



MAFES Dawg Tracks

June 27, 2011



Protection from
Lyme Disease



Lyme disease is the most common tick-borne illness in North America and Europe. It is caused by the bacterium, *Borrelia burgdorferi*. Deer ticks, which feed on the blood of animals and humans, can harbor the bacterium and spread it while feeding. **The most likely areas to contract the disease is in low bushes and tall grassy areas in the woods.** Since we know this, it behooves us to take the necessary precautions to protect ourselves.

If we are treated with the proper antibiotics in the early stage of the disease, we can experience a complete recovery. If it is started in a later stage, the treatment and recovery will be slower. However, the majority of folks fully recover with the proper treatment.

SYMPTOMS- Lyme disease signs and symptoms vary widely because they affect different parts of the body. Also the symptoms will vary with different people, but generally the following symptoms will occur with all infections:

Rash- Starts with a small red bump in a few days or a month at the site of the bite, usually in the groin, belt area or behind the knee. It will be warm and tender and in a few days can become a rash - the size of your fingertip to as large as 12 inches. It resembles a bull's eye with a red ring on the perimeter and a red center.

Flu-like symptoms- Fever, chills, fatigue, body aches, and a headache can accompany the rash.

Migratory joint pain- If the infection isn't treated, you may develop bouts of severe pain and swelling in weeks or months after you're infected. Knees are the most likely to be infected, but other body parts can be as well and the pain can shift to different parts of the body.

Neurological problems- In some cases inflammation of the membranes surrounding the brain (meningitis), temporary paralysis of one side of the face (Bell's palsy), can occur. Numbness or weakness in the limbs and impaired muscle movement may occur in weeks, months or even in years after an untreated infection.

Less common signs and symptoms- Some people may develop heart problems, such as irregular heartbeat weeks after infection, but this rarely lasts longer than a few days or weeks. Eye inflammation, hepatitis, and severe fatigue are possible as well.

WHEN TO SEE A DOCTOR- Only a minority of deer tick bites lead to Lyme disease. The longer the bite is left untreated, the longer the tick is left in the skin, the greater the risk of getting the disease. If you know you have been bitten and experience symptoms, get to a doctor immediately. Treatment is more effective when caught early. As stated earlier, only a minority of tick bites lead to Lyme disease. The longer the tick remains attached, the greater the risk of getting the disease.

CAUSES- As stated earlier, the bacterium is carried primarily by deer ticks, which are brown and about the size of a pin head. Their size makes them almost impossible to spot. Ticks attach themselves to a host and feed until their body is much larger than normal. During feeding ticks carry the disease producing bacteria and transfer it to a healthy host. If the host is infected the tick may pick up the bacteria. Deer ticks feed on mice, birds and deer. They can also feed off blood of humans, cats, dogs and horses. They live in low bushes and tall grassy areas in the woods and are most active in the summer months.

To contract Lyme disease, you must be bitten by an infected deer tick. The bacteria enters your skin through the bite and makes its way into the blood stream. An attached tick has a swollen appearance, indicating the bacterium has entered the bite. Removing the tick as soon as possible may prevent the infection.

RISK FACTORS- Where you live or vacation and where you work can affect your chances of getting the disease. Some of these factors are:

Spending time in grassy or wooded areas- In the U.S. deer ticks are more prevalent in the Northeast and Midwest, also in the northwest states of Oregon and Washington. These areas are heavily wooded and tend to attract adults through work and recreation and children for recreation.

Having exposed skin- It behooves us to wear long-sleeve shirts and long pants for protection when visiting these areas.

COMPLICATIONS-

- ✓ Chronic inflammation, usually in the knees.
- ✓ Neurological symptoms, such as facial palsy or neuropathy.
- ✓ Cognitive defects, such as impaired memory.
- ✓ Heart rhythm irregularities.

PREVENTION-

- **Wear long sleeve shirts and long pants-** It is also a good idea to tuck your pant bottoms in your socks and wear a hat and gloves. Try to stick to walking on trails, avoid the bushes and grassy areas. If you have your dog with you, keep him on a leash.
- **Use insect repellent-** Use repellents that contain DEET with a 10 to 30 percent concentration level.
- **Do what you can to tick proof your yard-** Clear debris that are the habitat for ticks.
- **Check yourself, your children and your pets-** After any type of outdoor activity, especially in the tick prone areas, check all of the above for ticks.
- **Never assume that you're immune-** Even if you have had Lyme disease in the past, you can have it again.
- **Remove ticks with tweezers-** Gently remove the tick with tweezers by the tail or mouth. Don't squeeze or crush the tick, just pull it out gently. Once the tick is out, dispose of it and apply antiseptic to the bite.

Ted /Gordon-Risk Mgmt. /Loss Control Mgr.
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Excerpts: www.mayocliniconline.com
1/5/2011