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Does your dog play with your child in the backyard or woods? Of course! People and pets often spend time together hiking, walking or playing in the same environment, which can potentially put them at risk for common exposures to the same <u>disease-transmitting</u> ticks.

So, if your dog was just diagnosed with <u>Lyme disease</u>, this article is a must-read for you.

According to the *US Centers for Disease Control (CDC)*, there has been a dramatic increase in the number of diagnosed human infection cases of Lyme disease per year – up from 30,000 to 300,000 recently. Lyme disease has been found in every US State, and it would be dangerous to think that your dog is safe based on your location. People who live in these 13 states should know that the incidence of Lyme disease is especially great: CT, DE, ME, MD, MA, MN, NH, NJ, NY, PA, VT, VA, WI.

Lyme disease, caused by a spiral-shaped organism called Borrelia burgdorferi (Bb), can affect humans, dogs, horses and other species, and is one of the most common tick-borne diseases in the world. Clinical signs of Lyme disease vary between humans and dogs.

Human symptoms of Lyme disease

Clinical signs of acute Lyme include:

- Flu-like signs
- A target-like rash

Chronic (long-lasting) signs of Lyme disease in humans include:

- Arthritis
- Skin changes
- Neurologic signs (e.g., meningitis)
- Cardiac signs (e.g., arrhythmias)

Dog Symptoms of Lyme disease

In dogs, three states of Lyme disease can be seen: acute, sub-acute and chronic. With acute Lyme disease in dogs, clinical signs include:

- Transient fever
- Lethargy
- Depression
- Hesitance to move
- Inappetence
- Pain
- Enlarged lymph nodes
- Acute arthritis (i.e., warm joints that are painful to touch)

Sub-acute clinical signs, like <u>limping</u>, may also be seen in dogs, and can last several weeks.

Chronic clinical signs in dogs include:

- Cardiac changes (e.g., bradyarrhythmias such as heart block, etc.)
- Neurologic signs
- Arthritis
- Changes related to Lyme nephritis (e.g., inflammation of the kidneys that can result in acute <u>kidney failure</u>, which is estimated to occur in 1-2% of dogs affected by Lyme disease)³.

What is being done to combat Lyme disease?

Based on the fact that Lyme disease can result in significant problems for both humans and dogs, the American Academy of Pediatrics (AAP) and the American Veterinary Medical Association (AVMA) teamed up on a new initiative to help increase awareness of Lyme disease and to promote the early diagnosis of it. Click here to learn how the AVMA/AAP Lyme partnership started out with a protest.

By teaming up to increase awareness, hopefully both veterinarians and medical doctors can work together to help diagnose illness sooner. Pet owners who have had a dog diagnosed with Lyme disease should consult with their medical doctor to discuss their own risk – or their children's risk. Also, people who are diagnosed with Lyme disease should be advised to consult with their veterinarian to discuss testing, better preventive care for their dog and minimizing environmental exposures.







If your dog did test positive for Lyme disease (commonly tested for using an IDEXX SNAP 4Dx® Plus Test), it means your dog has been exposed to Bb. While this may not necessitate treatment, it does mean that you need to improve your prevention methods – for you, your children and your pets!

Some dogs may spontaneously recover from Lyme disease without therapy at all. That said, the prognosis for chronic manifestations of Lyme disease (e.g., Lyme nephritis) is grave. Again, preventive care is imperative to help minimize the incidence of clinically symptomatic Lyme infection in both four-legged and two-legged family members.

Click here for more tips on how to prevent Lyme disease.

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.

References:

- 1. Goldstein RE. Managing the growing threat of canine Lyme disease. Western Veterinary Conference Proceedings, 2014.
- 2. Lyme Disease Data. Centers for Disease Control and Prevention. Accessed May 5, 2014 at http://www.cdc.gov/lyme/stats/index.html?s_cid=cs_281.
- 3. Magnarelli LA, Anderson JF, Schrier AB et al. Clinical and serologic studies of canine borreliosis. J Am Vet Med Assoc 1987;191:1089-1094.



