

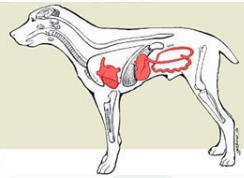
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## What is Canine Parvovirus

As we head into the spring months, one disease that vet clinics start to see a lot of are cases of parvovirus. Parvovirus is an extremely contagious virus that affects dogs, mainly puppies and dogs that are unvaccinated for parvo. But what exactly is parvovirus?

### Transmission

Parvovirus is actually a relatively new disease, with it first being identified in 1978 in Europe. Since then, it has spread around the globe. The virus is mainly spread through fecal-oral transmission, meaning a dog needs to ingest contaminated stool in order to become infected. However, it can also be spread by dog-to-dog contact as well. The virus is extremely hardy and is able to survive in both warm and cold temperatures for long periods of time. It can also be transferred as a fomite on the bottom of shoes, through clothing, etc.



### Symptoms

The incubation period (how long it is inside the dog before the dog shows symptoms) is between 3-7 days. The virus first attacks the lymph nodes and tonsils before it invades the bloodstream. From here, the virus heads to the bone marrow and GI tract. Within the bone marrow, it shuts down the body's ability to produce white blood cells to better fight the virus. In the GI tract, it invades the small intestine, destroying the "crypt cells" (the cells that help create the lining of the small intestines) and prevents the absorption of nutrients. This leads to the vomiting and bloody diarrhea that are often seen with parvovirus. Furthermore, the damaged GI tract allows for bacteria to infect the GI tract, leading to additional infections.



### Treatment

Parvovirus is a virus, meaning that once your dog has been diagnosed, there is no simple medication like an antibiotic that can be used to cure it. Treatment for parvovirus is supportive therapy, treating the secondary bacterial infections in the GI tract with antibiotics and keeping the patient hydrated despite the constant fluid losses. With early aggressive treatment, survival rates can be in the 80-90% range. However, left untreated, the mortality rate is closer to 90%, usually around 3-4 days after symptoms arise.



### Prevention

What can be done to protect your dog against parvovirus? Vaccinate! The parvovirus vaccine is labeled for dogs as young as 6-8 weeks of age, and it is recommended that they continue to receive the vaccine every 3-4 weeks until they are around 16 weeks of age. Furthermore, keeping your puppy away from other dogs until they are fully vaccinated will help prevent your puppy from becoming exposed. If your house happens to have been contaminated by an infected dog, bleach has been proven to kill the virus and can be used to disinfect your home. While it is not recommended to spray your yard with bleach, watering down your yard (along with rain) will eventually reduce the virus down to acceptable levels within a couple of weeks.

Best regards,

*Rachel Rielinger, DVM*



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