



## MY DOG IS 4DX LYME POSITIVE... NOW WHAT?

The IDEXX 4Dx test evaluates for heartworm disease and exposure to Lyme bacteria, Anaplasma, and Erlichia canis. A positive Lyme test means your dog has antibodies against Lyme bacteria (*Borrelia burgdorferi*) in its blood. A positive test can cause a lot of worry, but let's make sure we understand what it means and what we should do about it...

### ***My dog is positive... does he/she have Lyme Disease?!?!***

The answer is... maybe. An antibody test looks for antibodies, which are tools the immune system creates to help kill invaders in the body. Think of it like the police. Just because there are police driving around the streets does not mean there is crime, and you want the police around in case a crime develops. Your dog's body at some point was exposed to Lyme bacteria via a tick bite and created its own police force to fight off that infection. The 4Dx test shows those police are present, but does not show that the criminals (i.e., the bacteria) is present. But it *could* be.

### ***What are the chances that this positive test means the bacteria is present?***

As many as 90-95% of dogs exposed to Lyme bacteria never fall ill. Dogs seem to have some innate ability to fight off the infection without getting sick. This means a positive test alone is not an indication to treat.

### ***If Lyme Disease could be present, shouldn't we treat just in case?***

We do not recommend treating just because a test is positive. Right now we have an antibiotic, doxycycline, that is very effective against Lyme Disease. If we started throwing doxycycline at every positive dog, sick or not, eventually there is a chance that strains of the bacteria could develop a resistance to doxycycline. If that happened, it would be much harder to treat sick animals.

### ***Then when do I need to worry about treatment?***

Dogs with active Lyme Disease typically fall ill very quickly. Often times the owner will notice the dog will go to bed acting normal and wake up the next morning with symptoms. They will have joint pain in multiple joints, with the wrists joints in the front legs being affected most often. They will not want to eat, and they will be running a fever when their temperature is taken (Note: dogs' normal body temperature is 1-3 degrees warmer than ours, so all dogs will "feel" hot! A fever has to be confirmed via rectal thermometer!). If your dog is ill with these symptoms and is Lyme positive on the 4Dx, we will recommend treatment. Treatment involves a four-week course of antibiotics and a short course of non-steroidal anti-inflammatories to help with the joint pain. If your dog has acute Lyme, this treatment often has them back to normal within 48 and often just 24 hours.

We would need to recheck your dog to confirm the symptoms are present... we cannot dispense treatment for a dog that tested positive based on owner-observed symptoms at home.

### ***Can my dog have Lyme Disease relapses?***

Probably not. There is no evidence that once a dog is Lyme positive it will develop chronic relapsing episodes. Dogs can get reinfected, however. Unfortunately, a small number of dog owners think a dog's recurring lameness will be due to Lyme Disease when it is usually in fact due to other unrelated reasons.

### ***Do I need to worry about other Lyme-related illness?***

A very small percentage of dogs infected by the Lyme bacteria can develop kidney infections. This is very rare but possible. **The best way to check for this is for you to bring a free-catch urine sample and we can run a test for \$55 to check for protein in the urine.** If positive, follow-up tests will likely be necessary.