

Lyme Disease



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A Public Health Bulletin From
Your State Senator

Awareness

The first line of defense against Lyme Disease, the most common tick-borne illness in the United States, is awareness of what it is, what its symptoms are, what causes it and what can be done to prevent and treat it.

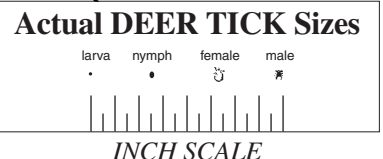
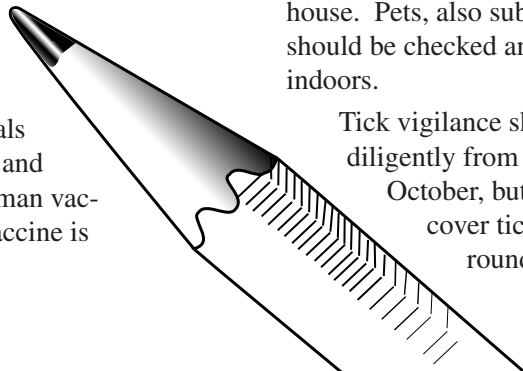
Named for the town in Connecticut where it was first identified in the U.S. in 1975, Lyme Disease is caused by a spirochete bacterium present in some wildlife. Deer ticks (*Ixodes dammini*), which feed on various forms of wildlife can transmit the disease to humans and domesticated animals.

The disease, which can cause arthritic, cardiac and neurological problems, is successfully treated in its early stages – and often in later stages – with antibiotics.

It is worth noting that all ticks are not deer ticks (dog ticks are larger and have not been implicated in Lyme Disease) and not all deer ticks are infected with the Lyme Disease spirochete.

The invasion of the *Ixodes dammini* into our area signals what appears to be the onward spread of the disease-carrying tick from its eastern strongholds in New Jersey, New York state and New England. Trials are being conducted in New York and New England communities on human vaccines against Lyme Disease. A vaccine is currently available for pets.

Magnified several times, pencil point and deer tick nymph. The miniscule nymphs are more likely than adult deer ticks to feed on humans and pets.



Prevention

Because ticks generally lie low in grass and bushes, protective clothing is advised especially for feet, legs and ankles. Avoid wearing open-type shoes or going barefoot outdoors. Long pants should be tied at the ankle or stuffed into socks. Added protection for gardeners or children whose upper limbs come into contact with vegetation would include long sleeved shirts with tight cuffs. Clothing should be light colored so that ticks can be readily spotted.

Use of bug repellents on clothing, especially on shoe tops, socks and pant legs, is helpful too. Lawn tick control treatments are also available.

Since it may be difficult to force children to “bundle up” in summer heat, body checks are an important daily preventive measure. Ticks usually crawl upwards on the body for several hours before settling on a feeding site. Be sure to check hidden areas like the hairline, navel, groin, underarms and the nape of the neck. Brush off clothing before entering the house. Pets, also subject to Lyme Disease, should be checked and brushed before coming indoors.

Tick vigilance should be practiced most diligently from late spring through October, but when there is no snow cover ticks may be active all year round.

Detection

Recognizing the presence of deer ticks is difficult since the adult is about the size of a pinhead and the nymph is not much larger than a pinpoint. Caught in the act of biting, the blood engorged ticks are easier to spot, although bites are not likely to be felt. If a tick is discovered, time is on your side because experts believe the disease is transmitted only after many hours of feeding.

Remove a biting tick with tweezers by grasping firmly where the head is attached to the skin and pulling out slowly and steadily. Be careful not to squeeze the body as this could result in release of spirochetes. If you plan to save the tick, place in a sealed container in rubbing alcohol, and obtain tick identification information from your County Health Department.

Detecting Lyme Disease can sometimes be as difficult as detecting the tiny tick that causes it. The symptoms of the early stages – fever, headache, stiffness, lethargy and a myriad of other mild complaints are often dismissed as “the flu.” The symptoms of the later stages – ranging from facial palsy to heart irregularities to large joint arthritis – are also easily misdiagnosed.

Perhaps the best chance of discovery is afforded by the red, often ring-like rash that occurs on many victims after infection. Often the rash has a hard center with red edges, but any rash should be suspect, especially if other symptoms are present. Most typically the rash expands then fades within a few weeks. The drawback to this means of detection is that the rash does not occur on more than one-quarter of Lyme Disease victims.

The best rule is to seek medical advice if you or your children or pets may have been exposed to ticks and have experienced Lyme Disease symptoms, early or advanced.

