

Outdoor Action Guide to Giardia, Lyme Disease and other "Post Trip" Illnesses

by Rick Curtis

We hope that you had an exciting and enjoyable time in the wilderness on your latest trip. After you've gotten a shower and washed your clothes, there are a few important pieces of information you need to be aware of. All outdoor travelers may come in contact with things during the trip that can lead to illnesses later on. Typically, the signs and symptoms of these illnesses don't become apparent until after your trip is over, so it is important that you be able to recognize them. Should you experience some of the symptoms noted below after a wilderness trip, see your physician and describe your symptoms. Be sure to inform him or her about your backcountry trip since s/he may not initially identify the proper cause of the disease without knowing about your wilderness trip. Most of these illnesses can be treated effectively using antibiotics, as long as you go for treatment.

Water-borne Infections

Giardiasis:

Giardiasis refers to a syndrome of diarrhea, excess gas, and abdominal cramping. It is caused by *Giardia lamblia*, a water-borne parasite that is worldwide in distribution. The symptoms usually occur one to two weeks after exposure to the parasite. Symptoms initially include diarrhea, bloating, nausea, abdominal cramping, and malaise. Weight loss is also a frequent finding. Backcountry travelers usually contract giardiasis by drinking water from

untreated or improperly treated sources. Chemical treatment of the water and commercial water filtration systems, used properly, eradicate the parasite. The diagnosis of giardiasis can be confirmed by inspecting a stool sample for the presence of the parasite. Because this test may not always identify the organism even if it is present, a physician may elect to treat you empirically for the infection. The use of an appropriate antibiotic for seven days is usually highly effective in relieving symptoms and curing the disease.

Cryptosporidium:

Cryptosporidium is a protozoan that causes a diarrheal illness similar to Giardia. Symptoms include watery diarrhea, headache, abdominal cramps, nausea, vomiting, and low-grade fever that may appear 2 to 10 days after infection. Some infected people will be asymptomatic. Currently, there is no effective treatment for *Cryptosporidium*. Symptoms usually last 1 to 2 weeks, at which time the body's immune system is able to stop the infection. People with normal immune systems are generally not at risk and improve without taking antibiotics or antiparasitic medications. For people with compromised immune systems this can be a dangerous disease. Please see your physician.

Cyclospora:

Cyclospora is a recently discovered cause of diarrhea. It can cause a prolonged illness (average 6 weeks) with profound fatigue, loss of appetite, and intermittent diarrhea. *Cyclospora* can be treated with antibiotics. If you develop these symptoms, consult your physician.

Tick-borne Diseases

Lyme Disease:

Lyme disease is an infection caused by a spiral shaped bacterium called a spirochete. This bacterium is carried in the gut of the deer tick *Ixodes dammini*. The tick becomes infected after feeding on the blood of an infected animal. Once infected, the tick can transmit the disease to its next host. Deer ticks are extremely small, with tick nymphs being about the size of the period at the end of this sentence. This means that you may have been bitten without realizing it. The tick needs to feed for an extended period of time (8-12 hours) before infection can occur. So just because you have found a tick does not mean that you have been infected. It is also possible that the tick was not carrying the disease.

Detecting Lyme Disease can be difficult as the symptoms associated with the early stages--fever, headache, stiffness, lethargy, and a myriad of other mild complaints, are often dismissed as the flu. In some cases (25%), there is a red, ring-like rash that occurs at the site of the bite. The rash is often referred to as a "bull's eye" rash because it has a white center surrounded by a red ring. Most typically, the rash expands and then fades within a few weeks after the bite. There is a blood test for Lyme Disease, but it is not perfect. The test generally

produces positive results in the later stages of the disease but often turns up false negative results in the early stages of infection. Therefore, diagnosis in the early phase is frequently based on symptoms and the likelihood of a deer tick bite. Early detection means early treatment when the disease is most effectively controlled with antibiotics. Lyme disease can result in more serious symptoms if left untreated.

Rocky Mountain Spotted Fever:

Rocky Mountain Spotted Fever is carried by a bacterium and can be transmitted by the bites of dog or wood ticks. Contrary to what the name of the disease suggests, it can be found throughout the U.S. Watch for mild chills, appetite loss, and a general run-down feeling. These symptoms may worsen to severe chills, fever, headaches, muscle and bone pain, and sensitivity to light. Also, a spotty red rash may appear (hence the name) usually starting at the wrists and ankles and spreading over the rest of the body. Normal onset of these symptoms is anywhere between 3 and 14 days, so anyone bitten by a tick should be aware of the disease, as it may not present itself until the trip is over. Untreated, the mortality rate is 20 to 30%. Anyone who shows these signs should seek medical attention as soon as possible.

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