

### 1) What is Lyme disease?

Lyme disease is caused by infection of a spirochete bacterium called *Borrelia burgdorferi*. This disease can affect humans, dogs, horses and occasionally cats (1).

### 2) How does my dog get Lyme disease?

In Manitoba, the black legged tick/deer tick (*Ixodes sp.*) is responsible for transmitting Lyme disease. Dogs are thought to be incidental hosts in the life cycle of the black legged tick. An infected tick will bite a dog and transmit the *Borrelia bacteria* once it has been attached for 36-48 hours (2)



Figure 1

### 3) What are the symptoms?

Symptoms of Lyme disease occur 2-5 months after infection (1). Bite site lesions can occur within a week to months.

Common symptoms include signs of lameness due to arthritis: hunched back, walking as if over glass or on egg shells, fever, enlarged lymph nodes and generalized malaise. In rare cases the disease can affect the kidneys and nervous system tissue causing signs such as: increased thirst, increased urination, vomiting, diarrhea, swelling of extremities and seizures.

### 4) How do you treat Lyme disease?

Lyme disease is treated with antibiotics, most commonly Doxycycline for a 4 week period. If your dog is going to an endemic area (known population of infected deer ticks), recommendations for prevention include: Lyme vaccine, oral or topical tick preventative medications.

#### References:

1. Tilley, L. P., Smith, F. W.K. (2011). Blackwell's Five-Minute Veterinary Consult: Canine and Feline 5th Ed. West Sussex, UK: John Wiley and Sons Ltd  
2. <http://www.cdc.gov/lyme/transmission/> Accessed June 11, 2015

#### Figures:

1. [www.PetDiseaseReport.com](http://www.PetDiseaseReport.com) website. Accessed June 11, 2015

2. <http://www.healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/lyme/index-eng.php> website. Accessed June 11, 2015

A blood test may be advised by your vet to see if your dog has been exposed to Lyme disease. Often this test is part of your dog's annual heartworm test. If the test indicates exposure, further testing and possible treatment is indicated.

Talk to your veterinarian for further advice and to discuss your dog's potential risk level.

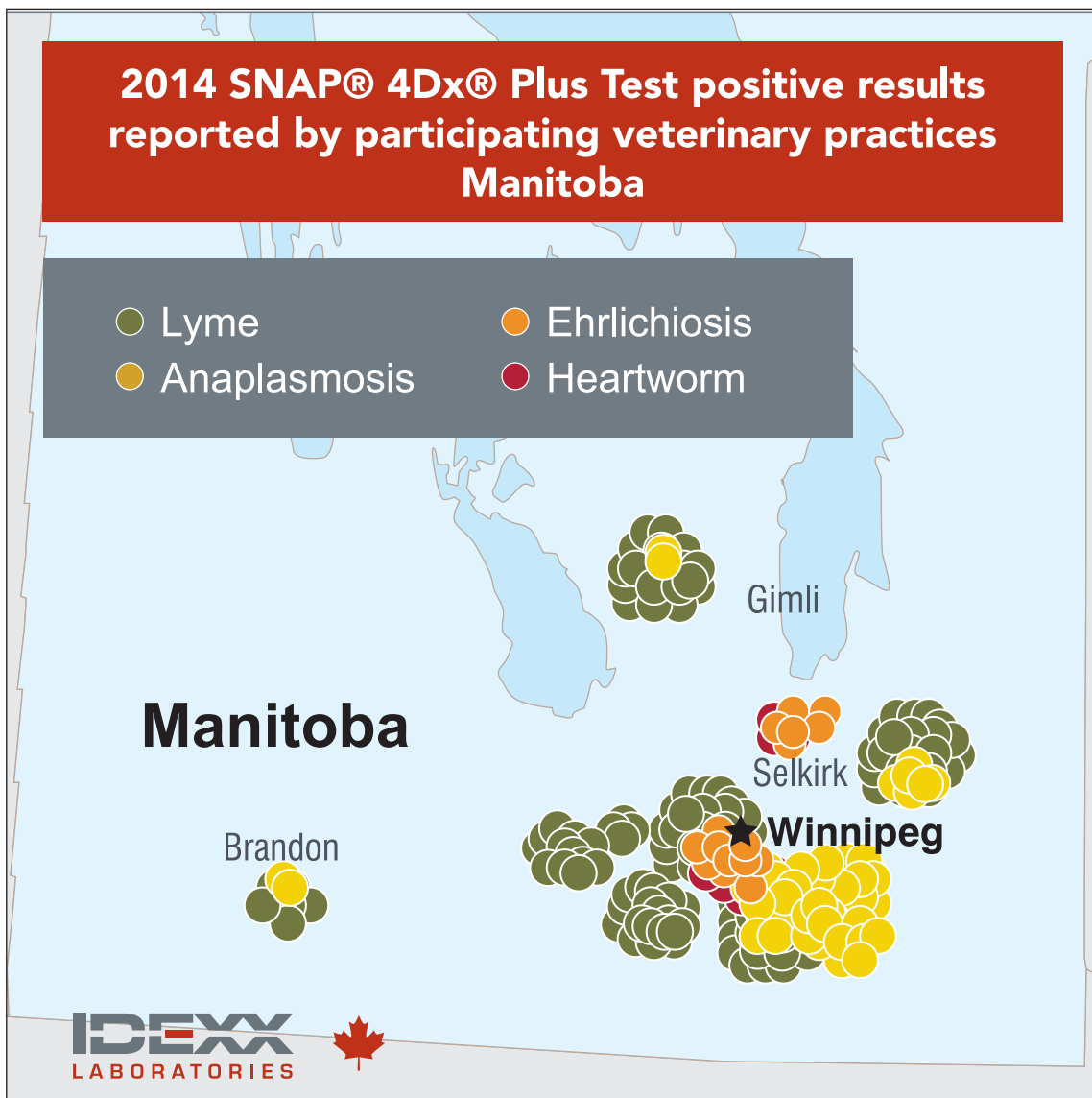


Figure 2