

Vaccine Antibody Titers

When exposed to a virus or bacteria, the immune system produces special proteins specifically designed to interact with the unique protein structures on the surface of the bacteria or virus. These unique proteins are called antibodies. Antibodies help the immune system attack the offending organism and kill it before it causes illness. The principle behind a vaccination is to expose the body to a small dose of a disease-causing virus or bacteria in order to elicit an immune response without inducing the disease (immunization). Unfortunately, every vaccination has the potential to cause an adverse reaction. These reactions can be as minor as hives or a fever, or as serious as a life threatening immune-mediated disease.

Traditionally, the distemper vaccine has been given annually in both cats and dogs and many veterinarians still recommend that pets receive yearly vaccinations. However, immunologists acknowledge that vaccine antibodies persist for longer than one year. At the Veterinary Wellness Center, we recognize the value and importance of vaccines but recognize the harmful aspects also. Our conservative approach is to vaccinate dogs to protect them against the two most severe, life-threatening viral diseases called distemper and parvo. For cats, the usual “distemper” vaccine is a combination of herpes, calici, and panleukopenia viruses. After immunization, it is possible to measure antibodies against these viruses.

An *antibody titer* is a laboratory analysis that measures how much of a specific antibody is present in the bloodstream. In order to tailor the need for vaccination to the individual, rather than treating pets as members of a herd, we recommend measuring the antibody titers to these serious diseases and repeating them every two years. The veterinarians at the Veterinary Wellness Center feel strongly that this is a better approach to keeping patients healthy when compared to repeated vaccinations. If there is no measureable antibody level, then we will discuss the possibility of a booster vaccine.

In order to obtain an antibody titer, a small sample of blood is drawn and sent to Cornell University Diagnostic Laboratory for analysis. Results are usually reported within 2 weeks.