



YOUR PET'S VACCINES - WHAT WE GIVE and WHY

For as long as most of us can remember, it has become a ritual for pet owners to get their pets vaccinated. But most pet owners don't fully understand what their pets are being vaccinated for. And that makes sense since, in many cases, veterinarians use abbreviations or initials to indicate what vaccine is being used or given.

So my intent is to de-mystify the 'secret' of pet vaccines, and help you gain a more thorough understanding of not only what we are vaccinating your pet for, but why.

VACCINES: WHAT ARE THEY ?

First, let's start with what vaccines are. We all had them when we were infants and children (currently, children are vaccinated against ~14 different diseases). But it didn't end there for many of us as millions of people continue to get a Flu shot every year. And for people traveling overseas to tropical countries, vaccines may be needed against diseases that we don't find in the U.S.

But what is their purpose ? Quite simply, vaccines provide protection (immunity) against the disease being vaccinated against. Vaccines fortify your immune / defense system against future exposure or attacks from particular viruses or bacteria.

When a virus or bacteria (a pathogen) enters our body, our immune system creates antibodies to try to fight off the infection. Depending on the strength (or weakness) of your immune system and how effectively the antibodies fight off the virus or bacteria, you may or may not get sick.

If you become sick, some of the antibodies will remain to guard you in the event you are exposed to the same pathogen again. The antibodies of a healthy immune / defense system will recognize this foreign invader and fight it off.

Vaccines are made up of killed or weakened versions of a pathogen. The pathogen in a vaccine isn't strong enough or abundant enough to cause the disease, but it's enough for your immune system to create antibodies against the virus or bacteria. When / if you're exposed to the same pathogen again, you will be protected since your immune system will recognize the pathogen and fight it off.

THE VACCINES (Dogs and Cats): Rabies

Among the vaccines that we give to pets, there is only one that is required by law: Rabies. And with good reason. And that's because humans can get Rabies from a rabid pet. If a pet becomes ill from rabies, it is virtually always fatal. Likewise, if a person should get exposed to rabies and fail to get treated right away, and then signs of rabies begin to show in a person, it will nearly always kill that individual. For that reason, public health officials are aggressive in making sure that everyone who has been exposed to a rabid pet or a rabid wild animal be treated immediately. Clearly, Rabies is not a disease to be taken lightly at all.

Here in North Carolina, the 5 main sources of exposure to our pets (and possibly people) are through raccoons, skunks, foxes, bats and coyotes. While the potential exists for squirrels, rabbits, possums, chipmunks, rats and mice to get rabies, this very rarely happens.

Rabies can only be transmitted through the saliva of infected animals (or through exposure to brain tissue of an infected animal). It affects the nervous system of mammals, causing very abnormal behavior. There is a 'furious' form of Rabies with the classic symptoms of an overly aggressive, fearless animal. Unknown to most people, there is also a 'dumb' form of Rabies, in which wild animals may appear to be tame and fearless, with no signs of aggression. Other signs of Rabies can be an animal appearing disoriented, or wobbly and circling, or mutilating itself.

Every state in the U.S. requires that pets are vaccinated against Rabies. And I can assure you that every veterinarian and clinic staff member takes this disease very seriously since we risk being exposed to the virus if a pet should be brought to a vet clinic carrying the disease.

Keep your pets current on the Rabies vaccine ~ the law requires it ~ for their protection and yours !

THE VACCINES (Dogs): Distemper

What It Is: Distemper is a highly contagious virus that can be fatal. It affects a dog's respiratory tract, nervous system, and intestinal tract. The most common symptoms are persistent, croupy coughing, vomiting and diarrhea, and seizures and paralysis.

How Is It Spread: The virus is spread through the air, through direct contact with an infected dog, or through items such as food bowls, bedding, toys, etc.

Which Dogs are Most at Risk: Puppies are at most risk since their immune systems have not fully developed. However, any dog that has not been vaccinated against Distemper is at risk of the disease.

DrBob's Comments: I graduated from veterinary school in 1982. Back in the '80's, I used to see a lot of distemper. Unfortunately, there is no cure, so we could only provide supportive therapy and hope the dog survived. Sadly, most dogs did not survive. Fortunately, most people learned of the horrors (and believe me, it's a horrible disease to see in a dog) and learned the need to vaccinate. As a result, we rarely see the disease nowadays.

THE VACCINES (Dogs): Adenovirus CAV-2/ Hepatitis (Infectious Canine Hepatitis)

What It Is: Infectious Canine Hepatitis is a highly contagious virus that can be fatal. It primarily affects a dog's liver, but can also affect the eyes. The most common symptoms are fever, loss of appetite, vomiting and diarrhea, weakness, and abdominal pain.

How Is It Spread: The virus is spread through the feces and saliva of an infected dog. So, mouth to mouth contact with an infected dog, or contact with the feces from an infected dog can trigger this deadly disease.

