Tick-Borne Disease

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what diseases do ticks carry?

There are several diseases that ticks can transmit to your dog's blood.

Whether your dog accompanies the family hunting, or just hunts down backyard creatures, he will more than likely be exposed to ticks. Ticks carry disease from one pet to another and have been known to transmit disease to humans.

Diseases Affecting Blood Cells

There are several diseases that ticks can transmit to your dog that affect his blood cells. These diseases include those caused by the *Bartonella* microorganism, the *Babesia* parasite, and *Ehrlichia/Anaplasma*. Symptoms of these blood-borne diseases include fever, anemia and weight loss. Some also affect the joints. Treatment includes antibiotic therapy, and blood transfusions for the more severe cases.

Rocky Mountain Spotted Fever

A common disease is Rocky Mountain Spotted Fever (RMSF), transmitted by the American Dog Tick and the Rocky Mountain Spotted Fever Tick. The microbe that actually causes the disease is also a rickettsia called *Rickettsia rickettsii*. RMSF is often manifested by neurological signs (dizziness, seizures), as well as muscle and joint pain. There is antibiotic treatment for this disease, but dogs with severe neurological problems may not recover completely.

Lyme Disease

The most common disease caused by ticks is called Lyme disease, named after the town in Connecticut where it was first diagnosed in the 1970's. A tiny, common deer tick (also called the black-legged tick) carries the *Borrelia burgdorferi* bacteria that cause the disease. The deer tick must be attached to the host for 24-48 hours for the bacteria to be transmitted. Dogs show several different forms of the disease, but by far, the most common symptoms are a fever of between 103°F and 105°F, shifting leg lameness, swelling in the joints, lethargy, and lack of appetite. Unfortunately, symptoms do not usually appear for two to five months post-exposure.

Lyme disease responds readily to antibiotics, but damage to joints can be permanent. There is a vaccine available, but it does not ensure total protection. Both Rocky Mountain Spotted Fever and Lyme disease are transmissible to humans via ticks.

Tick Prevention

All in all, it is much simpler to prevent ticks from attaching to your pet or to be diligent about removing them when your pet is in high tick areas such as forests or fields. With the advent of once-a-month topicals and insecticides, tick control

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has become a lot easier and more effective. Tick collars containing Amitraz have been shown to be an effective addition to tick control.

Lyme vaccination in tick-infested areas is also a great idea. There are several Lyme vaccines on the market that are licensed for use in dogs. However, since vaccines are not 100% effective, tick control is still recommended.

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