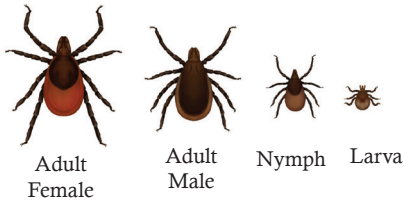


Common Ticks in the Northeast

Blacklegged Tick or Deer Tick



Known Diseases: Lyme, Anaplasmosis, Babesiosis, Powassan, and Borrelia miyamotoi

The Blacklegged Tick has no light spots on its body. It is commonly found across the Northeast with an increasing population. This tick is a vector for a numerous tick borne diseases.

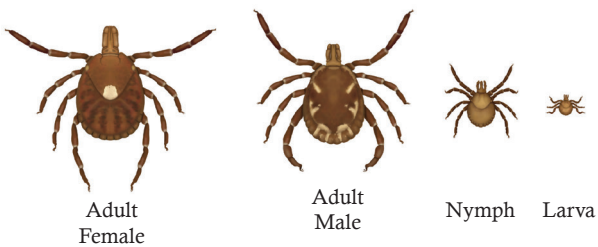
American Dog Tick



Known Diseases: Rocky Mountain Spotted Fever and Tularemia (both rare)

The Dog Tick is mostly found questing in tall grasses. Infections in the northeastern US are rarely caused by these ticks.

Lone Star Tick



Known Diseases: Ehrlichiosis and Tularemia

The Lone Star tick has been identified up the mid Hudson and on Long Island in high densities. It is moving across New York State. They do best in dry habitats, and are less cold tolerant and more dry weather tolerant than other species. Allergic reactions associated with consumption of red (mammalian) meat have been reported among people bitten by Lone Star Ticks.

*Tick sizes relative to a dime



The Blacklegged tick or deer tick has a life cycle that generally lasts two years, but tick life cycles vary with different species. The three biting stages of the life cycle, larva, nymph, and adult, each require a different host or blood meal.

Female adult ticks lay eggs in late spring to early summer, eggs then hatch into larva mid-summer. This stage has no harm for humans because ticks are not born carrying diseases, they contract them from their first host.

Larva feed, drop off, and molt into nymphs. This stage is the most important for tick borne disease because these ticks are small and hard to find on the body. Nymphs are most active in the spring to mid-summer, and at this stage are carrying diseases such as Lyme.

Nymph's drop off when they are done feeding and molt into adults. At this stage they are most likely to be carrying disease but are much easier to find on the host. They are most active late summer to fall and again in the spring.

Common Tick Borne Diseases in the Northeast

Lyme Disease: Bacteria

Symptoms: Approximately 70% of cases present with a bullseye rash.

Symptoms can vary between individuals and often include headache, sore joints, and fatigue.

Treatment: Antibiotics

Transmission: Transmission generally occurs within 24 to 48 hours of being bitten. Symptoms appear 3-30 days after the tick bite (most commonly 7 days).

Anaplasmosis: Bacteria

Symptoms: Early symptoms can include fever, chills, severe headache, muscle aches, nausea, vomiting, diarrhea, or loss of appetite. Delayed treatment can cause respiratory failure, bleeding problems, organ failure, or death

Treatment: Antibiotics, early treatment can prevent severe illness or death.

Transmission: Symptoms appear 1-2 weeks after tick bite

Ehrlichiosis: Bacteria

Symptoms: Early symptoms can include fever, chills, severe headache, muscle aches, nausea, vomiting, diarrhea, loss of appetite, confusion, or rash (more common in children). Late illness includes damage to the brain or nervous system (e.g. inflammation of the brain), respiratory failure, uncontrolled bleeding, organ failure, or death.

Treatment: Antibiotics

Transmission: Ehrlichiosis is the general name used to describe diseases caused by the bacteria *Ehrlichia chaffeensis*, *E. ewingii*, or *E. muris euclairensis*. Symptoms appear 1 – 2 weeks after tick bite.

Babesiosis: Parasite

Symptoms: Some people develop nonspecific flu-like symptoms, such as fever, chills, sweats, headache, body aches, loss of appetite, nausea, or fatigue. Babesiosis can be a severe, life-threatening disease.

Treatment: Effective treatments are available, but without symptoms, people usually do not need treatment.

Transmission: Infection caused by microscopic parasites that infect red blood cells.

Powassan: Virus

Symptoms: Initial symptoms can include fever, headache, vomiting, or weakness. Symptoms of severe disease include confusion, loss of coordination, difficulty speaking, or seizures. Approximately half of the survivors with severe disease have permanent neurological symptoms, such as recurrent headaches, muscle wasting and memory problems.

Treatment: There is no medication for the infection. People with severe disease often need to be hospitalized to receive support for breathing, hydration, or reducing swelling in the brain.

Transmission: Symptoms appear 1 week to 1 month after a tick bite, but many infected have no symptoms. There is death in 1 of 5 reported cases.

Graphics and information adapted from the Centers for Disease Control and Prevention

This material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28588.



United States
Department of
Agriculture

National Institute
of Food and
Agriculture



NORTHEAST
EXTENSION
RISK
MANAGEMENT
EDUCATION

Cornell Cooperative Extension
Chenango County