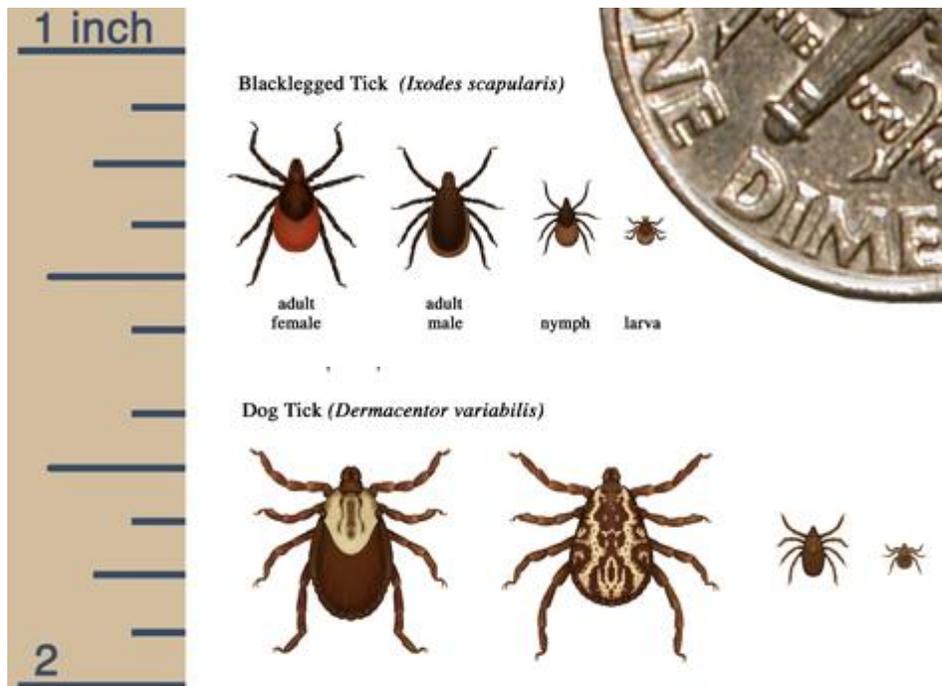




Tick Borne Diseases

What are ticks?

Ticks are relatives of spiders that feed on the blood of mammals, birds, and reptiles. Deer ticks and dog ticks are found throughout Massachusetts and may spread different disease-causing germs through bites. Ticks exist in three stages: larva, nymph and adult. Ticks come in different sizes, so checking carefully for ticks on your body is important. Young deer ticks (nymphs) are the size of a poppy seed. Adult dog ticks are about the size of a watermelon seed. Both of these bite humans and can make them sick.



Relative sizes of several ticks at different life stages. http://www.cdc.gov/ticks/life_cycle_and_hosts.html

Where are ticks found?

Ticks are generally found in brushy, wooded, or grassy areas. Ticks do not fly, jump, or drop from trees or high bushes. They attach to animals or people that come into direct contact with them and climb upwards.

What diseases can ticks spread?

Ticks in Massachusetts can spread Lyme disease, babesiosis, anaplasmosis, tularemia, and Rocky Mountain spotted fever. All but Lyme disease are rare in Boston. In Massachusetts, Lyme disease as well as the other infections occur most frequently on Cape Cod, Martha's Vineyard, and Nantucket.

Babesiosis is caused by a parasite that affects red blood cells. Most people who are infected will show no signs of illness. Symptoms, when they do occur, begin gradually about 1 to 6 weeks after being bitten by an infected deer tick and can include fever, chills, headache, joint and muscle aches, fatigue, nausea, vomiting, abdominal pain, and dark urine. The elderly and people without a healthy spleen or immune system are more likely to develop serious symptoms.

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Lyme disease is an illness caused by bacteria (germs) that are spread to people and animals by tiny infected deer ticks. In Massachusetts, deer ticks are found everywhere. Initial symptoms usually begin 3 to 30 days after a person is bitten by an infected deer tick and may include an expanding rash at the site of the bite and/or flu-like symptoms.

Anaplasmosis (human granulocytic ehrlichiosis) is caused by bacteria that affect certain white blood cells. Symptoms typically appear suddenly 7 to 14 days after being bitten by an infected deer tick and can include fever, headache, muscle aches, chills, sweating, nausea, and vomiting. Because symptoms may become life-threatening, immediate treatment is necessary. The elderly and people without a healthy immune system are more likely to develop serious symptoms.

Tularemia is caused by bacteria that can be spread to people in a number of ways, including through the bite of a infected ticks. Symptoms vary depending on the way the germs are transmitted and usually begin between 3 to 5 days after an exposure, although it can take as long as 14 days. People infected by a tick bite typically have a slow-healing skin sore (ulcer) and swollen glands (lymph nodes).

Rocky Mountain spotted fever (RMSF) is a rare disease caused by bacteria that usually presents as a high fever with severe headache and fatigue 2 to 14 days after being bitten by an infected dog tick. A rash that spreads to the palms of the hands and soles of the feet often appears 2 to 5 days after the fever begins.

What should I do if I find a tick on myself?

Carefully remove the tick as soon as possible. Use fine point tweezers to grip the tick as close to the skin as possible. Pull the tick straight outward with steady, gentle pressure. Do not squeeze or twist the tick. Do not apply kerosene, petroleum jelly, nail polish, or a hot match tip to remove the tick. You may want to save the tick for identification. Notify your health care provider if you have been bitten by a deer tick or if you develop a rash or other signs of illness following a tick bite.

How can I prevent tick borne disease?

The best way to prevent tick borne disease is to check yourself and your children after being in an area where ticks are likely to be found. Ticks often are found on the legs, in the groin, in the armpits, along the hairline, and in or behind the ears. Deer ticks are very small, so look for new “freckles”.

Other precautions include:

- Wear long sleeved shirts and long pants and tuck your pant legs into your socks.
- Light colored clothes will help you spot the ticks on your clothes before they reach your skin.
- Stay to the middle of paths when in a heavily wooded area.
- Use insect repellants containing DEET on exposed skin. Read labels carefully. Use products with no more than 30% DEET. Do not use insect repellents on infants. Wash skin with soap and water after returning indoors.
- Permethrin may be applied to items such as clothing to repel ticks. Read the product package carefully and follow the directions for use. Do not apply directly on your skin.
- There are other insect repellents approved by the EPA for ticks. For more information, visit: <http://www2.epa.gov/insect-repellents/find-insect-repellent-right-you>
- Talk to your veterinarian about the best ways to protect your pets from ticks.
- Know the symptoms of diseases spread by ticks and see a health care provider if you get any symptoms.
- Not all ticks carry disease, and being bitten by a tick does not mean that you will always get a disease. The longer a tick is attached, the more likely an infection can be transmitted.

