Lyme Disease Fact Sheet

What is Lyme disease?
Lyme disease is caused by a bacterium, *Borrelia burgdorferi*. It was first discovered in the U.S. in a cluster of children in Lyme, Connecticut in 1977, hence the name. The bacteria are transmitted to humans by the bite of infected deer ticks and cause more than 20,000 infections in the United States each year.

What are the symptoms of Lyme disease?
The illness usually occurs during the summer months and generally starts as a large reddish circular rash around or near the site of the tick bite, commonly referred to as a “bulls-eye rash”. Multiple rash sites may also appear. During the rash stage, or occasionally prior to the rash, other symptoms such as fever, chills, headache, fatigue, stiff neck, swollen glands and muscle and/or joint pain may be present. These may last for several weeks. If Lyme disease is left untreated for a few weeks or months after the rash onset, complications such as meningitis, facial palsy, arthritis and heart abnormalities may occur and other body systems may be affected. Symptoms usually begin within a month of exposure, but onset ranges from 3 to 32 days.

What is the treatment for Lyme disease?
Antibiotics are used effectively against Lyme disease. Early diagnosis improves the outcome of treatment so it is important to contact your healthcare provider if you are feeling sick or develop a rash.

How should a tick be removed?
Grasp the mouthparts with tweezers as close as possible to the attachment (skin) site. If tweezers are not available, use fingers shielded with tissue or rubber gloves. Do not handle a tick with bare hands. Be careful not to squeeze, crush, or puncture the body of the tick, which may contain infectious fluids. It is important that a tick be removed as soon as it is discovered. After removing the tick, thoroughly disinfect the bite site with rubbing alcohol or an antibacterial wash and then wash hands with hot water and soap. See or call a doctor if there are concerns about incomplete tick removal. Do not attempt to remove ticks using petroleum jelly, matches or any other home remedies because they may actually increase the chance of contract tick-borne disease.
What can I do to prevent getting Lyme disease?

When in tick-infested areas:
- Wear light-colored clothing to make ticks easy to see
- Tuck pants into socks and shirts into pants
- Consider using an insect repellent. Products containing DEET have been shown to be effective for repelling ticks. Clothes may be treated with Permethrin. Always follow manufacturer’s instructions when applying repellents
- Check after every 2 or 3 hours of outdoor activity for ticks on clothing or skin
- A thorough check of body surfaces for attached ticks should be done at the end of the day
- Reduce the number of ticks around your home by keeping grass short, removing leaf litter, and creating a wood chip or gravel barrier where your lawn meets the woods.
- If a tick is attached to your skin for less than 24 hours, your chance of getting Lyme disease is extremely small. But just to be safe, monitor your health closely after a tick bite and be alert for any signs and symptoms of illness.
- Inspect your pets daily and promptly remove any ticks that you find.

The above photo is actual scale

From left to right: The deer tick (*Ixodes scapularis*) adult female, adult male, nymph, and larva on a centimeter scale.

<table>
<thead>
<tr>
<th>Brown Dog Ticks</th>
<th>Black-Legged Ticks (Deer Ticks)</th>
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<tbody>
<tr>
<td>A. Engorged Female</td>
<td>D. Larve</td>
</tr>
<tr>
<td>B. Female</td>
<td>E. Nymphs</td>
</tr>
<tr>
<td>C. Male</td>
<td>F. Males</td>
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<tr>
<td>G. Females</td>
<td>H. Engorged Female</td>
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For more information, contact the Manchester Health Department Environmental Health Division 603-624-6466