I ssues concerning the side effects of vaccines for humans have garnered a great deal of attention lately. Liberal use of vaccination and revaccination for domestic pets is equally controversial and an increasingly prevalent issue among dog and cat owners. As a pet parent and professional pet sitter, I am well aware of their importance in health protection, especially in young animals, as they are much more susceptible to disease. However, I have also seen, first hand, what over-vaccination can do. I have watched my own adult dog react adversely to a rabies vaccine with signs of skin allergies, depression, lethargy, abscesses, partial lameness, and more. The effects of the vaccination, a set of symptoms ranging from mild to severe, precipitated by vaccination and revaccinations, took several years to neutralize. He has only now returned to his old self at the age of seven.

How often are Vaccinations Really Needed?

The idea that over-vaccination cannot harm an animal has been proven false. Expert in immunology and veterinary pathology Dr. Ronald D. Schultz writes, in Duration of Immunity to Canine Vaccines: What We Know and Don’t Know, that “We have found that annual revaccination, with the vaccines that provide long-term immunity, provides no demonstrable benefit and may increase the risk for adverse reactions.” Our vaccination programs are gradually changing. The American Animal Hospital Association updated the vaccination guidelines in 2011, but we may have further to travel.

In their 1970’s study Schultz and his colleagues demonstrated that certain vaccines are not needed as frequently due to the duration of immunity. He states that the three most important viral infections are CDV, CPV-2 and CAV-1, and if a puppy is immunized with these vaccines, there is every reason to believe the animal will have life-long immunity. The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The rabies vaccination is mandated plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.” The vaccines mentioned above, plus the rabies vaccine, make up the “Canine Core Vaccinations.”

How long is immunity achieved? With the three core vaccines, immunity is achieved for 16 weeks of age. If you must revaccinate, discuss with the doctor the option of using a single antigen, or a “simpler” vaccine which has fewer vaccines in it than the multivalent vaccines which can be composed of as many as seven or more vaccines, often mixing “core” viral and “non-core” bacterial infections. Think about how hefty an amount that is to inject into the blood stream at once. Also note that these single and “simpler” vaccines may be harder to come by. It is suggested that the best technique is to inject each different vaccine into different injection sites so that they are dispersed to different lymph nodes.

Dr. Schultz, who also created the first veterinary clinical immunology laboratory in the US, has been instrumental in recommending today’s vaccination guidelines and ensuring they are backed by scientific research. He states, “My general philosophy is to vaccinate more animals in the population, but vaccinate with only those vaccines that the animal needs, and only as often as needed to maintain proactive immunity.”

What about Non-Core Vaccinations?

Certain vaccines such as leptospirosis, Lyme, and bordetella, to name a few, are non-core, or optional. (There are an ever increasing number of non-core vaccines coming on the market.) For many of these, duration of immunity and efficacy counts at levels that confer immunity for seven years after vaccination. A titer, the measurement of antibodies in the system to a specific antigen, is an important tool in determining if a booster is needed or not.

Safer Vaccination

It is vital to protect young pets with the core vaccines. However, it is also important to keep your dog safe from incurring adverse reactions due to over-vaccination. There are steps to take if you believe your animal is at risk for over-vaccination. Remember, more is not better, so before you revaccinate ask your vet to titer your pet. Low titters, however, may not necessarily mean the animal lacks the proper immunity.

Schultz states that if any antibodies are found, the dog in question is protected if older than 16 weeks of age. If you must revaccinate, discuss with the doctor the option of using a single antigen, or a “simpler” vaccine which has fewer vaccines in it than the multivalent vaccines which can be composed of as many as seven or more vaccines, often mixing “core” viral and “non-core” bacterial infections. Think about how hefty an amount that is to inject into the blood stream at once. Also note that these single and “simpler” vaccines may be harder to come by. It is suggested that the best technique is to inject each different vaccine into different injection sites so that they are dispersed to different lymph nodes.

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The more we discover through scientific exploration, the more accepted views change. As a pet care professional, it is important that we are aware of recent advancements and changes in view. It might be time to re-think the frequency of vaccinations.

