

# Ticks & Tick-Borne Diseases: Information for Pet Owners & Clinicians

## Quick Tick Facts

- Ticks can potentially transmit disease.
- Some tick species are expanding their ranges and moving into areas where they have not been found historically.
- Ticks can be found on pets during all seasons of the year, not just in the spring and summer.

**What if ticks are found on a pet?** Tick removal is best done by following the instructions available from the Centers for Disease Control: [cdc.gov/ticks/removing\\_a\\_tick.html](https://www.cdc.gov/ticks/removing_a_tick.html). It is important to carefully remove a tick so that the head remains attached. This can aid in identification which is important for determining which diseases are of concern. Your veterinarian can help you with tick removal. If the tick cannot be identified at the veterinary clinic, the tick can be sent to the MSU VDL for identification.

**Symptoms for tick-borne diseases in animals are typically non-specific** but often include fever, weakness, lethargy, lameness, lack of appetite, vomiting, and diarrhea. While much of the veterinary focus on tick-borne diseases tends to be on dogs, many species, including horses, are also susceptible. Prevention, identification, diagnostic testing, and early treatment for infection are keys to decreasing the incidence of severe illness and fatalities.

**If a tick is never found on a pet, can the pet still acquire a tick-borne disease?** Yes. Larva and nymph stages are very small and easily missed when a pet is examined for ticks. Also, the MSU VDL has received several engorged ticks that were not found on the pet, but in the house in areas frequented by the pet. So it is possible even for an engorged tick to escape detection.

## For Additional Information

### CDC Tick Website

Centers for Disease Control and Prevention  
[cdc.gov/ticks](https://www.cdc.gov/ticks)

Offers comprehensive information about tick geographic distribution, life cycle and hosts, and diseases transmitted; suggestions for avoiding ticks on people, pets, and in the yard; instructions for removal; and a listing of symptoms of tick-related illness in people. This site has easy navigation and good use of graphics and photos.

### MSU VDL Tick-Borne Disease Diagnostics

MSU Veterinary Diagnostic Laboratory  
[animalhealth.msu.edu](https://www.animalhealth.msu.edu)

The MSU VDL can perform the following tests: Anaplasma phagocytophilum IFA, Anaplasma PCR, Babesia canis IFA, Babesia gibsoni IFA, Babesia spp PCR, Ehrlichia canis IFA, Ehrlichia PCR, Equine Tick Core Panel, Lyme IFA, Lyme PCR, Rickettsia rickettsii IFA, Rickettsia PCR, Tick-Borne Disease Antibody Screen, Tick Identification, and Tick PCR. For more details on these or other tests, visit our website and click on "Available Tests."

## Resources for Michigan Residents

### MDHHS Lyme Disease Website

Michigan Department of Health and Human Services  
[michigan.gov/lyme](https://www.michigan.gov/lyme)

Provides information about Lyme disease including details about blacklegged ticks; history and distribution of the disease; treatment and prevention; transmission and development; suggestions for Michigan's public; and tick identification and tick-bite prevention resources. These include a Michigan Tick ID Card, information on tick removal, and several publications/guides:

- Healthcare Provider Lyme Disease Toolkit
- Michigan's Five Most Common Ticks
- Tick Bite and Lyme Disease Prevention in Michigan
- Tick Bite Prevention in Michigan's Outdoors
- Tick Identification and Testing in Michigan
- Ticks and Your Health Brochure

*The MSU VDL encourages clinicians and pet owners outside of Michigan to check with their state and/or local health department for information specific to their geographic area.*

*This fact sheet is provided by the Veterinary Diagnostic Laboratory at the Michigan State University College of Veterinary Medicine as a public service. It is not intended to diagnose any disease. Please contact your veterinary medical service provider if you have questions regarding this or any other veterinary medical issue.*

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