Treatment

There is a blood test for Lyme Disease, but it is not perfect. The test generally produces positive results in the later stages 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 treatment is important because that is when the disease is most easily conquered by antibiotics. Pets also respond to antibiotic treatment.

Later stages of the disease take longer to resolve and are often treated by injection or intravenous administration of antibiotics.

The Lyme Disease diagnostic test is useful in the later stages to distinguish the tick-borne ailment from the many conditions Lyme symptoms can mimic.

Some of the secondary and tertiary results of Lyme Disease include arthritis – most likely affecting large joints such as the knees, facial palsy, encephalitis, meningitis, heartbeat irregularities, depression and memory loss.

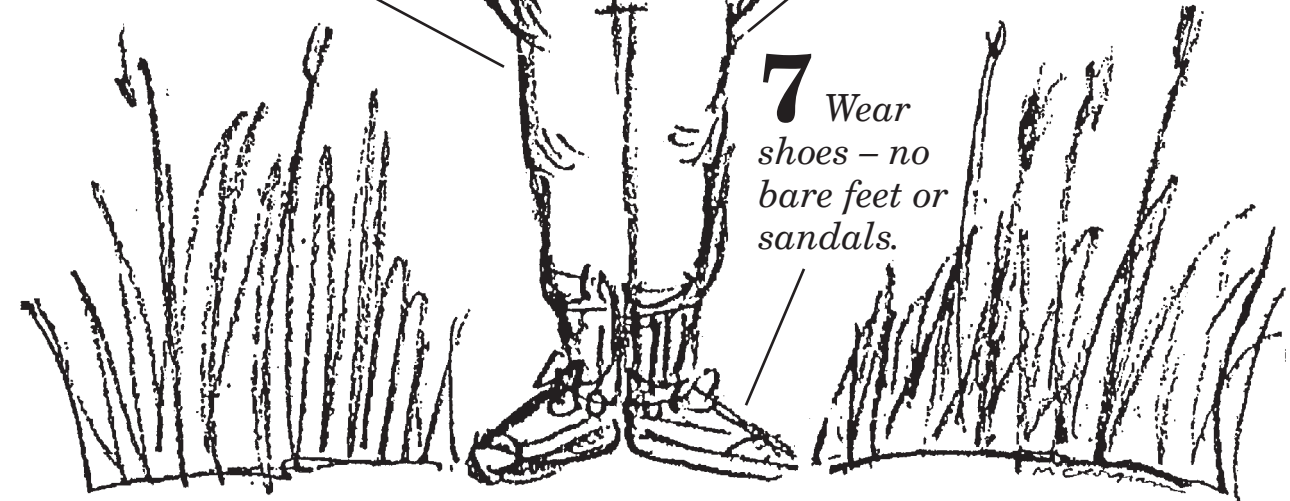
While many of the Lyme Disease ailments are reversible with antibiotic therapy even in the later stages, medical experts have issued a special caution for pregnant women because of the potential for Lyme Disease spirochetes crossing the placenta.

Mothers-to-be should avoid tick infested areas as much as possible and should seek prompt medical attention if Lyme Disease develops.

It's Lyme Time!

Protect Yourself Against Lyme Disease in Spring, Summer and Fall

- 1** *Walk in the middle of trails, away from tall grass and bushes.*
- 2** *Wear a long-sleeved shirt.*
- 3** *Wear white or light-colored clothing to make it easier to see ticks.*
- 4** *Wear a hat.*
- 5** *Spray tick repellent on clothes and shoes before entering woods.*
- 6** *Wear long pants tucked into high socks.*



1/9/06

From National Institutes of Health *Healthline*

Lyme Disease: How Big a Threat?

Experts believe deer ticks are a growing threat and that Lyme Disease cases are likely to increase, but field studies to determine the geographic distribution of the tiny ticks and medical reporting of all cases of Lyme Disease to the Department of Health are needed.

Lyme Disease became a mandatory reportable disease in February 1987, but the Department of Health believes the disease is widely under-reported in Pennsylvania. Medical reporting is important for the collection of medical data on the disease and for determining state public health priorities.

The geographic habitats of the deer tick in Pennsylvania are being documented by field studies in some regions, but the incidence of Lyme Disease in certain areas has been the best source of information thus far on where the disease-carrying ticks are located.

Another tick-borne disease is Rocky Mountain Spotted Fever. It is spread by the larger sized dog tick. While not common in our state, awareness of the disease is important. Rocky Mountain Spotted Fever symptoms include high fever, cough, chills, lethargy, headache and a spotty rash usually starting on the hands and feet. Early treatment with antibiotics is imperative.

More information on Lyme Disease is available from your doctor or the County Health Department.