

Still vaccinating your pet every year?

That may not be necessary and could even cause harm

By Kim Campbell Thornton

Special to MSNBC.com

Updated: 10:48 a.m. ET July 18, 2005

Vaccinations have saved many pets' lives over the years, but they aren't without risk. Now, with new research showing that immunity may last longer than once thought, veterinary experts say it's safer to decrease the frequency of most shots that typically have been given every year.

Side effects from vaccinations range from mild itching and swelling to anaphylactic shock leading to death. Cats may develop vaccine sarcomas, which are cancers that develop at the site of the injection. And dogs may develop certain autoimmune diseases.

Veterinarians have suspected for years that annual vaccinations for cats and dogs aren't necessary, but large, well-controlled studies just didn't exist to prove it one way or the other. With the exception of rabies vaccine, the U.S. Department of Agriculture doesn't require data beyond one year for any vaccine.

With that being the case, vaccine manufacturers arbitrarily recommended annual vaccinations, and most veterinarians, concerned about liability issues, concurred.

Sometimes immunity lasts a lifetime

More recently, however, several published studies have shown that immunity provided by some vaccines lasts for much longer than one year and in some cases for a lifetime.

FAST FACTS ON VACCINE REACTIONS

Most dogs and cats never develop vaccine-related problems. But vaccines are medications, and any medication has the potential to cause side effects. Here's what you should know:

- Signs of local reactions to vaccinations include itching, swelling, pain, hair loss at the injection site, and cancer development at the injection site.
- Systemic reactions, which involve the entire body or a specific area other than the injection site, include allergic reactions; anaphylaxis and collapse; polyarthritis (lameness); vomiting, with or without diarrhea (most common in cats); trouble breathing; fever; and lethargy.
- The vaccines most likely to cause reactions are distemper, parvovirus, rabies and giardia.
- The breeds most at risk for vaccine reactions are Akitas, American Eskimo Dogs, Cocker Spaniels, Great Danes and Weimaraners. Any animal with a white coat and pink nose or a dilute coat color, like that of the harlequin Great Dane, is more at risk.

"We know that for [canine] distemper and parvo, for example, the immunity lasts a minimum of five years, probably seven to nine years, and for some individuals for a lifetime," says veterinarian Jean Dodds, founder of Hemopet, the first nonprofit national blood bank program for animals, located in Santa Monica, Calif.

"For cats, so far we have challenge data out nine years showing that immunity is still protective," says Dodds. And with rabies vaccine, new data indicate the immunity lasts for at least seven years, she says.

What does all this mean for your dog or cat? As with many other aspects of veterinary

medicine, vaccinations are becoming individualized, but in most cases, fewer and less frequent vaccinations are the way to go. Most animals need only what are known as core vaccines: those that protect against the most common and most serious diseases. In dogs, the core vaccines are distemper, parvovirus, hepatitis and rabies. In cats, they are panleukopenia, calicivirus, rhinotracheitis (herpesvirus), and rabies as required by law.

Three-year interval recommended

"Current vaccine protocol is to properly immunize puppies and kittens with two or three doses, starting later than we used to, maybe at eight weeks and not earlier than six weeks," Dodds says. "Then you can give a booster at one year and either repeat it every three years, stagger it by giving one vaccine per year instead of combination vaccines, or do titers instead." Titers are tests that measure the level of antibodies in the blood, which would indicate that immunity still exists.

That recommended three-year interval was a compromise decision. "Annual boosters for the core vaccinations are excessive for most dogs and cats," says veterinarian Link Welborn of North Bay Animal and Bird Hospital in Tampa, Fla., and a member of the most recent panel of veterinarians that revised vaccination guidelines for dogs and cats.

"Limited studies suggest that booster vaccinations for many of the core vaccinations last for at least seven years. However, given the limited number of animals involved in these studies, three years seemed like a reasonable compromise."

There's also an advantage to giving single rather than combination vaccines. "Giving more vaccinations increases the likelihood of side effects," Welborn says. "Separating vaccinations allows the veterinarian to determine which vaccine caused a side effect if one occurs."

If you're concerned that your dog or cat will develop a vaccine-related health problem, but you want to make sure they're protected against disease, annual titers are an economical alternative.

They're reliable and costs are comparable to those for vaccinations. For instance, at Canyon Animal Hospital in Laguna Beach, Calif., the rate for a combination distemper/parvo titer is \$39. If the dog turns out to need a vaccination, it's given at no additional charge. Titers are also available for cats.

Consider changing veterinarians if yours claims that titers are too expensive to perform, charges \$50 or more for them or wants to vaccinate because a titer level is "too low." "Any measurable titer to a specific antigen means you've got immune memory cells," Dodds says.

Skip the annual exam, too?

So do these new recommendations mean that your dog or cat no longer needs an annual veterinary exam? Don't get your hopes up.

The physical exam your veterinarian performs is far more important than vaccinations. In a recent study on longevity, 16 percent of dogs and 20 percent of cats were found to have subclinical — meaning signs weren't yet obvious — diseases that were diagnosed through an exam and routine lab work.

"Many people, because the animal is living with them, don't notice subtle changes in the behavior or the clinical state of the animal that a veterinarian would notice," Dodds says. Welborn likes to see veterinarians and pet owners working together to perform an annual lifestyle risk assessment. That means looking at the animal's environment and habits to decide whether it needs such non-core vaccines as those for feline leukemia or Lyme disease or canine cough (probably not, unless the exposure risk is high) and whether it needs changes in diet or exercise levels to prevent obesity and its attendant problems, which include arthritis and diabetes.

"Care should be individualized for each pet," Welborn says.

"The days of treating all dogs and cats the same are gone."

Kim Campbell Thornton is an award-winning author who has written many articles and more than a dozen books about dogs and cats. She belongs to the Dog Writers Association of America and is past president of the Cat Writers Association. She shares her home in California with three Cavalier King Charles Spaniels and one African ringneck parakeet.