Lyme disease

Lyme disease is an illness that may affect the skin, joints, nervous system, heart, and other areas of the body. People of all ages can get Lyme disease, which is caused by the bacteria *Borrelia burgdorferi*. The bacteria are transmitted to humans by the bite of an infected deer tick. The deer tick (*Ixodes scapularis*) is also called the blacklegged tick.

**Introduction**

Lyme disease is one of several tick-borne diseases in Minnesota.

In order to get Lyme disease, a person must be bitten by a blacklegged tick (also known as deer tick or bear tick) that is infected with the Lyme disease bacteria. Remember: not all blacklegged ticks are infected with the bacteria, so not all blacklegged ticks transmit disease.

The tick must be attached for at least 24-48 hours to transmit the bacteria. The chance of getting Lyme disease increases the longer the tick is attached.

**Signs and symptoms**

Recognizing the early signs and symptoms of Lyme disease is important.

If you have one or more of these signs and symptoms within 3 to 30 days after a deer tick bite or spending time in wooded areas where deer ticks are present, see your physician immediately.

- A characteristic skin rash, called erythema migrans, has a “bull’s eye” appearance: a red ring with a central clearing. Not everyone recognizes or gets the rash. Not all rashes have central clearing.
- Fever and chills
- Fatigue
- Muscle and joint pain
- Headache

If a person is not treated early in the disease, these late signs and symptoms may develop weeks, months, or years after the tick bite:

- Multiple rashes
- Facial paralysis on one side
- Weakness, numbness, or pain in arms and legs
- Irregular heartbeat
- Memory and/or concentration problems
- Chronic arthritis in one or more joints, usually the knees, which may be swollen and painful

**Diagnosis and Treatment**

The diagnosis of Lyme disease is based on signs and symptoms, presence of the characteristic rash, and
a history of exposure to deer ticks. A blood test may be helpful in confirming the diagnosis.

Antibiotics are used to treat Lyme disease.

Lyme disease is easiest to treat when diagnosed during the early stages.

**Prevention**

When in the woods, wear a repellent with DEET or permethrin to avoid picking up ticks. Follow directions on the label.

Create a barrier to ticks by tucking pants into socks or boots.

Wear light-colored clothes so ticks are visible.

Check and recheck for ticks.

These precautions are most important during May-June and the fall.

**Tick Removal**

1. Use tweezers to grasp the tick close to its mouth.
2. Gently and slowly pull the tick outward.
3. Apply an antiseptic to the bite.
4. Do not burn it off or use petroleum jelly.
5. Not all people bitten by a deer tick will get a disease. Not all deer ticks carry diseases. If a deer tick is infected, it must be attached for at least 24 hours before it can transmit Lyme disease.

Prompt removal of attached ticks prevents disease!

**Questions**

If you have questions, or require further assistance, please contact the Office of Occupational Health and Safety at (612)626-5008 or email us at uohs@umn.edu