Preventing Tick Bites is the Best Way to Prevent Lyme Disease!

Here are some recommendations from the Vermont Department of Health:

- Wear clothing treated with Permethrin – an insecticide that can be safely applied to clothing or gear. (It should never be applied to skin!)
- Use repellents (chemical or natural) that are labeled for ticks. Be sure to carefully follow the directions on the label.
- Wear light colored clothing (long sleeved shirt and pants) so that it is easier to spot ticks. Tuck pants into socks, and your shirt into pants. Wear hats and boots/sneakers.
- Stay on the center of hiking trails – avoid walking through high grass and leaf litter.
- CONDUCT DAILY TICK CHECKS! Check carefully along the hairline, nape of neck, inside and behind the ears, armpits, groin area, behind the knees, inside your belly button, and between your toes.
- Place exposed clothing and gear directly into dryer on high heat for 10 minutes to kill ticks that may be clinging to the fabric.
- Shower as soon as you come inside if you have been in tick habitat.
- Avoid sleeping with pets. They may transport ticks onto your bed.
Lyme Basics

What is Lyme Disease?

Lyme disease is an illness caused by an infection with Borrelia burgdorferi, a complex microbe known as a spirochete. Disseminated Lyme disease is a multi-staged, multi-systemic illness. If untreated, it may affect multiple organs, including heart, brain and joints, and other parts of the central nervous system.

How do you get Lyme disease?

Lyme disease is transmitted from the bite of an infected blacklegged (deer) tick. Ticks look for hosts to feed on. Hosts can include pets, deer, mice, birds, squirrels, some reptiles, and yes, people. Ticks that carry Lyme disease can also transmit other infections through the same bite. Babesia, Anaplasma, Ehrlichia, and Borrelia miyamotoi are all present in Vermont ticks.

Who gets Lyme disease?

According to the CDC, Vermont is an endemic state for Lyme disease. Men, women, children, and pets are all susceptible. Children ages 5-14 and adults over 50 are at highest risk, along with anyone who works or recreates outdoors. Lyme disease has been diagnosed all 12 months of the year in Vermont.

Common Myths

MYTH #1: Lyme tests are always accurate

FACT: A negative test does not guarantee you don’t have Lyme disease. The timing of blood tests, and previous antibiotic treatment, can affect results. Your doctor may make a clinical diagnosis of Lyme disease based on your symptoms and history of exposure to ticks.

MYTH #2: Lyme always causes a bull’s-eye rash

FACT: The most conservative estimates show 1 out of 5 people with Lyme disease do not have a bulls-eye (erythema migrans) rash. One Vermont Department of Health Lyme disease surveillance report showed only 49.5% of children with CDC confirmed Lyme disease had a bulls-eye rash that year.

MYTH #3: You will know if you have been bitten by a tick

Ticks have a numbing agent in their saliva, so you may not feel a bite! In nymphal stages, ticks can be as small as a poppy seed and difficult to notice. Some people with a tick-borne disease do not remember ever being bitten by a tick.

MYTH #4: A tick has to be attached for 36-48 hours to transmit Lyme disease

There is no scientifically established minimum transmission time for Lyme disease. Powassan virus can be transmitted in as little as 15 minutes, and Borrelia miyamotoi has been shown to be transmitted in less than 24 hours. Your risk for Lyme disease increases the longer a tick is attached, so learn how to remove ticks safely.

Diagnosis & Treatment

Stages of Lyme Disease

It is important to understand the difference between early stage Lyme disease and disseminated disease. Disseminated disease can affect any part of the body, including the heart and nervous system, and symptoms can appear days, months, or years after infection. While some people have objective symptoms of Lyme disease, others may have subtle neurological and cognitive deficits such as memory loss, or changes in behavior. Early diagnosis can result in better health outcomes and reduce the chance of long term problems related to Lyme disease.

Diagnosing Lyme Disease

Lyme disease may present traditionally with a bulls-eye rash, fever, and joint pain. Other people have headaches, vision problems, or cognitive difficulties. Symptoms of tickborne diseases can vary significantly in each person.

Both the timing of blood tests and antibiotic treatment can affect test results, so negative blood tests may not always mean a person does not have Lyme disease.

Other Tickborne Diseases

Other tickborne diseases present in Vermont include Anaplasmosis, Babesiosis, Ehrlichiosis and Borrelia Miyamotoi. These may have symptoms different than Lyme disease. Environmental exposures, and other infections and viruses which are not tickborne, may further complicate a person's illness.