

# Progress Treating Parvo

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Dog owners and veterinary professionals despise canine parvovirus. For almost 50 years, this virus has sickened numerous puppies, causing heartbreaking illness and the death of too many young dogs. An effective vaccine was developed in 1981. However, parvovirus infections continue due to inadequate vaccination practices and the virus's ability to survive in the environment. Therefore, effective treatments are needed to ensure the survival of puppies and adult dogs that develop clinical illness. Thankfully, recent advances in canine health research are making real progress in our ability to treat parvo!

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### **Parvo Basics -**

Canine parvovirus spreads when dogs sniff or eat infected feces, when they come into direct contact with an infected dog, or even when they sniff or lick contaminated items such as bowls, bedding, or the clothing of a human caretaker. The virus can remain active in the environment for months unless killed by a disinfectant specifically known to neutralize it. Illness typically develops 4-14 days after exposure and, if left untreated, is reported to be fatal in 91% of cases.

Canine parvovirus specifically attacks rapidly dividing cells in the bone marrow and intestinal lining. This weakens the dog's immune system, making it easier for other viruses, bacteria, and parasites to cross the intestinal barrier with disastrous consequences.

The clinical signs of parvovirus include severe bloody diarrhea, vomiting, fever, lethargy, and severe dehydration. It's vital to seek veterinary care immediately! Infection can be diagnosed by testing feces for viral antigen. Treatment involves supportive care such as intravenous fluids, antibiotics to prevent secondary bacterial infections, and medications to combat vomiting and diarrhea. Hospitalization for intensive care is often needed.

### **New Treatments -**

In 2023, a new treatment for canine parvovirus was approved using monoclonal antibodies. This

cutting-edge therapy uses proteins created in a laboratory that are designed to help the immune system recognize specific disease-causing germs, marking them for destruction. The new Canine Parvovirus Monoclonal Antibody selectively binds to the parvovirus, preventing it from entering and destroying intestinal cells. A single dose of the treatment is given intravenously and has been shown to reduce clinical signs and prevent death from this infection. This marks a substantial step forward in treating this deadly virus.

Another new treatment is being explored thanks to AKC Canine Health Foundation (CHF) funding ([CHF Grant 03140: Efficacy and Tolerability of Gelatin Tannate \(Tasectan®\) in Canine parvovirus-infected Dogs](#)). Investigators at the Koret School of Veterinary Medicine are studying if the drug Tasectin® can reduce bacterial toxin release and the resulting inflammatory response in dogs with parvo. Tasectin® is made of tannic acid, a compound with astringent, antibacterial, and anti-inflammatory properties, and gelatin. This composition helps it form a biofilm across inflamed areas of the intestinal lining, preventing water loss into the intestine and protecting the intestinal wall from the growth or attachment of certain bacteria. Investigators hypothesize that adding Tasectin® to standard parvo treatment protocols will decrease gut permeability and shield the intestine from harmful bacteria, resulting in faster recovery. Enrollment for this clinical trial is approximately 50% completed, and thus far, the drug has been well-tolerated.

Canine parvovirus has proven its staying power. Thankfully, canine health research continues to provide new solutions that can more accurately and effectively treat this deadly virus. Vaccination plus proper cleaning and disinfection practices remain the best methods to protect dogs from parvovirus infection. Supporting canine health research through the AKC Canine Health Foundation will help ensure we continue to make progress against parvo and provide a brighter future for all dogs. Learn more at [akcCHF.org/research](http://akcCHF.org/research).