

AVOID UNNECESSARY VACCINES WITH TITER TESTS (PART III)

In my last two posts, I discussed the potential side-effects (vaccinosis) of over-vaccinating our pets, and the difference between MLV (modified live) and killed vaccines. I cautioned that dogs and cats with immune-mediated diseases are especially vulnerable to vaccinosis, since over-vaccination places additional stress on their already compromised immune systems and has been linked to autoimmune disease. So, then, what is the solution to this dilemma? How can you protect your pet from over-vaccination and the risk of contracting a life-threatening disease at the same time? Fortunately, the solution is simple and affordable. Titer tests.

What is a titer test? A titer test is a simple blood test that measures a dog or cat's antibodies to vaccine viruses (or other infectious agents). For instance, your dog may be more resistant to a virus whereas your neighbor's dog may be more prone to it. Titers accurately assess protection to the so-called "core" diseases (distemper, parvovirus, hepatitis in dogs, and panleukopenia in cats), enabling veterinarians to judge whether a booster vaccination is necessary. All animals can have serum antibody titers measured instead of receiving vaccine boosters. The only exception is rabies re-vaccination. There is currently no state that routinely accepts a titer in lieu of the rabies vaccine, which is required by law.

There are commercially available vaccine titer tests for dogs that can be performed in a laboratory or also in the veterinarian's office for faster results. Several commercial and university veterinary diagnostic labs and Hemopet offer reliable titer testing for dogs, cats and horses.

What do I do if the titer shows that my pet has immunity? If your pet's titer levels show that an adequate immune memory has been established, you do not need to create the potential for vaccinosis by introducing unnecessary antigen, adjuvant, and preservatives into his body via booster vaccines. Instead, skip the boosters and have your dog re-titered in three years.

Are there downsides to titering? There is no downside to titering your pet. However, be aware that some veterinarians may be resistant to performing titer tests in lieu of vaccination. These veterinarians are misinformed and incorrectly believe that measuring an animal's serum antibody titers is not a valid method of determining his immunity to infectious diseases, or that this testing is too costly.

With all due respect to these professionals, this represents a misunderstanding of what has been called the "fallacy of titer testing," because research has shown that once an animal's titer stabilizes, it is likely to remain constant for many years. Properly immunized animals have sterilizing immunity (immunity that prevents further infection even when an animal is exposed) that not only prevents clinical disease but also prevents infection, and only the presence of antibody can prevent infection.

As stated by the eminent expert Ronald Schultz, DVM of the University of Wisconsin in discussing the value of vaccine titer testing, "You should avoid vaccinating animals that are already protected, and titer testing can determine if adequate, effective immunity is present. It is often said that the antibody level detected is 'only a snapshot in time.' That's simply not true; it is more a 'motion picture that plays for years.'"

Furthermore, protection as indicated by a positive titer result is not likely to suddenly drop off unless an animal develops a severe medical condition or has significant immune dysfunction. It's important to understand that viral vaccines prompt an immune response that lasts much longer than the immune response elicited by contracting the actual virus. Lack of distinction between the two kinds of responses may be why some practitioners think titers can suddenly disappear.

What if the titer test is negative? Interpreting titers correctly depends upon the disease in question. Some titers must reach a certain level to indicate immunity, but with the clinically important “core” diseases vaccines, the presence of any measurable antibody indicates protection.

A positive titer test result is fairly straightforward, but a negative titer test result can be more difficult to interpret. This is because a negative titer is not the same thing as a zero titer, and it doesn't necessarily mean that the animal is unprotected. A negative result usually means that the titer has failed to reach a desired threshold antibody level, but a low titer may still mean that the dog is protected upon exposure, as it doesn't reflect tissue levels of immunity.

What's the bottom line on titers? More than a decade of experience with vaccine titer testing and published studies in refereed journals show that 92 – 98% of dogs and cats that have been properly vaccinated develop good measurable antibody titers to the infectious agent measured. In general, serum antibody titers to the “core” vaccines along with any natural exposures last a minimum of 7 – 9 years, and likely are present for life. This corresponds with what we see clinically, as the number of cases and deaths due to these diseases has decreased significantly in the vaccinated population.

The bottom line is that using vaccine titer testing as a means to assess vaccine-induced protection will likely result in your pet avoiding needless and potentially harmful booster vaccinations. And that is a huge benefit for a simple blood test!

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<http://drjeandodds.petthealthresource.tumblr.com/post/33393350071/vaccines-titer-testing-animals>