



**Missouri Coalition**  
for the **Environment**  
Effective Citizen Action Since 1969

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## ***OCTOBER***

### **Waterborne pathogen of the month — Giardia!**

*October 18 – Birthday of the Clean Water Act*



Missouri Coalition for the Environment's first ever Waterborne Pathogen of the Month is the parasite — which is truly out of sight, as it is microscopic— commonly known as giardia or, more formally, *Giardiasis lamblia*. According to the Centers for Disease Control and Prevention, Giardia is the most common waterborne parasite in North America.

Under a microscope, giardia is known for its 'clown face,' as the parasite resembles a smiling face, but its main symptom, severe diarrhea, does not leave much to smile about. Giardia can live in humans, dogs, cats, calves, and even lambs. This parasite, found in rivers and streams throughout the world, is best known for its symptoms of diarrhea, upset stomachs, and flatulence.

The parasite, a one-celled microscopic organism, lives in the small intestines of the infected person or animal and is passed out of the body through stools. A person can become infected with giardia if he or she ingests fecal matter or infected soil, water, or food or interacts with a surface infected with feces. Giardia can live in drinking and recreational water, such as lakes or streams, especially near sources of waste such as an outhouse, sewage lagoon, failing septic system, or a cesspool. Even a very small amount of infected water can cause a person to get sick.

Like a bad house guest, once it gets in, Giardia stays a while, makes a stink, and spreads misery. Because it may take 1-2 weeks for symptoms to appear, an infected person may be able to spread the parasite without knowing it. Symptoms tend to last from 2-6 weeks and can cause weight loss because of dehydration and diarrhea. Giardia is curable through a few different doctor-prescribed methods.

The parasite has a strong outer shell and Giardia can survive for long periods of time outside the body, especially in cold water. This means it can live in clean-looking streams and rivers.

The best way to avoid contracting giardia is to boil water that may be contaminated before ingesting it. This is not practical for streams and rivers, so proper handling and treatment of sewage to meet water quality standards is essential. Until all Missouri waters are safe, staying out of water contaminated with sewage is the safest bet. Of course on land, it is important to also practice good hygiene — always washing hands after using the bathroom. This is one guest you don't want to bring home.