be caused by ingesting Giardia cysts. Once Giardia cysts enter the body orally, they release a mature parasite (trophozoite) that attaches to the intestinal wall. It is this attachment which causes symptoms of the disease. The parasites can then multiply and create more cysts which will be excreted in the feces.

What should I do, if I believe I have Giardiasis?

If you believe that you may have Giardiasis, or if you would like more information about the infection, please speak with your healthcare provider. Giardiasis can be diagnosed by examining a fecal sample with a microscope or immunoassay test.

Sources:

Vermont Department of Health (2017, April 3rd). Personal interview.


Giardia lifecycle, courtesy of CDC PHIL #3394
What is “Beaver Fever”?

- “Beaver fever” is just one of many names for an infection caused by *Giardia intestinalis*, a waterborne protozoan parasite
- In addition to “Beaver Fever,” Giardiasis is sometimes referred to as “Hiker’s Disease” or “Wilderness Trots”
- It is the most common waterborne parasitic gastrointestinal infection worldwide

What do I need to know?

- Vermont has the highest incidence of Giardiasis in the nation
- The Vermont Department of Health has indicated that simply living in Vermont is a risk factor for infection
- Giardia can be found in almost all ground water in Vermont, including lakes, ponds, rivers, and streams
- Giardia infection can mimic other illnesses and lead to unnecessary treatments and costs

How can I become infected?

It is possible to become infected by ingesting as few as 10 Giardia cysts. While the parasite is primarily found in ground water, there are many ways that you may come in contact with these infective cysts:

- Ingesting water harboring Giardia parasites
- Eating food(s) that have been exposed to water containing Giardia cysts
- Coming in contact with people who are infected and lack good hand sanitizing practices
- Coming in contact with domestic or wild animals that have Giardiasis

How can I avoid infection?

Because giardia is so common in the environment in Vermont, it is often difficult to completely avoid becoming infected. A few ways that you can avoid exposure to Giardia are:

- Avoid drinking unfiltered and untreated water
- Avoid swimming in lakes, ponds and other sources of ground water
- Practice good hand hygiene techniques
- Wash fruits and vegetables that may have been exposed to Giardia

What are the symptoms of Giardiasis?

While most people will experience some symptoms after becoming infected, a small number of people will exhibit no symptoms. Others may develop chronic Giardiasis, if the infection is not eliminated by the immune system.

- Acute Giardiasis symptoms include diarrhea, abdominal bloating, upset stomach, nausea, and weight loss. Symptoms may last anywhere from a few days to months.
- Chronic Giardiasis may mimic other diseases such as gallbladder or peptic ulcer disease, irritable bowel, chronic fatigue syndrome, and even cancer. It has also been linked to eye lesions, arthritis, muscular weakness, malnutrition, growth stunting, and impaired cognitive function.

How is Giardiasis treated?

Giardiasis is often easy to treat with a simple oral medication. However, if the infection becomes chronic, it may mimic other diseases making it difficult for a healthcare provider to diagnose and treat the infection.