



Canine Parvovirus

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Canine parvovirus is a highly contagious virus infecting members of the canine family, including dogs, coyotes, foxes and wolves. Commonly called “parvo”, the organism is very stable in the environment, able to withstand freezing temperatures and many disinfectants to survive as long as seven months in a contaminated area.

Some breeds, including American pit bull terriers, Doberman pinschers, German shepherds and rottweilers appear to be at increased risk of contracting parvo. Cocker spaniels and toy poodles are less susceptible.

Highly Contagious

Canine parvovirus is contracted very easily. Three factors determine a dog’s risk of becoming infected: the number of viral particles present at exposure; the dog’s overall immunity (such as vaccines); and environmental stressors.

Infected dogs pass or “shed” the parvovirus in their feces. The number of virus particles shed is highest during the first two weeks following exposure.

After contact with a contaminated environment or animal, a dog may contract the virus via the mouth while cleaning itself or eating food

off the ground or floor. The organism incubates from three days to seven days after exposure before showing signs of illness.

Clinical Signs

Signs of the parvovirus include loss of appetite, fever, lethargy, vomiting and severe diarrhea which may contain blood. Vomiting and diarrhea may cause dehydration and shock, which can result in death. The disease strikes young dogs more often than adults.

Another, less common form of parvoviral infection is myocarditis (inflammation of the heart). Myocarditis is most often seen in puppies younger than three months of age. Because the virus multiplies quickly in heart muscle cells, diarrhea is not usually seen. Puppies may become lethargic and stop eating just before collapsing, gasping for breath.

Death can occur within minutes or several days. No specific treatment is known. Puppies that survive usually have permanent heart damage. A dog may die of heart failure weeks or months after apparent recovery.

Immunization of the bitch protects puppies early in life; therefore, vaccination of breeding animals is very important.

Diagnosis and Treatment

Initial diagnosis by a veterinarian is based on history-taking and clinical signs. A positive fecal or blood test will confirm the diagnosis.

Symptoms, rather than the canine parvovirus itself, are treated. Appropriate supportive care should begin immediately to restore the fluid balance caused by dehydration. Intravenous fluids are frequently required. Vomiting and diarrhea control is needed, as well as antibiotics for prevention of secondary infections.

Prevention and Control

Indoors: Contaminated areas should be thoroughly cleaned with household bleach (one part bleach diluted with 30 parts water) or with a commercial product specifically labeled for use against parvovirus.

Food and water bowls, toys, bedding, and any other surfaces or items that are colorfast (or where color change is not important) should be disinfected. Contaminated clothing and shoes may also need to be disinfected.

Indoors, the virus usually loses its infectivity in about one month. Especially in carpeted areas, at least 30 days should pass before a new puppy can be safely introduced into a household.

Outdoors: Dogs should not be allowed to come in contact with feces or other dogs when in a park or on the street.

Immediate waste disposal is recommended. If good drainage is available, a thorough watering-down of the contaminated area may dilute any existing virus.

Without thorough decontamination measures, a site is considered contaminated:

- for seven months if shaded;
- for five months with good sunlight exposure; and
- until the space is thoroughly thawed, if frozen. (Freezing protects the virus.)

Vaccination is critical for parvovirus prevention and control. The vaccination advice of a veterinarian, as recommended by the vaccine manufacturer, should be followed closely.

Indiana State Board of Animal Health
Office of the State Veterinarian
Discovery Hall, Suite 100
1202 East 38th St., Indianapolis, IN 46205-2898
317/544-2400; Fax 317/974-2011
www.in.gov/boah

