LYME DISEASE: WHAT DO I NEED TO KNOW?

Tick-borne illnesses have been on the rise in Vermont, and Lyme disease is the most common tick-borne illness. There are steps you can take to prevent tick bites, and there is effective treatment available in the event that you do contract Lyme disease. Here’s what you should know:

PREVENTION

Lyme disease and other tick-borne illnesses are spread by the black-legged tick (*Ixodes scapularis* species). Half of the ticks in Vermont carry the bacteria *Borrelia burgdorferi*, which causes Lyme disease. The black-legged ticks live in wooded areas, brush and tall grasses. Here are some steps you can take to prevent tick bites:

- Avoid wooded and brushy areas when possible, especially in May-July and October-November, when most tick bites occur
- Walk in the center of trails
- Wear long sleeves and pants
- Use repellant with 20% or more DEET on clothing and exposed skin
- Pre-treat clothing and gear with 0.5% permethrin products
- Do a full body tick check in a mirror after outdoor activity, making sure to check hard-to-see areas like the groin, armpits and scalp
- Check your children, pets and gear, too!
- Shower within 2 hours of outdoor activity to wash away ticks
- Put clothing in dryer for ten minutes to kill ticks, or wash in HOT water as needed

REMOVAL OF TICKS

Proper removal of ticks is essential to decreasing likelihood of transmission of tick-borne illnesses. However, it is not necessary to go to a doctor’s office or emergency department for tick removal. Follow these steps for proper removal technique:

- Use fine-tipped tweezers
- Grasp the head of the tick as close to the skin as possible
- Lift the tick straight off of skin without twisting
- Attempt to remove pieces of the tick left behind
- Dispose of tick by putting it in alcohol, a tightly sealed bag, or flushing it down the toilet
- Wash the area with rubbing alcohol or soap and water
- Once the tick has been successfully removed, monitor for symptoms (see reverse side)
**SIGNS & SYMPTOMS OF LYME DISEASE**

In the event that you are bitten by a black-legged tick that carries *B. burgdorferi* bacteria, symptoms of Lyme disease may appear within three days to a month of the tick bite. Here are signs and symptoms to look out for:

- Erythema migrans rash, also known as a bull’s eye rash, which can present anywhere on the body
- Fever, chills
- Joint pain or swelling
- Muscle aches
- Fatigue

Contact your primary care provider if you experience any of the symptoms above following a tick bite.

**TESTING & TREATMENT**

Treatment of Lyme disease is generally very effective when administered during the early stages of infection. Treatment involves a course of an antibiotic, most often Doxycycline. If you develop a bull’s eye rash following a tick bite, your primary care provider may decide to treat you with antibiotics without testing your blood for Lyme disease antibodies. Additionally, “post-exposure prophylaxis” may be given after a known tick bite that meets all of the following criteria:

1. The tick is identified as a black-legged tick (see images on reverse side)
2. The tick was attached for 36 hours or more
3. The antibiotic can be taken within 72 hours of the bite
4. You are able to take the antibiotic Doxycycline
5. Lyme disease is common in the area where the bite occurred (this criteria is met automatically if the bite happened in Vermont!)

Testing for Lyme disease involves obtaining a blood sample to look for antibodies that your body produces against the bacteria *B. burgdorferi*. It is a “two-tiered” test, meaning it involves two steps looking for the antibodies. If you are experiencing the symptoms listed above, this test can help determine whether or not antibiotics are the right treatment for you. Discuss your symptoms with your provider and make sure to note any exposure to ticks and outdoor activities to evaluate your risk.

For more information on tick bites and tick-borne illnesses, including videos on proper tick removal, visit the Vermont Department of Health website at [http://www.healthvermont.gov/disease-control/tickborne-diseases](http://www.healthvermont.gov/disease-control/tickborne-diseases) or the Centers for Disease Control and Prevention website at [https://www.cdc.gov/ticks/tickborne_diseseases/index.html](https://www.cdc.gov/ticks/tickborne_diseseases/index.html)