Elizabeth Natenshon lives in MetroWest Boston with her loving husband and her amazing Border Collie mix Strider! She is a pet sitter (and loves doing nothing more) and holds two masters degrees, from Brandeis University and Simmons College. She can be reached at liz@petssittingbyliz.com or www.petsittingbyliz.com
and Wellness Perspectives

Pet Care Should Focus More on Wellness

Once we “know” something it can be hard to accept contradictory information. That’s why we still say “an apple a day keeps the doctor away,” even though it has been known for years that the catchphrase was the clever work of apple growers. That’s why the idea of “yearly shots” remains the baseline for preventive care in the minds of many people, and they often overlook the value of regular physical exams and testing, which are critical to preventive care and can even be lifesaving for many pets.

An apple a day may not keep you healthy, but it probably won’t do you any harm. Some shots, though, can potentially cause problems for a few pets. The chance that they will is pretty small, but tailoring which vaccines your pet needs and when can make it even smaller.

Rabies vaccination is regulated by law because of the threat to human health.

Nothing in life is without risk, but we veterinarians used to think vaccines were safe enough that it was better to vaccinate whenever we had our doubts that a pet had been adequately protected. But then research showed that in some pets the negative reaction to a vaccine wasn’t a day of just not feeling right. In a small but significant number of cats, the problem was more deadly: cancer.

The science, in other words, told us we needed to change what we knew.

Science Leads the Way

That didn’t happen overnight, of course, but in time veterinary schools and colleges and groups such as the American Animal Hospital Association and the American Association of Feline Practitioners gathered the research and developed new guidelines. These guidelines recommend a series of vaccinations to initiate disease resistance in kittens and puppies, followed by fewer “core” vaccines at longer intervals for adult dogs and cats, depending on their risk of exposure to disease.

When the old way was first challenged, proposed changes were controversial among veterinarians. Serious adverse vaccine reactions were (and still are) rare, and some veterinarians argued that not having a reason to bring a pet in for the wellness examinations that went with vaccinations would lead to suffering and even death from diseases not caught early. Others believed that the changes—and the reasons behind them—would lead to confusion and fear in pet owners.

In some ways the concerns were justified. Even though preventive care prevents suffering (and often saves money), yearly or twice-yearly wellness exams haven’t been as widely accepted as the idea of a yearly combination shot. That’s the bad news.

Wellness Moves Forward

The good news is that the veterinary profession is doing its best to spread the word about preventive care. Last year, for example, I took to the road in a custom-wrapped bus emblazoned with the words “Healthy Pets Visit Vets” and talked about the importance of wellness care in each of the 30 cities I visited. The American Veterinary Medical Association is taking the lead as well in making wellness a centerpiece of its pet owner education efforts.

While it’s not easy to remember, here’s what you need to know:

- **Core vaccinations:** These protect against those diseases that are potentially more serious and that are everywhere, and those to which animals can be exposed even without direct contact. These include feline calicivirus (and others) for cats, and distemper (and others) for dogs. Once immunity is established in kittens and puppies through a series of shots, boosters are given at regular intervals.

- **Non-core vaccinations:** These are brought into play to help pets who have circumstances that put them at greater risk for diseases the vaccines cover, such as feline immunodeficiency virus for cats and leptospirosis for dogs.

- **Every pet is an individual:** Each pet should get as many vaccines as they need, but no more than they need. Kittens and puppies need their initial series of protective “core” vaccines, but after that, what other vaccines are given will depend on regional disease threats, lifestyle differences such as indoor vs. outdoor, and a pet’s history of reactions to vaccines.

- **Rabies is a special case:** Rabies vaccination is regulated by law because of the threat to human health. Almost all states now require a three-year cycle as mandatory for dogs (some clinics and municipalities even mandate that dogs get a rabies vaccine every two years), and highly recommend it for cats. Local governments may have stricter requirements, including mandatory rabies vaccinations for cats.

Any potential benefit your pet gets from these vaccine guidelines can be wiped out entirely by other health issues if you skip those wellness exams. So follow your veterinarian’s advice to set up the best preventive care regimen for your pets—including exactly which vaccines your pet needs and when.

Dubbed “America’s Veterinarian” by Dr. Oz, Dr. Marty Becker celebrates the healing power of pets and works to make veterinary medicine fear-free for animals. For more than 16 years, Dr. Becker has been the popular veterinary contributor on ABC’s “Good Morning America.” In April 2012, the World Small Animal Veterinary Association named him the recipient of their annual WSAVA Hill’s Excellence in Veterinary Healthcare Award (also known as the Global Companion Animal Veterinarian of the Year). He is also Chief Veterinary Correspondent for the American Humane Association.

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