## Canine Vaccinations

## **Core Vaccines**

Canine Distemper Vaccine (aka DAP): This vaccination protects against Canine Distemper Virus, Adenovirus or Canine Hepatitis, and Canine Parvovirus.

Distemper Virus: This disease causes eye and nasal discharge, fever, thickening of the paw pads, vomiting, and diarrhea as well as seizures and neurologic changes.

Adenovirus/Canine Hepatitis: This virus attacks the liver and kidneys, gastrointestinal tract, lungs, and nasal passages.

*Parvovirus:* This is most likely the disease you are most familiar with. This virus causes severe fever, bloody diarrhea, and vomiting, leading to life threatening dehydration, weakness, and sepsis.

**Rabies Vaccine:** In Pennsylvania, Rabies vaccines are required by law for all dogs. This is because Rabies is always fatal in all warmblooded animals. This includes humans. The rabies virus is transferred from infected saliva into a wound through biting and scratching. The virus then travels through the nervous system, resulting in brain and spinal cord inflammation and difficulty swallowing. This causes tell-tale signs of aggression, abnormal behavior, and foaming at the mouth. Once physical symptoms are seen, death occurs shortly after.

## Non-Core Vaccines

The following vaccinations are recommended based on the lifestyle of your dog.

**Bordetella aka "Kennel Cough" Vaccine:** Bordetella is a bacterial disease that causes a loud, honking cough, nasal discharge, and sometimes fever. In severe cases, patients can become lethargic, stop eating, or even develop pneumonia. The disease is spread through aerosols from sneezing and coughing, or contaminated surfaces.

Because this disease is easily spread by dogs in close quarters, we recommend vaccinating dogs that go to the groomer or public dog wash, doggy day care, kennel, or training classes. Most kennels require proof of this vaccination.

\*At BVH, we require all dogs to be vaccinated for Bordetella who are having surgery to prevent the spread of disease among our patients.

**Leptospirosis aka "Lepto" Vaccine:** Leptospirosis is a bacterial disease that is spread through the urine of wildlife and farm animals resulting in fever, flu-like symptoms, gastrointestinal signs, as well as kidney and liver failure. This disease can infect humans.

We recommend vaccinating any dogs that live on large properties and are allowed to roam, routinely go hiking and/or camping, live on a farm, or are very active outdoors.

**Lyme Vaccine:** Lyme is a bacterial disease that is passed through the bite of ticks. Acutely, dogs can show signs of fever, joint swelling, limping, and lethargy. This disease can also have serious long-term effects such as arthritis or even kidney failure.

Ticks are very common in Pennsylvania, even in well-manicured yards. Nearly all dogs of all lifestyles are at risk for exposure. Even if you use a tick preventative, there is no product that is 100% effective and exposure is still possible. Being vaccinated as well gives your dog an extra level of protection. Dogs at highest risk are those that participate in hiking, camping, or roaming large properties.

Canine Influenza: Canine influenza is a viral disease that is like the flu but does not infect humans. Symptoms can range from mild flu-like signs (sneezing, coughing, nasal discharge) to more serious fevers and pneumonia.

Canine Influenza is not a very common disease. Most dogs do not require this vaccination due to low exposure. We typically recommend vaccinating dogs that are traveling frequently and have exposure to large numbers of other dogs, such as those in showing, breeding, or other group activities.

## Vaccination Reactions

Vaccines are typically given under the skin and cause minimal reactions in patients. It is normal to feel a small lump in the area it was given for a few hours up to a few days after.

Like humans, some pets become tired, develop a low-grade fever, or feel sore for 24-48 hours after vaccination. Many show no signs at all. All of these are not reactions to the vaccines, but instead are the symptoms of a normal immune response.

Vaccine reactions typically occur 15 minutes to a few hours after administration of the vaccine. Some of the more common vaccine reactions include vomiting and diarrhea, unsteadiness or collapse, facial swelling, hives, or swellings all over the body, and difficulty breathing. If any of these symptoms are noted, please contact your veterinarian immediately. If the symptoms are mild, they may be treated at home with antihistamines such as Benadryl and rest. Severe symptoms will require care by the veterinary staff. If vaccine reactions occur, the veterinarian will decide the best course of action to prevent reactions in future vaccinations.