Ticks carry diseases that can make people and pets sick. In pets, dogs in particular are susceptible to tick bites and tickborne diseases. Tick bites may be hard to detect. Heavy tick infestations can cause anemia in pets, as well as skin irritation. Signs of tickborne disease may not appear for 7-21 days or longer after a tick bite, so watch your pet closely for changes in behavior or appetite if you suspect that your pet has been bitten by a tick. If you think your pet may be infected with a tickborne disease, take them to their veterinarian. Your veterinarian may perform diagnostic tests including lab work to look for tickborne diseases, and treatment such as a course of antibiotics and supportive care may be needed.

### Tickborne Diseases in Dogs and Cats

<table>
<thead>
<tr>
<th>Disease</th>
<th>Pet Affected</th>
<th>Route of Transmission in NJ</th>
<th>Average Incubation Period</th>
<th>Possible Symptoms</th>
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</table>
| Anaplasmosis and Ehrlichiosis¹ | Dogs (rarely cats)        | Tick bite (Ehrlichiosis: brown dog tick, American dog tick, lone star tick<br>Anaplasmosis: blacklegged tick) | 1-3 weeks; Acute, Subclinical, and Chronic phases possible | Fever<br>Enlarged lymph nodes<br>Decreased appetite<brreater  
Bruising, small red or purple spots on skin or gums | Decreased energy<br>Joint pain |
| Babesiosis²             | Dogs                     | Tick bite (primarily brown dog tick)<br>Infection from other dogs (bite wounds)<br>Blood transfusions | 1.5-4 weeks | Fever<br>Decreased energy<br>Pale gums<br>Bruising, small red or purple spots on skin or gums | Decreased appetite<br>Enlarged spleen |
| Lyme Disease¹           | Dogs                     | Tick bite (Blacklegged tick)                                   | Weeks-months | Fever<br>Enlarged lymph nodes<br>Joint pain<br>Increased drinking/urination (rare) | Limping<br>Decreased appetite |
| Rocky Mountain Spotted Fever¹ | Dogs                   | Tick bite (American dog tick)                                  | A few days - 2 weeks | Fever<br>Decreased energy<br>Joint/Muscle pain<br>Decreased appetite | Pale gums, bruising<br>Tremors |
| Tularemia¹³             | Cats (uncommon in dogs)  | Tick bite (American dog tick, lone star tick)<br>Bites from deer flies<br>Consuming infected animals<br>Inhalation | 1-5 days | Fever<br>Enlarged lymph nodes | Decreased appetite<br>Abscesses<br>Decreased energy<br>Ulcerated tongue |
| Tick Paralysis          | Dogs                     | Tick bite (primarily from American dog tick or blacklegged tick) | 5-9 days | Progressive neurologic signs (hind end weakness, progressing to weakness in all 4 limbs, then paralysis), Difficulty swallowing, Voice changes |

¹ Ticks can transmit this disease to people
² The Babesia species that affect dogs are different than those that cause disease in people
³ While rare, people can get tularemia from contact with infected pets; more often, humans get tularemia from infected ticks or wildlife
Tickborne Diseases in People

People can be infected with many of the same tickborne diseases that affect animals. While dogs and cats do not directly transmit most of these diseases (tularemia is an exception; for more information, please visit the NJDOH Tularemia website) they can bring ticks infected with the diseases into the house.

Tick Control and Prevention

- Know where to expect ticks - ticks live in grassy, brushy, or wooded areas, or even on animals. Many people get ticks in their own yard or neighborhood.
- Check yourself and your pets for ticks daily, especially after spending time outdoors. If a tick is found, remove it right away.
- When spending time outdoors, people can use Environmental Protection Agency (EPA)-registered insect repellents containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus, pare-menthane-diol, or 2-undecanone. Clothing and gear can be treated with products containing 0.5% permethrin. Do not use these products on your pet.
- Talk to your veterinarian about appropriate tick prevention products to use.
  Note: Cats are extremely sensitive to a variety of chemicals. Do not apply any tick prevention products to your cats without first asking your veterinarian.
- Talk to your veterinarian to see if the Lyme vaccine is right for your dog; there are no vaccines available for the other tickborne illnesses.
- Maintain your yard to discourage ticks and the wildlife that harbor them.

Where to Get More Information about Tickborne Diseases

- Your veterinarian
- Your healthcare provider
- NJ Department of Health http://www.nj.gov/health
- Centers for Disease Control and Prevention https://www.cdc.gov/ticks/index.html