



## VACCINATIONS

### ***INTRODUCTION***

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Immunizing dogs against disease seems to be a simple process; dog owners may even take vaccinations for granted. It is both the most routine procedure performed in veterinary clinics and also the one most prone to confusion and misconception. This article attempts to answer some common questions dog owners have about vaccinations.

### ***HOW DOES A VACCINATION WORK?***

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In simplest terms, a vaccination stimulates the dog's immune system to protect itself against disease. When the antigen or infectious agent enters the dog's body, it is recognized as foreign and antibodies are produced to bind to it and destroy it. Even though the invader is gone, the cells that manufactured the antibodies "remember" it and will respond more quickly the next time the same agent is confronted. Dogs don't actually get sick from today's vaccines as they are attenuated (weakened), killed, or contain only pieces of the virus and don't actually transmit the disease.

### ***WHAT ABOUT VACCINE REACTIONS?***

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It is true that some animals have a systemic reaction, including a low-grade fever or muscle aches and pain. This reaction is more common in young and toy breed dogs and causes them to eat less and sleep more for 24-48 hours. Rarely, dogs will have a more severe reaction, characterized by hives, swelling of the face, or even vomiting. This reaction is easily prevented by giving antihistamine at the time of subsequent vaccinations. Leptospirosis, the component most likely to produce such strong reactions, can be left out of some vaccines. If your dog has had a vaccine reaction in the past, don't skip future vaccinations but do warn the veterinarian so he/she can take the steps to prevent a recurrence.

### ***IT SOUNDS LIKE VACCINATIONS ARE DANGEROUS. IS IT WORTH THE RISK?***

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Absolutely! The risks associated with vaccines are slight compared with the risk of contracting a fatal disease like distemper, rabies, or parvovirus.

### ***MY DOG WAS VACCINATED AGAINST PARVO, KENNEL COUGH, ETC. AND GOT IT ANYWAY. WHY?***

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Vaccine breaks occur for many reasons. Fever, steroids, disease, and maternal antibodies will block the patient's ability to make antibodies. Improper storage and handling of the vaccines or incorrect administration will also lead to vaccine failure. If given too close together, vaccines can be blocked by earlier shots; given too far apart, the memory response of the immune system is not properly stimulated.

Vaccines given to very young puppies (under six weeks of age) or to sick or immunocompromised patients may be ineffective. In the case of parvovirus, it has been demonstrated that Dobermans and Rottweilers are more susceptible to infection. Some veterinarians recommend extra vaccinations for these dogs or for dogs who are often in contact with other dogs.

## ***HOW MANY SHOTS DOES A DOG OR PUPPY NEED?***

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There is no one answer for this question, but a few basic rules apply.

For young puppies, vaccinations usually start at six-to-eight weeks of age and are given every three-to-four weeks until the puppy is 16 weeks of age. Recent information regarding parvovirus may extend this recommendation to 18 or even 20 weeks, especially for Dobes and Rottweilers.

A minimum of two multivalent vaccinations (including distemper and parvo) given three to four weeks apart are required for every dog or puppy over three months old. An additional vaccination against rabies is also necessary. Vaccinations against Coronavirus, Bordatella, or Lyme disease are based on owner's needs and veterinarian's advice.

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