Which Dogs are Most at Risk: Puppies are at most risk since their immune systems have not fully developed. However, any dog that has not been vaccinated against Hepatitis is at risk of the disease.

THE VACCINES (Dogs): Leptospirosis

What It Is: Leptospirosis is caused by a bacteria, and can be fatal. (And it can also affect people.) It primarily affects a dog's liver and/or kidneys. The most common symptoms are fever, loss of appetite, vomiting, muscle pain, yellow gums, and bleeding or bruising.

How Is It Spread: The bacteria is spread through the urine of rats, raccoons, skunks and possums as well as pigs and cattle. Dogs are exposed to the bacteria by drinking, swimming or walking through water contaminated by the infective urine of the animals just listed.

Which Dogs are Most at Risk: If any of these conditions apply to your dog, then it definitely should be vaccinated against Leptospirosis: Dogs that have access to standing water, ponds, streams. Any situation where wildlife (raccoons, skunks, possums and rats) may come into your yard. Dogs that go camping with their owners. Dogs that have access to wooded areas. Dogs that are around livestock.

DrBob's Comments: Fortunately, we see very few vaccine reactions, especially with the high quality of the vaccines we use. But the 2 vaccines most likely to cause a reaction are Rabies and Leptospirosis, and even then, it is much more likely to occur in very small breeds of dogs. Since it is less likely that very small dogs will be exposed to the Leptospirosis AND since the little ones are more likely to have an adverse vaccine reaction (even though the risk is still very low), we tend to avoid giving the Lepto vaccine to these smaller dogs.

THE VACCINES (Dogs): Parainfluenza

What It Is: Parainfluenza is caused by a virus, and is part of the complex of Respiratory pathogens that we often call Kennel Cough. The most common symptom is, as the name suggests, a dry, coarse, hacking cough.

How Is It Spread: The virus is easily spread through the air, in which case it can be breathed in by a susceptible dog

Which Dogs are Most at Risk: Dogs that are in close proximity to other dogs are most at risk. Therefore, dogs that are boarded in a kennel; dogs that go to the groomers for haircuts or baths; dogs that go to dog parks, or dogs that often socialize with other dogs in the neighborhood.

THE VACCINES (Dogs): Parvo / Parvo Virus

What It Is: Parvo is a highly contagious, and highly fatal, virus that appears in 2 ways. The more common form is the intestinal form, with vomiting, diarrhea (often severely bloody), loss of appetite and weight loss. If not treated quickly and aggressively, it is often fatal. The other, less common form attacks the heart muscle of young puppies, and is typically fatal.

How Is It Spread: The virus is spread through the feces of dogs. A dog that sniffs an infected dog's poop can easily be exposed to the disease. Also, pet owners can be the source of infection by carrying it on their shoes by stepping into contaminated feces or visiting dog parks, etc.

Which Dogs are Most at Risk: Puppies that are exposed to the Parvo virus (through the environment or through contact with dogs shedding the virus in the feces) and that do not go through the entire series of vaccines are at highest risk. The message is simple: start vaccinating your puppies at 6-7 weeks of age ... be sure to go through the series of vaccines in a timely schedule ... and keep your puppy away from areas where other dogs frequent (dog parks, pet stores, etc).

DrBob's Comments: Even though we've been seeing Parvo since the late 1970's, and vaccinating since the early 1980's, we still see this awful disease far too much. Too many pet owners don't get their puppies vaccinated, or breeders have litters of pups in environments where the Parvo virus persists. And unfortunately, the Parvo virus itself is very hardy, meaning that it can live for many months to more than a year, even in extremes of high or low temperatures, and excess rain or drought conditions. Regarding the vaccine itself, all too often, pet owners think if their puppy gets a single Parvo vaccine, the pup will be protected. That is absolutely incorrect! They need to go through the series of vaccines to get adequate protection.

THE VACCINES (Dogs): Bordetella

What It Is: Bordetella is caused by a bacteria, and is part of the complex of Respiratory pathogens that we often call Kennel Cough. The most common symptom is a dry, coarse, hacking cough.

How Is It Spread: The virus is easily spread through the air, in which case it can be breathed in by a susceptible dog

Which Dogs are Most at Risk: Dogs that are in close proximity to other dogs are most at risk. Therefore, dogs that are boarded in a kennel; dogs that go to the groomers for haircuts or baths; dogs that go to dog parks, or dogs that often socialize with other dogs in the neighborhood.

DrBob's Comments: The Bordetella vaccine comes in 3 different forms: intranasal, injectable and oral. The intranasal (squirt into the nostrils) appears to give the fastest, most efficient response and protection. The belief is that the injectable form lasts longer, but that is not confirmed. The vaccines we use are FDA approved for 1 year, so that remains our recommendation. However, some boarding kennels require that their dog customers receive the Bordetella every 6 months. Understand that that is a reflection of their own policy ~ not of our vaccine.