



## CANINE PARVOVIRUS INFECTION

**What is Parvovirus?** - Parvovirus first appeared in 1978, and rapidly spread around the world. The virus is resistant to temperature extremes and is not harmed by many common disinfectants. Transmission of the disease occurs when the Parvovirus comes in contact with a healthy dog. The virus is in heavy concentration in the infected dog's feces. The virus can be spread easily on shoes, clothing, and other inanimate objects, so flies and people can be an indirect source of infection.

Any age or sex of dog may be affected by Parvovirus. However, being infected with the virus does not automatically result in illness. Many factors will affect the severity of the illness. These factors include age, breed, environment, stress, parasites, and general health. The illness may range in severity from very mild to very severe. Illness is most common in dogs less than six months of age.

**What Does the Virus Do?** - Parvovirus is a viral disease affecting dogs, which can cause two different problems. The intestinal form will cause diarrhea and vomiting, which is often bloody, and can rapidly lead to death. The second form can affect the heart, usually occurs in the very young puppy, and is not very common.

The Parvovirus cycle has three stages. The first stage (oral phase) occurs when the virus is ingested and invades the lymph nodes in the throat. The second stage (viremia phase) occurs when the virus enters the blood stream and is carried throughout the body. As the infection spreads, the signs of illness will become apparent. In the third stage (contagious phase), the virus is passed in the dog's feces and can infect other dogs. Transmission of the disease can occur for several weeks after the dog has been infected. Parvovirus in the environment can infect susceptible dogs for many months.

### **What are the Symptoms of Parvo Infection?**

The clinical signs of a Parvovirus infection include depression, loss of appetite, vomiting, and diarrhea with or without blood. Vomiting and diarrhea lead to dehydration, chemical imbalances and death. Secondary bacterial infections commonly occur and complicate the viral infection. The heart form of Parvovirus infections is most common in puppies less than 8 weeks of age. The signs of this are crying, weakness, extreme depression, an unwillingness to nurse, difficulty breathing, or sudden death.

A positive Parvo test will confirm the diagnosis, but some dogs will be negative early in the disease or if blood is in the stool. Other abnormalities include a low white blood cell count and blood electrolyte imbalances.

**How is It Treated?** - Early treatment is important and may save the dog's life. The treatment of Parvovirus infections is symptomatic and supportive. Intravenous fluids are given to correct dehydration and maintain hydration, antibiotics are given to treat secondary bacterial infections, nutritional support is provided, and other symptomatic care depending upon the individual needs of the puppy is given.

The survival rate with aggressive intravenous therapy and hospitalization is about 80%, but it depends on the severity of the illness at the time the puppy is presented for veterinary care, the level of care, and the puppy's ability to fight the infection and survive. Often the puppy will need to be hospitalized for five days or longer. The survival rate with outpatient therapy or restricted medical therapy is much lower except in very mild cases.

**What About Other Pets?** - Only dogs can catch Parvovirus. To effectively control Parvovirus infections, the contact with other dogs and dog stools should be minimized. A solution of bleach, diluted one part bleach to 30 parts water (1/4 cup Clorox in 1/2 gallon water), is effective in disinfecting inanimate objects such as clothing, floors and kennels. Having puppies receive a series of vaccinations by a veterinarian is the most effective means to decrease the incidence of Parvovirus disease.

**Is My Dog Going to Live?** - Probably, but...Parvo is a very serious disease which sometimes requires extremely complicated treatments. Some dogs will die regardless, but most will live with hospital care (50-80% survival rate with intense hospital care depending on the strain of Parvovirus that year).

### **Call Us If...**

- Your pet acts weak or depressed or loses its appetite.
- Your pet has trouble keeping medicine and/or food down.
- Diarrhea persists.

*Thank you for this opportunity to serve you!*