

Tick Borne Disease Information & Prevention Recommendations

LYME DISEASE



Lyme disease is an infection caused by the spirochete bacteria *Borrelia burgdorferi*. It is transmitted by a bite from a black legged (deer) tick. In Litchfield County the species of ticks associated with Lyme disease is *Ixodes scapularis*. Lyme disease often begins as a skin rash. Some people do not know a tick has bitten them and some people do not get the classic red skin rash. Antibiotics are used to treat the disease.

Since Lyme disease is a multi-systemic illness, there are a wide variety of possible symptoms. These symptoms may vary from mild to severe, and they may come and go. It may be helpful for your physician if you photograph your rash (if you get one) and log all symptoms on a daily calendar. The longer the disease remains undetected, the more difficult it is to treat. Since early detection and treatment is critical, seek medical advice as soon as possible.

Early symptoms may include:

Rash - often bull's eye in shape, but not always, may appear from 3 days to 1 month after the bite of an infected tick.

Headache

Stiff Neck

Chills and Fever

Prolonged Fatigue

Muscle and/or Joint Pain

Swollen Lymph Nodes

Late symptoms may include:

Arthritis - brief bouts of pain and swelling, usually in 1 or more joints.

Neurological abnormalities - Bell's Palsy, meningitis, numbness, pain, impaired memory and concentration, visual impairments

Cardiac involvement - irregularities of heart rhythm, shortness of breath, dizziness

Other Tick-borne Diseases

The same tick that transmits Lyme disease may transmit other diseases at the same time. Research indicates that it takes 24 to 36 hours after attachment to transmit Lyme disease **BUT** other diseases can be transmitted in less time. Co-infection with two or

three tick-borne diseases may complicate diagnosis, increase severity of symptoms, and prolong illness.

ANAPLASMOSIS (ehrlichiosis)

Several different Ehrlichia bacteria exist but the one associated with the black-legged deer tick is called Human Granulocytic Ehrlichiosis, HGE.

Anaplasmosis can most commonly cause high fever, chills, sweating, severe headaches and muscle aches. Fatigue and gastrointestinal complaints may include nausea, vomiting and diarrhea. The illness may vary from mild to severe to life-threatening. Effective antibiotics eradicate the infection and fewer problems develop with earlier treatment. Other pre-existing conditions may worsen the course of action.

BABESIOSIS

Babesiosis is an infection caused by a malaria-like protozoan. The disease usually begins with non-specific, flu-like symptoms 1-3 weeks after a black-legged deer tick bite. Symptoms often include spiking fevers and chills. The disease may result in anemia-causing fatigue and poor exercise tolerance. The infection may be asymptomatic to mild in the young. It can be severe and even life-threatening in patients without spleens, immune-compromised patients, and older patients with pre-existing medical conditions. Fewer complications occur with early treatment and effective antibiotics.

Submitting a Tick

We will accept all ticks for identification but test only those Ixodes scapularis (deer) ticks that have ingested human blood (engorged). We will examine all ticks for degree of engorgement. Laboratory personnel will test engorged black-legged (deer) ticks (Ixodes scapularis) and, upon special request, certain other species of ticks for the presence of spirochetes that cause Lyme disease.

Tick submission Form is located under *Health Dept Forms / Other*

Please note that it takes approximately two weeks to obtain a result from the CT Agricultural Experiment Station laboratory in New Haven.

If any suspicious symptoms such as a rash, joint symptoms, headache or nervous symptoms arise beforehand, please consult your physician immediately.

Prevention Recommendations:

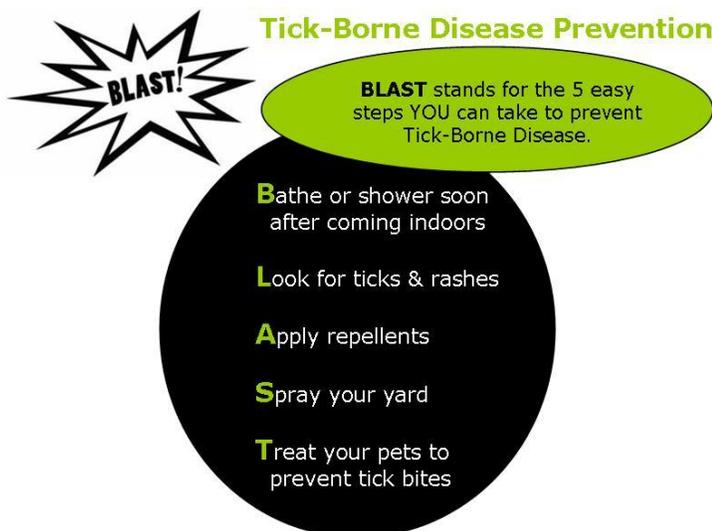
Deer ticks live in shady, moist areas at ground level. They will cling to tall grass, brush and shrubs, usually no more than 18-24 inches off the ground. They also live in lawns and gardens, especially at the edges of woods and around old stone walls.

Deer ticks cannot jump or fly, and do not drop onto passing people or animals. They get on humans and animals only by direct contact. Once a tick gets on the skin, it generally climbs upward until it reaches a protected area.

In tick-infested areas, your best protection is to avoid contact with soil, leaf litter and vegetation. However, if you garden, hike, camp, hunt, work or otherwise spend time in the outdoors, you can still protect yourself:

- Wear light-colored clothing with a tight weave to spot ticks easily.
- Wear enclosed shoes, long pants and a long-sleeved shirt. Tuck pant legs into socks or boots and shirt into pants.
- Check clothes and any exposed skin frequently for ticks while outdoors.
- Consider using insect repellent.
- Stay on cleared, well-traveled trails. Walk in the center of trails. Avoid dense woods and bushy areas.
- Avoid sitting directly on the ground or on stone walls.
- Keep long hair tied back, especially when gardening.
- Bathe or shower as soon as possible after going indoors (preferably within two hours) to wash off and more easily find ticks that may be on you.
- Do a final, full-body tick check at the end of the day (also check children and pets), and remove ticks promptly.

Mnemonic for Tick Borne Disease Prevention developed by Jennifer Reid/Ridgefield Health Department:



Additional Links:

Center for Disease Control: Tick Borne Diseases in the U.S. -

<http://www.cdc.gov/ticks/diseases/>

CT Department of Public Health: Lyme Disease Information -

<http://www.ct.gov/dph/cwp/view.asp?a=3136&q=395590>

Fairfield County Deer Management Alliance: Tick Born Illness Prevention Task Force -

<http://www.deeralliance.com/>

Housatonic Valley of Elected Officials: Tick Born Illness Prevention -

<http://www.hvceo.org/lymemain.php>

Ridgefield Health Department: BLAST . Lyme Disease Prevention Program

<http://www.ridgefieldct.org/content/46/6311/6347/8905.aspx>

University of Rhode Island . TickEncounter Resource Center

<http://www.tickencounter.org/>