



Tick-borne Disease and Prevention

*ISVMA Public Relations Committee
with the support of
Nathan A. Jurgena, DVM, Hawthorne Animal Hospital
May 2009*

As spring and summer approach, all pet owners dream of warmer temperatures and the chance to enjoy the outdoors again. Many of our pets also relish the opportunity to stretch their legs and play in their backyards, along trails, or in the parks of our neighborhoods. However, ticks are waiting to renew their life stages, and these parasites need a host to complete the cycle. This article discusses some of the diseases dogs are at risk of acquiring from these potentially deadly vectors of disease.

There are many different species of ticks, each carrying a multitude of infectious diseases. Many people are already aware of the deer tick, the causative agent of Lyme disease. This tick harbors the most commonly transmitted pathogen, *Borrelia burgdorferi*. More and more cases of Lyme disease are diagnosed every year in humans and dogs. This disease now spans nearly the entire contiguous United States, with Illinois ranking high in cases each year. The shocking truth for pet owners is that dogs are 50% more susceptible to Lyme disease than humans! Clinical signs owners may see in a dog with Lyme disease can sometimes be confused with other illnesses. Dogs do not get the classic “bulls-eye” rash that people get on their skin, but instead may have non-specific signs such as fever, joint swelling, lameness, lethargy, enlarged lymph nodes, kidney disease, heart problems or even behavior changes.

While Lyme disease has received much press and notoriety, there are many other types of infectious diseases caused by ticks. Ehrlichia, an organism mainly passed between dogs by *Rhipicephalus sanguineus*, the Brown dog tick, is especially troublesome because all of its life cycles have a desire to feed on dogs. It also has a tendency to live indoors as much as outdoors, which means it can infect dogs year-round. Signs of Ehrlichia infection can include anorexia, depression, fever, painful joints, pale gums and bleeding from the nose. Ehrlichiosis is now the second most common infectious disease in canines in the United States after parvovirus!

In addition, another tick-borne disease increasing in prevalence is Rocky Mountain spotted fever. While this disease can certainly cause similar clinical signs as mentioned with Lyme disease and Ehrlichiosis, these dogs may also demonstrate coughing, vomiting, diarrhea, muscle pain, seizures and eye-related issues. Because the symptoms of diseases transmitted by ticks are quite non-specific, it is extremely important to consider Lyme disease, Ehrlichiosis, Rocky Mountain spotted fever and others when dogs become ill.

Prevention is truly the best medicine to help minimize these risks. First, inspect your dog’s coat daily for ticks, especially after going on walks or being outdoors in endemic areas. Feel for ticks or hard bumps, and when found, remove ticks immediately as directed by your veterinarian. Secondly, please consult your veterinarian for the product most appropriate for your pet and its environmental risks. Use and apply this effective topical flea and tick preventative to eliminate any ticks not found on inspection. Finally, if your dog shows any of these signs mentioned above, please talk to your veterinarian immediately so that proper testing can be done and appropriate treatment can be started early for the best outcome.

This article is second in a series on key animal and public health issues. This was created for ISVMA members to use in educating their clients. To download a copy of this article, and to access other printable resources on the subject of tick-borne disease, visit the Members’ Center on the ISVMA’s website at 222.isvma.org. Click on “ISVMA Library” at the top of the page and look for the links under ISVMA Public Relations Committee Information Series.”