Annual Vaccinations vs Titer Testing

Annual revaccination is a practice that was started many years ago that lacks scientific validity or verification. Almost without exception there is no immunologic requirement for annual revaccination. Successful vaccination to most bacterial pathogens produces an immunologic memory that remains for years, allowing an animal to develop a protective anamnestic (secondary) response when exposed to virulent organisms.

What is Titer Testing?

A titer test is a blood test that measures the level of immune system proteins called antibodies. When your dog gets a vaccination, their immune system responds by producing antibodies which can then be used by the body to fight off future infections. The titer test determines how many antibodies are still in your dog's blood after one or more years from the time of vaccination.

A titer test is appropriate for determining if your dog has sufficient antibodies to be immune to parvovirus, distemper, or adenovirus.

The titer test is not appropriate for canine leptospirosis, bordetella (also known as kennel cough), or Lyme disease, as these vaccines only provide short-term protection. Rabies is an unusual case. Vaccines for rabies give long-term protection, and the titer tests are very accurate, but vaccination against rabies is mandated by law in the United States. No state will accept a titer test for rabies as a measure of immunity instead of vaccination.

For parvovirus, distemper, and adenovirus, a high antibody count in a titer test will indicate that a re-vaccination isn't necessary. However, a low count doesn't necessarily mean that a booster is needed. Some experts claim that the immune system of a dog that previously had high antibody levels will produce "memory cells" that will pump out antibodies if there is exposure to the disease.

In my experience it is not necessary to do titer testing every year. I recommend doing them every 3 years.