



## What are Ticks?

Ticks are tiny spider-like creatures that can range in size from a grain of sand to an apple seed. There are many kinds of ticks in our area. The deer tick is the most common one which bites humans.

Ticks do not jump or fly but instead stay low to the ground and grab onto animals or humans brushing up against them.

Deer ticks are most commonly found in woodland areas where there are deer, mice and other animals to feed on. They can also be found in grassy and brushy habitat located near woods, such as residential lawns and recreational parks.

Deer ticks can be found throughout the spring, summer, and even into the fall. However, they are most active during the months of June and July.

Deer ticks are capable of transmitting disease to humans. If a deer tick is infected with a disease and it bites a person, the disease may be passed to that person. The bite of a tick is painless and often goes unnoticed. In Westchester County, deer ticks are responsible for transmitting Lyme Disease and ehrlichiosis.



## What is Lyme Disease?

Lyme Disease is a potentially serious disease caused by a bacterium called a spirochete. This spirochete is passed on to people and domestic animals through the bite of an infected deer tick, but generally requires that a tick be attached for at least 36 hours. (Therefore, Lyme Disease generally will not occur unless the tick has been attached for more than 36 hours.)

Lyme Disease cannot be caught from other people, domestic animals, or insects such as mosquitoes or flies. The most common symptom of Lyme Disease is an expanding red rash, typically a bullseye rash, often at the site of the tick bite. The rash usually appears three to 30 days after the bite and may last for several weeks.

Symptoms of Lyme Disease can also include fever, sore throat, fatigue, sleeping difficulties, joint and muscle pain, swollen glands and dizziness. Even if they are not treated, these symptoms may go away.

Weeks or months after a tick bite, the symptom that brings most people to the doctor is stiffness in the large joints (arthritis). Bell's palsy, the drooping of one side of the face, may also occur.



## What is Ehrlichiosis?

Ehrlichiosis is a newly recognized tickborne disease which is caused by a bacteria. Like Lyme Disease, ehrlichiosis is spread through the bite of an infected deer tick and dual infection with both ehrlichiosis and Lyme Disease is possible.

Symptoms of ehrlichiosis can include fever, headache, chills, malaise, muscle and joint pain, nausea and vomiting. Acute weight loss, low platelet count, and low white blood cell count can also occur.

The disease typically resolves within a few days of starting antibiotics. Recovery usually occurs without long lasting problems, but serious complications can occur. Complications can include respiratory problems, blood and kidney abnormalities, meningitis, and other central nervous system complications. There have been fatalities associated with ehrlichiosis.



## What is Babesiosis?

Babesiosis is a tickborne disease which is caused by a protozoa. Babesiosis is spread through the bite of an infected deer tick and dual infection with Lyme Disease is possible.

Symptoms of babesiosis are very similar to malaria and can include headache, fever, chills, nausea, vomiting, muscle aches, confusion, difficulty breathing, kidney abnormalities and anemia.



## How are Tickborne Diseases Diagnosed and Treated?

Physicians diagnose lyme disease, ehrlichiosis and babesiosis through physical examination and the patient's history of symptoms. Blood tests may also be used to help confirm the diagnosis. Antibiotics given by mouth for Lyme Disease in its early stages generally results in complete recovery and no long term complications. The antibiotics most often used are amoxicillin and doxycycline to treat Lyme Disease, and antibiotics in the tetracycline family for ehrlichiosis. Symptomatic babesiosis is treated with quinine sulfate plus clindamycin. Antibiotics for tick bites alone without any symptoms are not indicated.



## How can I Protect Myself from Tickborne Diseases?

- Avoid tick-infested areas (wooded or grassy areas), especially in May, June and July.
- Wear light-colored, tightly-woven clothes to spot ticks more easily. Tuck your pants into socks and shirt into pants.
- Use insect repellents containing DEET according to label instructions.
- **Do tick checks after outdoor activities such as gardening, hiking or picnicking, but at least once a day. Inspect the entire body (parents should check their children) and remove ticks promptly.**

