

**EVERYONE
IS TALKING
ABOUT TICKS
AND LYME
DISEASE.**



**IS YOUR DOG
AT RISK?**

WHAT IS LYME DISEASE?

LYME DISEASE IS AN INFECTIOUS DISEASE. IN NORTH AMERICA, IT IS PRIMARILY TRANSMITTED BY DEER TICKS, ALSO KNOWN AS BLACKLEGGED TICKS (*IXODES SCAPULARIS*).

Deer, migratory birds, rodents, and other small mammals play an important role in the life cycle of the tick and the disease.

The prevalence of ticks in Canada is increasing.



HOW CAN MY DOG BE INFECTED WITH LYME DISEASE?

Ticks can latch onto your dog when walking in tall grass or near shrubs.

The *Ixodes* tick can transmit a bacteria called *Borrelia burgdorferi*, which causes Lyme disease. Your dog is at a higher risk of contracting the disease if the tick has been feeding on your dog for more than 24 hours.

Ticks can be present at anytime of the year. They are most active during the spring and fall when temperatures are cool and conditions are moist.



WHAT ARE THE SIGNS OF LYME DISEASE?



LAMENESS

is your dog limping?



LETHARGY

is your dog lacking energy and less interested in usual activities?



LYMPH NODES

Your veterinarian may notice swollen lymph nodes



Signs of Lyme disease may appear as late as **5 months after your dog has been bitten** by an infected tick, so be proactive. The majority

of dogs will not show clinical signs, however a chronic state of disease may cause damage to their joints and limping later in life. Blood tests can be performed to detect if your dog has been exposed to *Borrelia burgdorferi*.

HOW CAN I PROTECT MY DOG AGAINST LYME DISEASE?

A COMPREHENSIVE TICK CONTROL PROTOCOL IS RECOMMENDED.

“PAIR” UP AND REMEMBER THESE STEPS:

PRODUCT

Use an oral product that kills ticks fast. Look for a product with **BROAD** tick coverage because *Ixodes* ticks are not the only species of ticks that can transmit diseases to your pet.

Consider requesting the latest Lyme vaccine technology for **BROAD** Lyme protection.

AVOID

Cut grass, remove leaf litter and keep your dog away from high-risk areas

INSPECT

Check your pet and your family for ticks

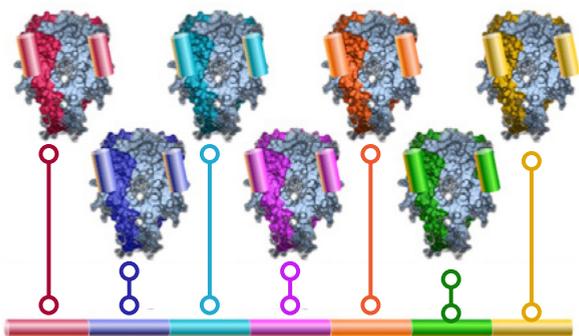
REMOVE

Correctly remove ticks using a tick remover or fine pointed tweezers, and keep it for tick identification*

*Visit www.newtickintown.ca to learn more about *Ixodes* ticks and other tick species, for useful information on how to remove a tick, and where to submit ticks for identification.

BREAKTHROUGH LYME VACCINE TECHNOLOGY

The bacteria responsible for Lyme disease expresses a protein on its outer surface, called OspC, with varying subtypes. These subtypes help the bacteria to disguise itself from the dog's immune system. Previous vaccine technology was not able to address this challenge.



Vanguard® crLyme's recombinant formulation of multiple outer surface proteins provides BROAD protection.

Thanks to its unique recombinant technology, **Vanguard crLyme** targets OspA and multiple OspC variants — the ones most relevant to dogs in North America. This technology makes **Vanguard crLyme** an effective and safe vaccine.

VANGUARD® cr Lyme



MEASURE YOUR DOG'S RISK

TAKE THIS ASSESSMENT TO FIND OUT YOUR DOG'S RISK OF LYME DISEASE.

1) Have you seen or heard of ticks on people or pets in your area?

Yes

No

Ticks can range in size and can be very difficult to detect in the fur of your pet. Some life stages of ticks can be as small as a poppy seed.

2) Is your dog likely to go into areas where ticks are found?

Yes

No

Ticks like to wait for a passing host under leaf litter or on plant stems, leaf tips and blades of tall grass. They can occasionally be carried inside the house.

3) Do you live in an area with *Ixodes* ticks and/or where there are cases of Lyme disease in animals or humans?

Yes

No

The incidence of Lyme disease is increasing and the geographic range is expanding throughout North America.

MEASURE YOUR DOG'S RISK

4) Are you likely to travel with your dog to areas where Lyme disease is present?

Yes

No

The risk for exposure to Lyme disease is highest in parts of southern and southeastern Quebec, southern and eastern Ontario, southeastern Manitoba, New Brunswick and Nova Scotia, and much of southern British Columbia. Don't forget to consider areas outside of Canada where you may travel.

5) Have you ever forgotten to give monthly tick medication on time?

Yes

No

Repellent products alone are unreliable to prevent Lyme disease. Oral products that kill *Ixodes* ticks fast may help prevent the transmission of Lyme disease. It is important to remember to give the product on a monthly basis. A complete approach that includes vaccination increases the likelihood of your dog being protected from Lyme disease.

If you answered **YES** to any of these questions, Lyme vaccination for your dog may be recommended

LEARN MORE ABOUT VANGUARD CRLYME @ [ZOETIS.CA/LYME](https://zoetis.ca/lyme)

Reference: 1. Rhodes DV *et al.* Identification of *Borrelia burgdorferi* OspC genotypes in canine tissue following tick infestation: implications for Lyme disease vaccine and diagnostic assay design. *Vet J* 2013;198:412-18.

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