

# FREQUENTLY ASKED QUESTIONS ABOUT LYME DISEASE

## WHAT IS LYME DISEASE?

Lyme disease is an infection caused by a bacteria (*Borrelia burgdorferi*) that is spread by the bite of an infected tick. Lyme disease can affect the skin, joints, nervous system and/or heart.

When detected early, it usually can be treated with oral antibiotics. If left untreated, it often causes serious health problems.

## HOW IS LYME DISEASE SPREAD?

The only way to contract Lyme disease is from the bite of an infected deer tick. Not all deer ticks carry the bacteria that causes Lyme disease; they become infected after feeding on infected animals, such as mice or other small mammals.

Transmission of Lyme disease from an infected tick does not occur until a tick has been attached and feeding for at least 24-36 hours, which is why it is important to always check for ticks after spending time outdoors.

## WHAT ABOUT THE LONE STAR TICK?

The Lone Star Tick, which has been migrating from southern states, has been detected in parts of Long Island and elsewhere in the northeast. It is an aggressive predator, most active from April to July, with a white, star-shaped mark on its back. This tick does not carry the bacteria that causes Lyme disease, but carries another germ that causes a similar illness called Southern Tick-Associated Rash Illness (STARI).

## IS THERE A TICK SEASON?

Ticks are active when the weather stays above freezing, usually from March through November. Young deer ticks or nymphs, which are about the size of a poppy seed, are active from mid-May to mid-August. Adult ticks, which are approximately the size of a sesame seed, are most active from March to mid-May and from mid-August to November. Both nymphs and adult ticks can transmit Lyme disease.

## WHAT ARE THE SYMPTOMS OF LYME DISEASE?

Lyme disease is often hard to diagnose because it has various symptoms that are seen in many other illnesses. Early symptoms appear anywhere from 3 to 30 days after the bite of an infected tick.

- In 60-80% of the cases, a red rash (erythema migrans) develops within a few days to a month later.
- The rash is at least two to six inches in diameter and may have a clearing in the center or look like a bulls-eye. The rash may last for three to five weeks.
- The rash may be accompanied by symptoms including joint pain, chills, fever and fatigue. They may seem too minor to seek medical attention.
- Severe fatigue, stiff neck, tingling or numbness in the arms and legs or facial paralysis can occur with the progression of Lyme disease.

## WHAT ARE THE LONG-TERM EFFECTS OF LYME DISEASE?

- Left untreated, it can spread into the central nervous system, heart and/or joints.
- Heart problems develop in less than 5% of people with Lyme disease.
- Arthritis can develop in nearly 50% of untreated victims.
- Lyme arthritis has been misdiagnosed as juvenile rheumatoid arthritis in some children.

## WHAT DO I DO IF I AM BITTEN BY A DEER TICK?

As soon as you find a tick attached to your skin, remove it. The risk of Lyme disease is greatly reduced if you remove the tick within the first 36 hours.

- Use pointed tweezers to grasp the tick by the head or mouth parts as close to the skin as possible. **DO NOT** grasp the body.
- Pull out firmly, making sure that the entire tick is removed. **DO NOT** jerk or twist the tick.
- Place the tick in a small container of rubbing alcohol to kill it.
- Wash hands and apply antiseptic to the bite immediately to prevent secondary infection.
- Observe the site of the tick bite for the next 30 days for the appearance of a rash. If you develop a rash or have flu-like symptoms, you should contact your doctor and seek medical treatment.



## HOW CAN I PREVENT TICKS FROM BITING?

Deer ticks do not jump or fly onto their victims. They wait on vegetation, usually no more than 18-24 inches off the ground, and cling to animals and humans as they brush by. Once a tick gets on the skin, it usually climbs upward until it reaches a protected area. Their preferred habitats are wooded areas and adjacent grasslands. They also live in lawns and gardens, especially at the edges of woods. While there is no way to protect yourself 100% from being bitten by a tick while in an infested area, there are steps you can take to reduce your risk.

