

Frequently Asked Questions Regarding Tick Testing for Tick-borne Pathogens

- 1. What kinds of ticks bite people in Connecticut?** *Ixodes scapularis*, the black-legged tick (also known as the deer tick) is the most abundant, followed by *Dermacentor variabilis*, the American dog tick, and then *Amblyomma americanum*, the lone star tick.
- 2. How much do you charge to test a tick?** Our tick program is offered as a public service and is paid for by state and federal tax dollars. We do not charge any additional handling fees for identification and/or testing.
- 3. Why do I have to go through my local health department in order to send my tick to you?** It has been mandated by the State of Connecticut that the Tick Testing Laboratory accept only ticks submitted through local health departments. Working via health departments helps us process the large volume of ticks and paperwork more efficiently, meaning we can get results to you more quickly.
- 4. Do you test for pathogens other than the one that causes Lyme disease?** Yes, in addition to *Borrelia burgdorferi*, the spirochete which causes Lyme disease, we test for *Anaplasma phagocytophila* and *Babesia microti*, the causative agents of human granulocytic anaplasmosis and babesiosis, respectively.
- 5. My health department says they don't send ticks to you anymore. What do I do?** There are a number of health departments that no longer participate in our program due to budget constraints. Residents of these towns can send their ticks to us directly. Our submission form can be found online at www.ct.gov/caes.
- 6. How should I submit the tick?** Most health departments will send the tick for you when you submit it to them. Enclose with your specimen a CAES tick submission form either given to you by your health department or obtained from www.ct.gov/caes. The tick should be packaged in a crush-proof container placed in a padded envelope. Please do not place the tick on tape or in layers of folded tissue. There is no need to put grass, moisture, or any other materials inside the container. Make sure the container is securely closed. Please do not send glass containers through the mail. Please request the mail carrier to handle the envelope containing tick manually and not through a machine.
- 7. Can you test a tick that's been sitting around for a while?** The test we perform looks for the DNA of the disease-causing organisms *Borrelia burgdorferi*, *Anaplasma phagocytophila*, and *Babesia microti*. DNA can often be extracted from very old specimens (think of the samples extracted from fossils, for example). Even though most ticks have not been preserved in any way, DNA can maintain its integrity for a long time. We are usually able to successfully test samples that are months or even years old. However, it makes sense to test the tick as soon as possible to determine if it is infected.
- 8. When will I get my result?** It generally takes an average of 2-3 days for the lab to receive the tick from the postal service. It takes approximately 2-3 laboratory days to test a tick. Sometimes there are other specimens "in line" ahead of your tick, which means a delay of a few more days. Results are sent via e-mail only to both health departments and residents.
- 9. How should I remove a tick?** Remove the tick as quickly as possible. Delaying removal increases the potential for pathogen transmission. Grip the mouthparts (hard parts of the tick closest to the attachment site) with a pair of fine tweezers and pull forcefully to dislodge the tick. Do not use petroleum jelly, other topical products, or a burning match to remove the tick. If the tick is damaged during removal make sure to save any broken-off pieces for testing.
- 10. What should I do if part of the tick is left in the skin after removal?** It is best to leave the parts embedded in the skin, allowing the body to expel them naturally over time. Digging around to remove mouthparts can further irritate the bite site and could cause an infection unrelated to Lyme disease. Tick parts remaining in the skin can not continue to infect the host nor can the tick regenerate from those parts.

11. **It's red around the bite site. What does this mean?** This is a localized reaction from the bite itself. A bull's eye rash, the classic Lyme disease symptom, has specific characteristics and should be diagnosed by your physician. If you have concerns about a rash, please seek medical attention for diagnosis and/or treatment.
12. **My doctor prescribed XX antibiotic. Does that sound right to you?** We defer all medical questions to your physician.
13. **Why didn't my unengorged tick get tested?** Ticks need to feed for nearly 40 hours to transmit the causative organism of Lyme disease to humans. Ticks without blood in their midguts have not been attached long enough to transmit *Borrelia burgdorferi*.
14. **Why wasn't my larval tick tested?** Ticks need to acquire the Lyme disease bacterium from a host before they can pass it on to a second host. Larval ticks hatch from eggs and have not yet had a blood meal, which means there has been no opportunity for them to acquire the bacterium.
15. **I sent you a male deer tick. Why wasn't it tested?** Male ticks have not been documented to transmit *Borrelia burgdorferi*.
16. **I sent in a tick I removed from my pet. Why wasn't it tested?** Due to limited resources, we only test ticks that have fed on humans. We will identify your pet's tick to species and degree of engorgement, and will contact you with that information.
17. **Why wasn't my dog tick tested?** The American dog tick, *Dermacentor variabilis*, does not transmit the causative agents of Lyme disease, babesiosis and anaplasmosis, the three important tick-associated diseases in Connecticut.
18. **Do ticks fall out of trees?** No, ticks do not drop out of trees, nor do they jump or fly. They stay mainly on grass and bushes, waiting to "hitch a ride" through direct contact with passing hosts.
19. **What kinds of animals do deer ticks feed on?** The adult deer tick feeds primarily on larger mammals. Nymph and larval deer ticks feed on smaller mammals, such as mice, and birds. Humans are not intentional, but rather incidental hosts.
20. **Should we have our yard sprayed in an effort to control the ticks?** Dr. Kirby Stafford's "Tick Management Handbook" includes a comprehensive examination of the various methods available for habitat control as well as personal protection from tick bites. The handbook can be downloaded from our website www.ct.gov/caes.
21. **I found a tick crawling around on me. Could it have bitten me already?** If the tick is flat, it most likely has not fed on you yet. Once a tick starts feeding, it will stay attached for several days, until it becomes fully engorged with blood. If the tick that is crawling on you is filled with blood, it probably has finished feeding.
22. **I found a tick on me this morning, but I know it wasn't there when I went to bed. I wasn't outside at all yesterday. How could it have gotten on me?** Ticks may be brought into the home by a pet, or they may be brought in on the outside of clothing and eventually crawl onto you inside the house.
23. **I can't get Lyme disease in the winter, right?** A few cases of Lyme disease are acquired during the winter. Adult ticks will seek hosts during the winter whenever temperatures are relatively mild.
24. **When are ticks most active?** Springtime (especially May and June) is the peak season of the year, with nymphs being very active. This is when most Lyme disease cases occur. A second, smaller peak occurs in the fall (mid-October until it gets colder) and is comprised largely of adult ticks.