

“Beaver Fever” --- Giardiasis in Vermont

Summer is fast approaching in Vermont, and many are looking forward to spending more time outdoors with family, friends, and four-legged companions. Many Vermonters are familiar with the term “Beaver Fever” and its association with illness after drinking from streams, ponds, lakes, or other untreated water sources. “Beaver Fever,” or Giardiasis, is caused by a single-celled parasite called *Giardia intestinalis*. Giardia is found in every state in the United States and is, in fact, the most commonly identified intestinal parasite in the world. Giardia infection is common in humans and both wild and domestic mammals.

So how could Giardia affect you? According to the most recent reports by the CDC, Vermont consistently has the highest rate of Giardia infection in the nation and has an incidence rate (number of new infections in the population at a given time) that is approximately three times higher than that of Maine, the state that ranks second in Giardia infection. A representative at the Vermont Department of Health indicated that simply living in Vermont is a risk factor to becoming infected, because Giardia is ubiquitous in our ground water. Since the risk of infection for Vermonters is so high, it is important to understand the transmission, symptoms, and treatment of this very common disease.

Giardiasis may be contracted through the drinking of contaminated water or by ingesting Giardia cysts after contact with a person or animal that has the infection. Once ingested, the Giardia cysts rupture, and the maturing parasite invades the intestinal wall. It is this invasion that tends to start many of the symptoms of Giardiasis. While some individuals may exhibit no symptoms of infection, most will experience abdominal cramps, bloating, nausea, weight loss, and bouts of diarrhea lasting anywhere from days to months. As the infection progresses and the parasite develops within the host, the infected person or animal will pass Giardia cysts in their feces posing a risk of infection to others. This can continue throughout the time a person is infected. In more extreme cases of untreated Giardiasis, the infection may linger resulting in chronic Giardiasis. Unfortunately, the symptoms of chronic Giardiasis may mimic health issues such as gallbladder or peptic ulcer disease, irritable bowel, chronic fatigue syndrome, and even cancer, making it difficult for a healthcare provider to diagnose the infection. Chronic giardiasis has also been linked with eye lesions, arthritis, muscular weakness, malnutrition, growth stunting, and impaired cognitive function.

If infection with Giardia is so common in Vermont, how can infection be prevented? Since this parasite lives in water, try to make sure that drinking water is obtained from a filtered or treated water source, rather than natural ground water found in springs, lakes, ponds, or rivers. Since swimming in the lakes and ponds of Vermont is common and may be difficult to avoid, be aware that infection is possible. In addition, when people or animals are infected with Giardia, they can release cysts in their feces. Poor hygiene and sanitation practices could lead to further ingestion and spread of Giardia, so practice good hand washing skills to avoid infection through contact with infected people or animals.

If you think that you may have Giardiasis or are worried about coming into contact with the parasite, please speak with your doctor. Giardia is easily treated with an oral medication. Many times, an acute Giardia infection is easily recognizable based on the history provided to the healthcare provider, but if the infection is not diagnosed and becomes chronic, it may be overlooked as a potential cause of illness and be mistaken for other similarly presenting diseases.