

Leptospirosis

With the increased number of recent cases seen in San Francisco, we have received a lot of concerns expressed to us in regards to leptospirosis. We want to inform our clients and educate them about this bacterial disease that has been present for a long time.

Background Information

The reason we have seen increased cases is due to the significant rainfall we have had this year. Leptospirosis is a spirochete bacteria that likes to live in wet environments, particularly stagnant or slow moving water. It is shed from animal's urine and can be contracted by both our pets and humans through direct or indirect transmission. It can be contracted by many different routes, but most commonly with exposure to infected urine, contaminated water, soil or food. Due to the increasing numbers of wildlife in the San Francisco area, we have more hosts to shed this bacterial agent. Raccoons, skunks, rats and opossums are the most common hosts for shedding this disease.

It is important to know that you can decrease your pet's exposure by keeping them on leash, staying away from stagnant bodies of water, and not allowing them to drink from outside water sources.

Clinical Signs

If your pet contracts leptospirosis, it may take around 7 days or longer to start showing signs. The most common signs include but are not limited to lethargy, decreased appetite, increased drinking, increased urinating, fever, vomiting, and possibly icterus or yellow tinged skin. These signs occur because this bacteria affects and replicates within the kidneys and liver. This bacteria can also affect the nervous system, spleen, and eyes.

Diagnosis

Diagnosing leptospirosis can be challenging, but thankfully there are multiple tests to look for the specific bacteria. A thorough physical exam, blood panels, urine samples, chest xrays and ultrasounds are required to help diagnose leptospirosis. Samples are ideally collected prior to starting antibiotics, so please do not give your pet antibiotics without your veterinarian's recommendation. There are tests that help detect the DNA of the bacteria in the blood and/or urine specifically. There are also tests that evaluate the antibody level in the body, but there can be false positive results if your pet has been previously vaccinated.

Treatment

Treatment of leptospirosis includes supportive care, antibiotic therapy, and diligent monitoring while your pet's body tries to fight off this infection. Supportive care includes fluid therapy, monitoring urine production, treating upset stomach issues like vomiting and diarrhea, restoring platelets and red cells if needed, and careful monitoring while in the hospital. Treatment is aimed both at the bacteria itself as

well as at the damage that these organisms have already done to the body by the time your pet is diagnosed. Every case is unique and different as each of our pets are different and unique. Many pets can recover with aggressive treatment and some with dialysis, but this can be a very fatal disease to some of our pets.

Prevention and Vaccination

Keeping your pet on leash is important during these rainy seasons to ensure that your pet isn't drinking from contaminated water sources.

Since leptospirosis isn't a core vaccine, you need to discuss with your veterinarian if your pet is at risk and what the risks and benefits are of vaccinating. Our vaccination is towards the 4 most common serovars of leptospirosis, but there are many different serovars or strains of leptospirosis out there. What this means is that if your pet is vaccinated, they are still at risk for contracting leptospirosis.

Vaccinations are geared towards showing the body similar proteins to the actual disease so that if your pet is exposed to leptospirosis, the body can start fighting against it right away. Vaccinating helps to decrease the severity of the disease but it is not 100% protective in preventing your pet from catching leptospirosis.

If your pet is at risk for infections from leptospirosis, we recommend you talk to your veterinarian about vaccinating against this bacteria. We recommend 2 vaccinations, 3-4 weeks apart, initially. The vaccination is then boosted or re-administered annually.