

HOW IS CANINE PARVOVIRUS PREVENTED?

Vaccination and good hygiene are critical components of prevention. Because canine parvovirus is widespread, it is considered a core vaccine for dogs. All dogs are at risk and should be vaccinated against canine parvovirus.

Young puppies are very susceptible to infection, particularly because the natural immunity provided in their mothers' milk may wear off before the puppies' own immune systems are mature enough to fight off infection. If a puppy is exposed to canine parvovirus during this gap in protection, it may become ill. An additional concern is that immunity provided by a mother's milk may interfere with an effective response to vaccination. This means even vaccinated puppies may occasionally be infected by parvovirus and develop disease.

To reduce gaps in protection and provide the best protection against parvovirus during the first few months of life, a series of puppy vaccinations are administered. In most cases, the first vaccine is administered at 6-8 weeks of age, followed by boosters every 2-4 weeks. To develop adequate protection, puppies should receive a dose of canine parvovirus vaccine at or after 16 weeks of age, no matter how many doses they received earlier.

To protect adult dogs, pet owners should be sure that their dog's parvovirus vaccination is up to date. The American Animal Hospital Association (AAHA) and the World Small Animal Veterinary Association (WSAVA) recommend: vaccination starting at 6-8 weeks of age, then every 2-4 weeks until 16 weeks or older, followed by a booster at 6 months or one year of age, then vaccination at three-year intervals. There are titers available that can indicate the dog's level of protection against canine parvovirus, but these are relatively expensive and may cost more than vaccination. **Ask your veterinarian about a recommended prevention program for your dog.**

Until a puppy has received its complete series of vaccinations, pet owners should use caution when bringing their pet to places where young puppies congregate. This includes pet shops, parks, puppy classes, obedience classes, doggy daycare, kennels, and grooming establishments. Reputable establishments and training programs reduce exposure risk by requiring vaccinations, health examinations, good hygiene, and isolation of ill puppies and dogs. Puppies that have received at least one vaccine prior to attending puppy socialization classes are not at greater risk of infection, as long as good practices are followed. Contact with known infected dogs and their premises should always be avoided.

Even with proper vaccination, a small percentage of dogs do not develop protective immunity and remain susceptible to infection. If the majority of dogs in the community are vaccinated against CPV-2, "herd immunity" can provide protection for these dogs by reducing the number of dogs in the area that could become infected and spread the disease. **That means vaccinating your dog can protect both your dog and other dogs in your community.**

Finally, do not let your puppy or adult dog come into contact with the fecal waste of other dogs while walking or playing outdoors. Prompt and proper disposal of waste material is important to limit spread of canine parvovirus infection and other diseases that can infect humans and animals.

Dogs with vomiting or diarrhea, and dogs that have been exposed to ill dogs, should not be taken to kennels, show grounds, dog parks, or other areas where they will come into contact with other dogs. Similarly, unvaccinated dogs should not be exposed to ill dogs or those with unknown vaccination histories.

People who are in contact with sick or exposed dogs should avoid handling other dogs or should at least wash their hands and change clothes before doing so.

FOR MORE INFORMATION:

American Veterinary Medical Association
avma.org

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WHAT IS CANINE PARVOVIRUS?

Canine parvovirus type 2 (CPV-2) is a highly contagious virus that attacks white blood cells and the gastrointestinal tract of puppies, dogs, and wild carnivores (including coyotes, wolves, foxes, and even wild cats) . It also can damage the heart muscle in puppies. It was first identified in 1978 and is seen worldwide. There are several variants of CPV-2 (CPV-2a, CPV-2b, CPV-2c) based on analysis of the genetics of the virus, but they produce similar signs in animals. Dogs infected with the CPV-2 virus that are ill are often said to have “parvo.”

HOW IS PARVOVIRUS SPREAD?

Canine parvovirus is highly contagious and is spread by direct dog-to-dog contact and contact with contaminated feces (stool), environments or people. The virus also can contaminate kennel surfaces, food and water bowls, collars and leashes, and the hands and clothing of people who handle infected dogs. It's resistant to heat, cold, humidity, and drying, and can survive in the environment for long periods of time. The virus is readily transmitted from place to place on the hair or feet of dogs or via contaminated cages, shoes, or other objects. Even trace amounts of feces from an infected dog may harbor the virus and infect other dogs that come into the infected environment. The virus has been detected in wild animals, and contact between domestic dogs, feral dogs, and wild animals (especially foxes, wolves, and coyotes) may play a role in its spread.

WHAT DOGS ARE AT RISK?

All dogs are at risk. Puppies less than four months old and dogs that have not been adequately vaccinated against canine parvovirus are at increased risk of becoming infected and ill.

WHAT ARE THE SIGNS OF PARVOVIRUS INFECTION?

Signs of CPV-2 infection include:

- Lethargy
- Loss of appetite
- Abdominal pain and bloating
- Fever or low body temperature (hypothermia)
- Vomiting
- Severe, often bloody, diarrhea

Most deaths from parvovirus occur within 48 to 72 hours following the onset of clinical signs. **If your puppy or dog shows any of these signs, you should contact your veterinarian immediately.**

Persistent vomiting and diarrhea can cause rapid dehydration, and damage to the intestines and immune system can cause septic shock. Severe reduction of leucocytes (white blood cells that are important for immune function) reduces the dog's ability to fight the infection and increases the risk of additional infections.

HOW IS CANINE PARVOVIRUS DIAGNOSED AND TREATED?

CPV-2 infection is often suspected based on a dog's history, physical examination, and laboratory tests. Fecal testing can confirm the diagnosis.

No specific drug is available that will kill the virus in infected dogs. Treatment aims to support the dog's body systems until the dog's immune system can fight off the viral infection. Treatment should be started immediately and consists primarily of intensive and supportive care to combat dehydration by replacing electrolyte, protein and fluid losses; controlling vomiting and diarrhea; and preventing secondary infections. Sick dogs should be kept warm and receive good nursing care. When a dog develops parvo, treatment can be expensive, and the dog may die despite aggressive treatment. Early recognition and aggressive treatment are very important in successful outcomes. With proper treatment, survival rates can approach 90%.

Since CPV-2 is highly contagious, infected dogs must be isolated to minimize spread of infection. It's also essential to properly clean and disinfect contaminated kennels and other areas where infected dogs are (or have been) housed.

The virus is not easily killed, so consult your veterinarian for specific guidance on cleaning and disinfecting agents.

