



Maine Farm Safety Program

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Lyme Disease

Lyme disease is an illness caused by bacteria called spirochetes. A tick infected with the bacterium can transmit spirochetes to people, dogs, horses, and other animals. The disease is rarely life-threatening but has the potential to cause problems in the joints, nervous system, and heart.

Spread of Lyme Disease

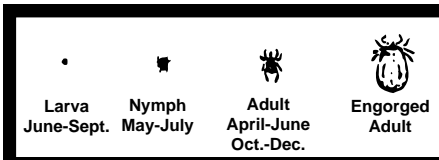
Lyme disease is spread by the deer tick, also called the black-legged tick (*Ixodes scapularis*). The deer tick is smaller than the more common dog tick. It is most likely to cause infection between the months of June and September. Not all deer ticks carry the pathogen that causes Lyme disease. Experts think that an infected tick must be attached for over 24 hours before infection is passed on. Unfortunately, many people never remember being bitten by a tick and are unaware of the possible infection.

Symptoms of Lyme Disease in Humans and Animals

Symptoms of Lyme disease may vary from person to person. Usually a small, red skin rash develops at the site of the tick bite three to 32 days later. Gradually, this area enlarges and there is often a partial clearing at the center, which looks like a doughnut. The rash may be accompanied by flu-like symptoms such as fever, headache, sore and aching muscles and joints, sore

Lyme Disease

- **Wear long pants tucked into socks in tick areas.**
- **Wear long sleeves in tick areas.**
- **Conduct regular tick checks.**
- **Inform your physician about possible tick exposure if Lyme disease symptoms develop.**



throat, and swollen glands. The symptoms and rash may disappear in several weeks. However, the

rash and more serious problems may occur later. Treatment with antibiotics clears up the rash and usually prevents complications. If not treated, Lyme disease can cause long-term health problems with the joints, nervous system and heart. Animals react to Lyme disease in different ways. The most common symptoms include lameness, loss of appetite, fever and lethargy. If an animal displays these symptoms, contact a veterinarian. Usually, a rash is not visible. Animals, like humans, usually respond well to antibiotics.

Maine Farmers and Foresters

Maine farmers and foresters are at greater risk of contracting Lyme disease because they work outside in areas infested with ticks. The risks of contracting the disease are very low in northern Maine. Central Maine poses a low risk, and southern Maine along with the coastal area carries a moderate to high risk. Farmers, foresters, and others enjoying the outdoors need to take precautions to prevent infection.

Ways to Prevent Contracting Lyme Disease

There is no one way to prevent getting Lyme disease. There are several ways to lessen the chance of getting the disease. Avoid areas where ticks live. Do not walk bare-legged in the woods, brush or tall grass. Wear light-colored clothing such as a long-sleeved shirt, long pants, high socks (with pants

tucked into the socks), and closed shoes. Light colors show ticks better. Apply a commercial tick or insect repellent containing the chemical DEET on clothing, shoes and socks. Do not spray repellent on your face, cuts, sunburns or rashes. Do not put it on your hands. Read the label carefully for any precautions. Do not apply high concentration products to skin, particularly that of children. These products can irritate the skin. Conduct regular tick checks. Remove any ticks promptly if discovered. Know the symptoms of Lyme disease and, if these symptoms develop and the person experiencing them has been in an area where ticks live, call a physician.

If a tick is found embedded in the skin, use the following technique to remove it. Using tweezers or a piece of tissue, grip the body of the tick as close to the skin as possible. Pull gently until the tick lets go. After removing the tick, apply an antiseptic. Save the tick. Your doctor may want to see it. You can also submit it to the UMaine Cooperative Extension Tick Lab for identification or disease testing.

Animals can be protected from Lyme disease by using commercial insect and tick repellents. Flea collars are not as effective as powders and dips. On larger animals, use commercial insect and tick repellents made specifically for them.

This Maine Farm Safety fact sheet is part of an educational fact sheet series produced by University of Maine Cooperative Extension. For more information on farm safety, contact your county Extension office.

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