

Understanding Ticks & Lyme Disease

One in a series of “How-To’s”

What Is Lyme Disease?

Lyme disease is an infection caused by *Borrelia burgdorferi*, a type of bacterium that is carried by certain deer ticks. The syndrome was recognized in Lyme, CT in 1975, although undiagnosed cases date back to the 19th century. Lyme disease has been reported most often in the north-eastern United States, but it has been reported in all 50 states, as well as in other countries. Lyme disease however, is not contagious from an affected person to someone else.



What are the symptoms?

The first sign may be a skin lesion - a red ring around a central clear area, like a bull's eye. If untreated, symptoms progress to include: headache, weakness, chills, stiff neck, arthritis-like joint pain (especially in the knees), and swollen lymph nodes. Weeks to months later, neurologic symptoms (e.g. poor muscular coordination, memory loss, depression, facial paralysis, etc.), heart abnormalities, fatigue and arthritis-like joint pains can develop. Prenatal exposure can result in death or deformity in infants whose mothers were infected during pregnancy. Not all patients with Lyme disease will have all symptoms, and many of the symptoms can occur with other diseases. It is therefore important to get diagnosed by a physician.

How do you catch it?

In 1982, scientists found that Lyme disease was caused by a spirochete (a spiral-shaped bacterium) called *Borrelia burgdorferi*, carried by the pinhead-sized black-legged ticks, which live in grass and shrubs, that attach themselves to a suitable host as it passes by. These ticks harbor the bacterium in their stomachs and transmit the disease to humans and animals they bite.

Can the disease be treated?

Yes, the infection, if caught early, responds to antibiotic therapy, which will prevent or lessen the severity of symptoms. However, a small percentage of patients with Lyme disease have symptoms that last months to years even after treatment with antibiotics.

How can you control against ticks?

Beyond Pesticides recommends taking care in dressing for the outdoors (long sleeved shirt and pants, worn tight at wrists, neck and ankles), use of non toxic insect repellent, and a careful search of the body for ticks. Check pets regularly. Stay out of high grasses. Suspect areas, like lawns and fields, can be monitored for ticks--drag a piece of flannel cloth attached to a broomstick. Have ticks collected and professionally identified.

For least-toxic alternatives for controlling ticks, contact Beyond Pesticides

Updated 2008

BEYOND PESTICIDES

701 E Street, S.E., Suite 200, Washington DC 20003
202-543-5450 (v) • 202-543-4791 (f)
info@beyondpesticides.org • www.beyondpesticides.org