

Vaccines for Dogs and Cats

Vaccines are a critical part of your pet's preventative health plan. They help to protect your pet from contracting and transmitting life-threatening and/or highly contagious diseases. Most vaccines are given as injections, but some can be given as oral or nasal spray formulations.

There are several different types of vaccines, but the purpose of any vaccine is to stimulate your pet's immune system to make antibodies and specific immune cells necessary to fight off illness in the event of natural exposure. Most core vaccines require a primary series to elicit a robust immune response and then are boosted periodically to maintain that immune response. Core vaccines are strongly recommended, while non-core vaccines are optional but may be advised based on the prevalence of certain diseases where you live. In many states the rabies vaccine is required by law. Regardless of the law, a rabies vaccine is strongly recommended because rabies is fatal for any animal that becomes infected with it; infected pets can expose and/or transmit the disease to people.

Vaccine schedules vary based on your pet's age and the type of vaccine used. Very young puppies or kittens may receive antibodies from their mother, which help to protect them from certain diseases for the first 8-12 weeks of life. At high levels, those maternal antibodies can partially interfere with vaccines. Importantly, maternal antibody levels decrease significantly by 8-12 weeks of age and puppies and kittens become more vulnerable to diseases if they're not vaccinated. There are cases in which very young puppies and kittens do not receive maternal antibodies because the mother was not exposed to- or vaccinated for- diseases. These puppies and kittens are highly susceptible to diseases even before 8-12 weeks.

Most commonly, core vaccines are started at 6-8 weeks of age and repeated every 2-4 weeks until 16 weeks of age or older. This primary series is meant to ensure a robust immune response and considers any possible interference from maternal antibodies as those levels are waning. The primary series is typically boosted at 6-12 months of age and a vaccination schedule is then established by your primary care veterinarian based on the types of vaccines used and additional optional vaccines they may advise.

Core vaccines for dogs include canine distemper virus, canine adenovirus, and canine parvovirus type 2 (CPV-2). Core vaccines for cats include feline panleukopenia, feline herpes virus, and feline calicivirus infection. A rabies vaccine is typically considered a core vaccine in both species and often required by law. There are numerous non-core vaccines that may be strongly recommended by your primary care veterinarian because they help to prevent against additional serious or highly contagious diseases.

In most pets, the benefits of vaccines far outweigh the risks. Mild side effects from vaccines are to be expected and may include soreness at the injection site or mild lethargy and fever as the immune system works to appropriately respond to the vaccines. Rarely, more serious adverse reactions may occur, including allergic reactions or immune-mediated diseases.

If your pet develops any of the following signs after vaccination, please seek emergent evaluation: facial swelling, hives, difficulty breathing, pale gums, weakness, collapse, vomiting, or severe diarrhea. These may be signs of an allergic reaction to the vaccine. Immune-mediated diseases refer to any of a number of diseases that occur when the immune system erroneously targets part of the body. Vaccine-induced immune-mediated diseases are very rare; if your pet is diagnosed with an immune-mediated disease, you should discuss vaccination protocols with your veterinarian.