



## Lyme Information Sheet

### Frequently Asked Questions

#### What is Lyme Disease?

Lyme disease, or Borreliosis, is a tickborne disease caused by the bacterium *Borrelia burgdorferi*. It is extremely common in the northeastern United States.

#### How is Lyme Disease contracted?

Lyme disease is transmitted through the bite of the deer tick, *Ixodes scapularis*. Once in the bloodstream, the organism can travel to other parts of the body and tends to localize in the joints.

#### What are the symptoms of Lyme Disease?

Contrary to humans, only about 5-10% of infected dogs will show symptoms. When clinical signs do occur, it is typical for them to occur 2 or more months after infection. Common symptoms include joint pain (lameness or stiffness), swelling of one or more joints, fever, enlarged lymph nodes, lethargy, and decreased appetite. Kidney disease (Lyme Nephropathy) is seen in some severe cases and can cause lethargy, decreased appetite, excessive thirst, excessive urination, vomiting and edema (fluid accumulation).



#### How is Lyme Disease diagnosed?

An in-house blood test called a 4DX, recommended yearly, is the most common way to determine whether your pet has been exposed to the Lyme bacteria. The 4DX also screens for Heartworm disease and other tickborne diseases (Anaplasmosis and Ehrlichiosis). A positive test indicates exposure to the *Borrelia* bacteria but does not always indicate "active disease". In the presence of clinical signs, a positive test, and response to treatment, a diagnosis of Lyme disease is made.

#### What other tests may be recommended?

If symptoms of Lyme disease such as joint pain, fever, or enlarged lymph nodes are present, other tests may be recommended. These tests may include X-rays, a complete blood count, chemistry profile, and lymph node cytology. Regardless of clinical signs, a urinalysis and microalbumin test are recommended to screen your pet for signs of Lyme-associated kidney disease (Lyme Nephropathy). Urine should be evaluated when exposure is first diagnosed and every 6 months thereafter.

#### What is the treatment for Lyme Disease?

Treatment of Lyme disease consists of a 4-week course of antibiotics. Commonly used antibiotics are Doxycycline, Minocycline, and Amoxicillin. Clinical signs typically resolve within 24-48 hours of therapy.

#### My dog tested positive for Lyme exposure but doesn't show any signs of illness.

##### What should I do next?

Antibiotics are not usually warranted in the absence of clinical signs. Treatment of asymptomatic dogs with antibiotics does not eliminate the bacteria and has not been shown to prevent future illness. However, submitting a urinalysis and microalbumin test to screen for a kidney problem is recommended. If any signs of kidney disease (typically protein in the urine) are discovered, a course of antibiotics may be prescribed along with recommendations for further testing.

#### How can Lyme Disease be prevented?

1. Use of effective monthly tick preventatives such as Nexgard or Activyl.
2. Daily screening for ticks and prompt removal of ticks.
3. Vaccination. The Lyme vaccine should be considered in dogs 8 weeks or older who live in endemic areas or who travel to areas where Lyme disease is present.