In tick-infested areas, your best protection is to avoid contact with soil, leaf litter and vegetation. However, if you garden, hike, camp, hunt, work, or otherwise spend time in the outdoors, you can still protect yourself by the doing the following:

- Stay on the center of trails and paths and avoid sitting on the ground or on stone walls – don't brush against vegetation if you can avoid it.
- Wear enclosed shoes, long-sleeved shirts, long pants, and tuck the pant legs into your socks or boots. This helps keep ticks from reaching your skin.
- Wear light-colored and tightly woven clothing. This makes it easier to spot ticks.
- Use an insect repellent, but sparingly and cautiously.
- Check yourself, your children and pets for ticks often. A tick is so small it can easily go unnoticed. **Pay special attention to the backs of knees, behind the ears, the scalp, armpits and back.**
- Keep long hair tied back, especially when gardening.

## WHAT SHOULD I DO IF I THINK I MAY HAVE LYME DISEASE?

See your doctor immediately and tell him or her of your suspicions, especially if you have found a tick attached to your skin or if you were in an area where ticks were present. Since Lyme disease can mimic other disorders, this information can help your doctor make a diagnosis. Remember, if Lyme disease is discovered early, it can be treated before it becomes a serious problem.

## IS THERE TREATMENT FOR LYME DISEASE?

Depending on the type of tick-borne infection a person has, a specific antibiotic will be given. All medical personnel agree that early diagnosis and treatment is critical in preventing a serious later-stage disease and potentially chronic illness.

## CAN TICKS CARRY OTHER DISEASES?

Deer ticks and Lone Star ticks may also carry ehrlichiosis and babesiosis, cases of which primarily have been on Long Island and in the Hudson Valley. These other tick-borne diseases produce many of the same symptoms as Lyme disease, but diagnosis is even more difficult. They do not produce a rash and also tend to cause higher fevers than Lyme disease. Although Lyme disease is not fatal, these other diseases can be, especially in the elderly and those with weakened immune systems.

Ehrlichiosis is caused by bacteria and can be treated with certain antibiotics, which are also effective against Lyme disease. However, babesiosis is caused by a malarial-like parasite and cannot be treated in the same way.

The more familiar dog tick, which is larger than the deer tick, may carry Rocky Mountain Spotted Fever. Fewer than 50 cases are reported annually in New York State. It, too, is highly responsive to antibiotic treatment.

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New York has more reported cases of Lyme disease than any other state in the country: over 95,000 cases since reporting was first required in 1986, according to the New York State Department of Health.

## HOW CAN I REDUCE THE NUMBER OF TICKS AROUND MY HOME?

While most of us take precautions against deer ticks when we plan to be out in the woods, you can be bitten by a tick in your own back yard as deer ticks are commonly found in lawns, shrubs and gardens.

Deer ticks can hitch a ride onto your lawn via small mammals such as mice and chipmunks; therefore, keeping your yard free of clutter and places for these animals to hide can reduce the tick population in your yard.

- Keep your grass mowed and edges trimmed.
- Remove leaf litter, brush and weeds around the house, at edges of the lawn and around stonewalls and woodpiles.
- Keep woodpiles and bird feeders off the ground and away from your home.
- Move children's swing sets and other play equipment in dry, sunny areas of the yard away from the woods. Place them on a mulch or wood chip foundation.
- Clean up and seal stonewalls and small openings around the home to discourage rodent activity.
- Keep your pets out of the woods to reduce ticks brought into the home.
- Plan your landscape to restrict the use of groundcover plants in areas where family and pets may walk.
- Incorporate plants into your landscape that do not attract deer and consider installing a fence to keep deer out of your lawn.
- Use gravel pathways and mulch to define your landscape. A 3-foot or wider mulch, gravel or wood chip border between lawn and woods can reduce the tick population.
- Widen and maintain any woodland trails on your property.