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# **Vaccinations**

7-9 minutes

Vaccines help teach your pet's immune system how to recognize and fight off certain disease-causing agents. Vaccines work by stimulating the immune system's production of antibodies that identify and destroy these agents—before they can cause disease. This helps prevent or lessen the severity of future disease.

#### Why is it important to have my pet vaccinated?

Vaccinations protect your pet from highly contagious and/or deadly diseases and improve your pet's overall quality of life. Experts agree that widespread use of vaccinations within the last century has prevented death and disease in millions of animals.

- Vaccination prevents many pet illnesses.
- Vaccination can help avoid costly treatments for preventable diseases.
- Vaccination prevents diseases that can be passed between animals and from animals to people.
- Unvaccinated pets are at risk from life-threatening diseases found in wildlife, such as rabies and distemper.
- Reputable pet boarding, daycare, and training services require

vaccination against certain diseases to protect all participating animals.

 Many local and state laws require that household pets—including indoor-only pets—be vaccinated against certain diseases.

#### Does vaccination ensure protection?

For most pets, vaccination is effective in preventing future disease—especially when vaccines are given as recommended, at the appropriate time points. After a pet has been fully vaccinated, only rarely will their immune system fail to fight off the disease. It's important to follow the vaccination schedule recommended by your veterinarian to reduce the possibility of a gap in protection.

#### Which vaccinations does my pet need?

"Core" vaccines are recommended for all dogs and cats, unless there's a medical need not to vaccinate. "Non-core" vaccines are recommended for certain pets based on their risk of exposure to the disease, such as through their lifestyle or geographic location. For example, vaccination against Lyme disease is recommended for dogs that live or travel to areas where the disease-carrying ticks are found. *Bordetella* and canine influenza vaccines are recommended for dogs that visit places where other dogs gather, like boarding, daycare, and training facilities.

Talk with your veterinarian about your pet's lifestyle, including any expected travel to other locations and contact with other animals. Your veterinarian will consider these and other factors in recommending the vaccines and vaccination schedule that will provide your pet with the best possible protection throughout their

#### Why do puppies and kittens require a series of vaccinations?

Very young animals are highly susceptible to infectious diseases because their immune systems are not yet mature. If their mother has been vaccinated, they receive some protection through antibodies in their mother's milk, but that protection is not long-lasting.

In many instances, the first dose of a vaccine prepares your pet's immune system to recognize the virus or bacteria. Later doses help further stimulate the immune system to produce the important antibodies needed to protect your pet from disease.

To provide the best protection against disease during the first months of life, your veterinarian will recommend a series of vaccinations, usually 2-4 weeks apart. For most puppies and kittens, the final vaccination in the series is given at about 4 months of age. Your veterinarian may adjust this schedule based on your pet's circumstances and needs.

#### How often will my pet need to be vaccinated?

After the initial puppy or kitten vaccine series is complete, many vaccines provide adequate immunity when given every few years. Others need to be given more often to maintain a level of immunity that will continually protect your pet. Your veterinarian can recommend a vaccination schedule that best meets your pet's needs.

What are antibody titers, and do they replace vaccinations?

Antibody titers are blood tests that measure the amount of certain antibodies in the blood. They do not replace vaccination programs, but they may help your veterinarian determine if your pet has a reasonable expectation of protection against disease for the time being.

Your veterinarian will recommend an individualized vaccination plan based on your pet's needs, to help provide a lifetime of infectious disease protection.

#### Are there risks to vaccinating my pet?

Like other types of medical treatment, vaccination carries some risk of side effects. These side effects typically are minor, and they're far outweighed by the benefits of protecting your pet, your family, and your community from potentially fatal diseases.

Serious side effects are rare but can occur. One type is an allergic reaction, which may happen soon after vaccination and can involve part or all of the body. In cats, another rare, serious reaction can be development of a certain type of tumor (sarcoma). These tumors can develop several months or even years after a vaccine is given. Fortunately, improvements in vaccines and vaccination techniques have greatly reduced the occurrence of sarcomas and other vaccine reactions.

### What should you watch out for after your pet's vaccination?

It's common for pets to experience **mild**, **short-lasting side effects** after receiving a vaccine, usually starting within hours of the vaccination. You may notice one or more of these signs:

Tenderness and swelling at the vaccination site

- Tiredness
- Mild fever
- Decreased appetite

For vaccines given in the nose ("intranasal" vaccines), sneezing, mild coughing, or other respiratory signs also may occur 2-5 days after vaccination.

These minor side effects usually go away on their own within 24 hours. If they last for more than a day or two, or your pet seems extremely uncomfortable after vaccination, contact your veterinarian.

It's also possible that a small, firm swelling under the skin could develop at the vaccination site soon after vaccination. This swelling should start to disappear within a couple of weeks. If it lasts more than three weeks, seems painful, or seems to be getting larger, contact your veterinarian.

Allergic reactions, which may happen within a few minutes to hours after vaccination, are rare but can be life-threatening. **Seek veterinary care immediately if you notice any of these signs:** 

- Fainting or collapse
- Persistent vomiting or diarrhea
- Persistent and severe coughing
- Difficulty breathing
- Red, itchy bumps all over the body ("hives")
- Swelling or puffiness in or around the face, nose, eyes, or neck
  Always let your veterinarian know if your pet has had any prior

reactions to any vaccine or medication. If you're concerned that an allergic reaction may occur, wait in the veterinary clinic for 30-60 minutes after vaccination before taking your pet home.

## Vaccine-preventable diseases

Vaccination helps protect your pet against these and other highly contagious or deadly diseases.

- Canine distemper
- Canine influenza
- Canine parvovirus
- Feline panleukopenia
- Leptospirosis
- Rabies