

Ask A Vet: Devastating Puppy Viruses

Sunday, February 19, 2017

Dear Dr. Weldy's,

My family and I planning on adopting a puppy this spring and have heard a lot about infections like distemper and parvo. What are they and why is it so devastating to puppies?

-Signed, Worried

Dear Worried,

This is a very appropriate question for this time of year as there are soon to be many puppies available for adoption and sale. Both of those diseases are viruses which can cause serious infection to your puppy. The clinical signs to monitor for in your puppy for a potential viral infection are lethargy (tiredness), fever (above 102.5°F by rectal temperature), ocular and nasal discharge, vomiting, and diarrhea (particularly if it's bloody).

Parvo is spread primarily in the feces of infected puppies, and is a major cause of puppy death. The virus attacks rapidly dividing cells in the puppy's body, mainly in the intestines and bone marrow. Damage done to the intestines leads to the vomiting and diarrhea signs. Damaged bone marrow prevents the body from making white blood cells to fight off infections. Without a barrier in the gut to protect his/her body from bacteria and without white blood cells to fight off those bacteria, your puppy can develop a very significant bacterial infection on top of the viral infection. If your veterinarian suspects parvo, it is important to keep your puppy isolated from other puppies. This virus is highly contagious and easily spread. After diagnosis at the clinic, intensive treatment takes place. Usually, the puppy will be placed on IV fluids with several broad spectrum antibiotics and anti-nausea medications. Treatment will continue for 5-7 days as needed depending on the puppy's needs. Frequently they will continue to be treated for another week with oral medications.

Distemper is spread through an infected dog sneezing into the face of an uninfected and unvaccinated dog. The virus causes a fever 3-6 days following infection. Approximately a week later, the fever can return and the puppy can have a lot of eye and nose discharge and show neurologic signs, such as head tilt, tremors, circling, and seizures. This is due to the inflammation within the brain, caused by the virus. Distemper virus diagnosis is only accomplished by sending blood samples out to a laboratory to try and isolate the virus. Treatment is mainly centered on stopping the seizures and retaining as much neurologic health as possible. It's important to note that viruses cannot be directly treated; instead we must keep the puppy stable enough so they can fight it off. For many reasons it is important to vaccinate your puppy against these viruses, and complete the series of vaccines (depending on your veterinarian's recommendations).

Finally, it's important to note that the parvo virus is very stable in the environment. Cleaning everything with a 10% bleach solution is vital. The distemper virus on the other hand is not stable for more than a few hours in the environment, and is usually spread by direct contact with an infected dog.

-Dr. Jason Heitzman