

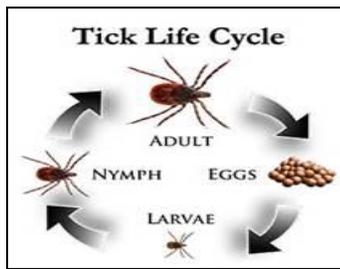
# TICK INFORMATION



Ticks are part of the arachnid family and most ticks have a hard body shell, elongated mouthparts, and eight legs in the nymph and adult stages. Ticks do not fly or jump. They live in tall grass, leaf litter and shrubs.

The life cycle of the tick requires 2 years to complete. The adult female ticks drop off their hosts (white-tailed deer are the host for the blacklegged ticks) and lay approximately 2,000 eggs in the spring. These eggs hatch into larvae later in the summer. The larvae then feed on mice and other small mammals. Once they feed, the larvae are inactive until the next spring when they turn into nymphs. Nymphs then feed in late spring and early summer, and become adults. In the fall, adults attach to and feed on hosts such as dogs, cats, white-tailed deer and humans. The adult females mate, drop off their hosts and lay their eggs in the spring as the cycle starts again.

Most cases of Lyme Disease are transmitted by the bite of an infected blacklegged tick during the nymphal stage in the spring and summer. Infected adult ticks can also transmit the bacteria that causes Lyme Disease into the fall. Adult ticks only die after they live their two year cycle; adult female ticks die once they lay their eggs in the early spring, and adult male ticks die after they mate in the late fall.



Ticks do not die off in the winter months. Since ticks live in tall grasses, leaf litter, shrubs, trees, and the like, they are protected from the cold temperatures. If the tick does not find a suitable host by winter they may continue to search for blood to feed on throughout the winter. Ticks continue to feed whenever the temperature is above 35 degrees.

## TICK BORNE DISEASES



**Lyme Disease:** Lyme disease is a bacterial disease caused by *Borrelia burgdorferi* carried by Blacklegged ticks. Within 1 to 2 weeks of being infected, people may have a "bull's-eye" rash with fever, headache, and muscle or joint pain. Some people have Lyme disease and do not have any early symptoms. Other people have a fever and other "flu-like" symptoms without a rash. After several days or weeks, the bacteria may spread throughout the body of an infected person. These people can get symptoms such as rashes in other parts of the body, pain that seems to move from joint to joint, and signs of inflammation of the heart or nerves. If the disease is not treated, a few patients can get additional symptoms, such as swelling and pain in major joints or mental changes, months after getting infected

**Rocky Mountain Spotted Fever:** The most severe and most frequently reported tick borne disease in the United States. The disease is caused by *Rickettsia rickettsii*, a species of bacteria that is spread to humans by ixodid (hard) ticks. Initial signs and symptoms of the disease include sudden onset of fever, headache, and muscle pain, followed by development of rash. The disease can be difficult to diagnose in the early stages, and without prompt and appropriate treatment it can be fatal.

**Human Babesiosis:** The disease is a malaria-like syndrome characterized by fever, fatigue, and hemolytic anemia lasting from several days to a few months. Headache, fever, chills, nausea, vomiting, myalgia, altered mental status, disseminated intravascular coagulation, anemia with dyserythropoiesis, hypotension, respiratory distress, and renal insufficiency are common. However, symptoms of babesiosis do not show periodicity. The incubation period varies from 1 to 4 weeks. In the United States, there have been hundreds of cases of babesiosis caused by *B. microti*, carried by Blacklegged ticks, mainly from southern New England, and specifically from Nantucket, Martha's Vineyard, Shelter Island, Long Island, and Connecticut.

Two other less common tick diseases are **Human Anaplasmosis** & **Human Monocytic Ehrlichiosis**

## Types of Ticks Found in Connecticut



**Blacklegged Tick:** Blacklegged tick is the correct common name for the tick popularly known as the “deer tick”. This tick transmits three tick borne diseases: Lyme Disease, human babesiosis, and human anaplasmosis. Unfed female Blacklegged ticks have a reddish brown body and a dark brown plate located behind the mouthparts. The length of the female tick from the tip of the mouth to the end of the body is 3 to 3.7mm (about 1/10th of an inch). Unfed male Blacklegged ticks are smaller than the females (about 2 to 2.7mm) and are completely dark brown. Females who are engorged with blood become fairly large and are often confused at this stage for the American Dog tick. Blacklegged ticks feed on a wide variety of mammals and birds and require 3 to 7 days to ingest blood, depending on the stage of the tick.



**American Dog Tick:** The American Dog tick is the primary carrier of Rocky Mountain Spotted Fever, and is also the carrier of tularemia. This tick does not carry Lyme Disease. It is the most common tick found in the Northeast U.S. and is also commonly known as the wood tick. Adult dog ticks feed on people and pets. Adult ticks are reddish brown in color with silvery-gray or white markings on the back and upper body. They are about 6.4mm (1/4 inch) in length. Engorged ticks may reach 1/2 inch in length and resemble a dark pinto bean. Dogs are the favorite host of these ticks, but they will feed on any medium to large mammal.



**Packard Tick:** Also known as the Woodchuck tick, prefers mostly medium sized mammals as hosts and can be found on woodchucks, opossums, skunks, raccoons, and foxes.



**Lone Star Tick:** This tick is named for the conspicuous spot located in the middle of the back. Lone Star Ticks are the carriers of human monocytic ehrlichiosis (HME). This tick does not transmit Lyme Disease, but has been linked to a Lyme Disease-like illness with a rash and other similar symptoms. This tick is some what scarce in Connecticut, and is mainly found in coastal communities from Fairfield to New Haven counties. The Lone Star tick has a wide host range, and will feed on virtually any mammal.



**Brown Dog Tick:** Found mostly on dogs, these ticks love to feed mainly on the ears, but can also be found on the head, neck, legs, chest, and belly. Occasionally people may be fed on by these ticks.

