

When should my puppy visit the veterinarian?

Most puppies will begin going to the veterinarian at two to three weeks of age for an initial health-check and de-worming and then at eight weeks of age to begin immunizations, heartworm and flea preventive treatments, receive behavior and training advice. Your puppy will be examined by your veterinarian then again at 12 and 16 weeks to ensure your puppy is healthy while growing. It is important to follow your veterinarian's recommended exam schedule to ensure that your puppy receives proper protection and that you receive timely and appropriate advice.

When should my puppy be vaccinated?

There are many fatal diseases of dogs. Fortunately, we have the ability to prevent several of these by vaccinating your puppy. In order to be effective, these vaccines must be given as a series of injections. Ideally, they are given at about 8, 12, and 16 weeks of age, but the recommended vaccines and schedule of injections may vary depending on your pet's individual needs.

The core vaccination schedule will protect your puppy from several common diseases: distemper, hepatitis, parvovirus, and rabies. The first three are generally included in one injection that is given at 8, 12, and 16 weeks old. Rabies vaccine is given at 16 weeks of age. Other optional vaccinations are appropriate in certain situations. These may include Bordetella, Lyme, and Leptospirosis vaccines if there are risks of those particular diseases based on your geographic location and your puppy's lifestyle. Your veterinarian will recommend which vaccinations your puppy will need.

Why does my puppy need more than one vaccination?

When the puppy nurses its mother, it receives a temporary form of immunity through the *colostrum*, the milk that is produced in the first days after delivery of the puppies. Colostrum contains high levels of *maternal antibodies* that can provide passive protection against diseases that the mother has been exposed to, either naturally or by vaccination. This *passive* immunity is of benefit during the first few weeks of the puppy's life, but at some point, its levels decline and the puppy must be able to develop its own *active* long-lasting immunity. Vaccinations are used to provide this long-lasting protection.

As long as the mother's antibodies are present, vaccinations are unable to stimulate the puppy's immune system because the mother's antibodies neutralize the vaccine.

Many factors determine when the puppy will be able to respond to vaccinations. These include the level of immunity in the mother at the time of birth, how many antibodies the nursing puppy absorbed, and the general health of the puppy. Since we do not know when an individual puppy will lose its short-term maternal immunity, we give a series of vaccinations. The goal is for at least two of these to fall into the timeframe when the puppy has lost immunity from its mother but has not yet been exposed to disease. A single vaccination, even if effective, is not likely to stimulate long-term immunity, which is critically important.

Rabies vaccine is an exception to this, since one injection given at the proper time is enough to produce long-term immunity due to the lack of maternal antibody interference.