## **Parvovirus**

Parvovirus is a highly contagious virus that attacks rapidly-dividing cells, including the intestines and the bone marrow. The cells that are attacked lead to pathology of disease, causing severe intestinal upset (vomiting, diarrhea, anorexia), dehydration due to fluid loss and decreased intake, and infections. Bacteria can cross the intestinal membrane, and the immune system is too weak to fight them off, causing sepsis and death.

Due to the unpredictability and limited treatment of viruses, we say that Parvovirus has a 50/50 success rate (although treatment often increases the chances of survival significantly). Dobermans, Rottweilers, and pit bulls tend to be more sensitive to Parvoviral infections.

Any unvaccinated, or inappropriately vaccinated, puppy under 1 year of age with sudden anorexia, vomiting, or bloody diarrhea will be tested for Parvovirus, as it's the most common disease we see in puppies. We at Animal Hospital have seen Parvovirus affect dogs as old as 13 years old; most are unvaccinated or have other immune system issues.

Bleach and accelerated hydrogen peroxide (Rescue) are the only labeled ways to kill Parvovirus in the environment. Moreso, vaccination is the most important method of control, giving vaccines every 3 to 4 weeks until at least 16 weeks of age.

## Treatment options:

## Inpatient Hospitalization:

- 1) IV fluids to treat dehydration.
- 2) Antibiotics to prevent secondary infections metronidazole, penicillin, gentamicin.
- 3) Antinausea medications Cerenia, Ondansetron
- 4) Nutritional support nasogastric tube (pull reflux out, put food in), syringe feeding.
- 5) Probiotic to stimulate the immune system and promote a healthy GI tract.

## Colorado State (CSU) Outpatient treatment:

- 1) Subcutaneous fluids (+/- initial IV bolus) to prevent dehydration until eating and drinking
- 2) Convenia 2 week antibiotic injection. Depending on severity, +/- metronidazole tablets.
- 3) Cerenia initial injection, followed by oral tablets.
- 4) Nutritional support syringe-assisted feeding of baby food or bland food, as long as not actively vomiting.
- 5) Probiotic to stimulate the immune system and promote a healthy GI tract.