**Glen Mills Veterinary Hospital**

**1785 Wilmington Pike**

**Glen Mills, PA 19342**

**LEPTOSPIROSIS**

**What causes Leptospirosis?** **Where does my dog pick up the disease?**

Leptospirosis is caused by spirochete (or spiral-shaped) bacteria called leptospires. The leptospires live in fluids from infected animals, including urine, saliva, blood and milk. The disease-causing organisms are transmitted by direct contact with the fluids or with an infected animal, as well as by indirect contact, including contamination on vegetation, food and water, soil and bedding materials. Stagnant water or slowly flowing streams may carry the leptospires; worldwide, leptospirosis infection increases with flooded conditions. Rodents are frequent carriers of leptospirosis. The bacteria can enter the body through mucous membranes or through breaks in the skin.

Enhancing its infectious potential, leptospires are known to survive in urine-soaked soil for six months. In addition, the disease may be carried for years in animals that serve as host reservoirs without the animals showing clinical signs of the disease.

**Do humans catch Leptospirosis?**

**Yes,** leptospirosis is a zoonotic disease meaning it can be transmitted from animals to humans. People can catch the disease from water that is contaminated by infected wild or domestic animals, as well as from more direct contact with animals, such as rodents, raccoons, skunks, dogs and cattle. Public health authorities suggest keeping dogs away from children's play areas, including sandboxes and wading pools.

**What are the symptoms of Leptospirosis in dogs?**

Infected dogs may develop vomiting, lethargy, depression, muscle pain, diarrhea or bloody urine. Leptospirosis infection can affect either the kidneys or the liver of the infected dog, resulting in kidney failure, liver failure or both. It can be a life-threatening disease for an infected dog.

**How is Leptospirosis diagnosed and treated?**

Diagnosis is based on clinical signs and laboratory tests, including tests for the disease-causing organism, urinalysis and blood tests. Dogs are treated with a course of antibiotics and with intravenous fluid to overcome dehydration. Hospitalization for care may be required.

**Can vaccination prevent Leptospirosis in dogs? Do I need to worry about adverse reactions from the vaccine?**

There are vaccinations that provide protection against leptospirosis for dogs. In fact, there are several different types of vaccines available. Some of the vaccines only protect against two serovars (strains) of leptospirosis while others provide protection against four different serovars. Though these four serovars account for a large percentage of the cases of leptospirosis seen, there are other serovars that can cause disease also. There is no vaccination that protects against all potentially infectious serovars of leptospirosis.

Only a small percentage of dogs that experience allergic reactions resulting from leptospirosis vaccine administration. We will discuss normal and adverse reactions for all vaccines during your appointment.

**Why are cats not affected by Leptospirosis?**

Tests for antibodies show that some cats are exposed to the disease, but cats almost never show clinical signs of leptospirosis. Some experts believe that cats have developed a kind of immunity to leptospirosis from their longtime association with rodents.