

CANINE PARVOVIRUS



When you get a new puppy it can be tempting to take them out right away and show them off. But before you do, make sure they've had their complete series of vaccinations.

What is Canine Parvovirus?

Canine parvovirus, also known as parvo, is one of the most fatal viruses a dog can contract. This virus is highly contagious and spreads through direct contact with an infected dog or by indirect contact with a contaminated object.

How is it spread?

Parvovirus is considered ubiquitous (it's present EVERYWHERE). This means that EVERY puppy or unvaccinated dog is at risk for the disease, even if they never leave the back yard. Parvo can be transmitted by dog-to-dog contact, contact with infected feces, or contact with contaminated environments or people. Higher risk environments include dog parks, groomers, shelters, and other areas where possibly unvaccinated dogs congregate. It is readily carried on shoes, clothing and car tires – and taken to new areas. The virus is very hardy and can survive in the environment for long periods of time. It can even survive freezing during the winter and many household disinfectants are not able to kill it.

Unfortunately, puppies between 6 weeks and 6 months have a high susceptibility to illnesses because their immune systems have not yet fully developed.

Signs & Symptoms

Common signs of parvovirus infection include lethargy, loss of appetite, fever, vomiting, and diarrhea. The diarrhea is often severe and bloody. A puppy showing any of these signs should be seen by a veterinarian immediately.

The disease attacks the stomach and small intestines, where it destroys cells, impairs absorption, and disrupts the gut barrier. This makes it impossible for young dogs to absorb nutrients and it allows other bacteria in the intestines to infect the rest of their body.

Vomiting and diarrhea, combined with not eating or drinking well, often leads to rapid, severe dehydration. The parvovirus simultaneously attacks the bone marrow, which is where the white blood cells that fight infection are produced. This makes it difficult for the body to fight off the bacterial infections caused by the compromised intestines. Sepsis, or infection throughout the blood stream, may result. Sepsis and dehydration may lead to death, often within 48-72 hours of onset of symptoms.

Treatment

There is no specific treatment available that directly kills the virus in infected dogs. Instead, treatment is aimed at stabilizing the patient until the dog's immune system can fight off the virus. Fluids are given to treat and prevent dehydration. Antibiotics are used to fight off any secondary infections and prevent sepsis. Anti-nausea medications and nutritional support are also provided.

Ideally, parvo patients are hospitalized to receive aggressive treatment and give them the best chance of a positive outcome. With aggressive treatment and hospitalization, the survival rate for parvovirus is 80-90%. Early recognition and diagnosis followed by aggressive treatment are very important to having the best chance at a successful outcome.

Considerations

Parvo positive patients are highly contagious and should be isolated to help limit the spread of the disease. Proper cleaning and disinfection of areas where the infected dog is or has been is also very important. Infected dogs shed the virus for 2-4 weeks, so proper sanitation, disinfection and isolation must continue during this time.

Prevention

Vaccination and minimizing exposure to the virus are critical steps to prevent parvo. In order to protect puppies against parvo and other diseases, a series of vaccines and boosters should be given. Vaccines should be administered every 3-4 weeks, usually starting at 6-8 weeks of age and ending at 16 weeks of age or older. After this, revaccination should occur every year. "Feed store" and other over-the-counter or internet vaccines should be avoided as variability in storage conditions can often cause the vaccines to be ineffective.

Until a puppy has received its entire vaccine series, or until an adult dog is up to date on vaccines, their exposure to parvovirus should be minimized as much as possible. Avoid areas where dogs congregate, such as parks, groomers, pet stores, etc. Make sure when boarding or taking your pet for training classes that the establishment is responsibly run and all dogs are required to be current on their parvo vaccines. Use caution when having "play dates" or taking your puppy to visit other dogs and households. Be especially careful not to let the puppy come in contact with fecal material (poop) while walking or playing outdoors. Avoid contact with dogs that are lethargic, vomiting or have diarrhea. Also avoid dogs that have had recent contact with ill dogs or people who are in contact with sick or exposed dogs.

