**Taking The Risk Out Of Puppy Shots**

by Dogs Naturally on July 12, 2011



Pet owners are becoming increasingly aware of the long period of duration for vaccines and are vaccinating every three years, or not vaccinating their adult or senior dogs at all. Although it is becoming increasingly obvious that yearly boosters – or any boosters – are at best unnecessary and at worst harmful, the risks and benefits of puppy vaccination are much less clear. If you choose to vaccinate your puppy, you can limit (but not eliminate) the vaccine damage in your puppy by understanding a few things about vaccines and immunity.

As we know, puppies are given a series of several vaccinations, spaced two to four weeks apart. This practice might lead some people – and some vets – to believe that it takes more than one vaccination, or that vaccinations need to be boostered, for the puppy to be protected. This is simply not true: it takes only one vaccination for a puppy to be protected. So why are puppies vaccinated three or four times instead of just once?

**Maternal Antibodies**

When puppies are very young, they are protected from disease by ingesting their mother’s first milk, called colostrum. This rich milk contains maternal antibodies against disease which the mother passes down to her puppies. The puppy’s immune system is not fully mature, or active, until it is around six months of age, so the maternal antibodies provide passive immunity for each puppy.

When a puppy with a reasonable amount of maternal antibodies is vaccinated, the maternal antibodies will essentially inactivate the vaccine, just as it would a real virus. What they can not do however, is protect the puppy against the other toxins contained in vaccines such as the chemical adjuvants and preservatives which contain harmful chemicals including mercury, aluminum and formaldehyde. The adjuvants are designed to stimulate an exaggerated immune response, to make certain that the body responds to the small amount of virus contained in the vaccine. Unfortunately, this heightened reaction can also cause autoimmune disorders which are affecting an alarming number of dogs and can include allergies, cancer, thyroid disease, digestive diseases, joint disease and a rather long laundry list of common afflictions.

Vets and pet owners used to believe that ‘more is better’ when applying vaccines, but we now know that there are very real dangers associated with vaccination. So, when designing a puppy vaccination schedule, the goal is to catch the small window in time when the maternal antibodies are low enough that they will not block the vaccine, but the puppy is young enough that he is not put in unnecessary danger from exposure to viruses in the environment.

Maternal antibodies weaken over time but the rate of weakening differs between different dogs and even different breeds. The maternal antibodies for Distemper are fairly predictable and are usually low enough for vaccination to be effective at 8 or 9 weeks of age. The maternal antibodies for Parvo however, are much less predictable in their decline, and can last as long as 26 weeks in some dogs.

This lack of predictability is why puppies are vaccinated every two to four weeks until 16 weeks of age: vets are trying to catch the window in time when the maternal antibodies are low enough for the vaccine to be accepted. If you are concerned about the risks of vaccination – and you should be – then this vaccine schedule really doesn’t make much sense as vaccinations may be given too soon or after the puppy is already protected.

**Intelligent Vaccination**

Noted immunologist Dr. Ronald Schultz has addressed this issue and recommends a minimal vaccine program that includes one vaccination for Parvo, Distemper and Adenovirus, given at 12 weeks of age. Twelve weeks is not an arbitrary number – it is the earliest age where a combination parvo/distemper vaccine will have the greatest chance of protecting puppies.

Pfizer performed an interesting field study in 1996. C. Hoare, P. DeBouck and A. Wiseman assessed vaccinated puppies and split them into two groups.  Group A received a single vaccination at 12 weeks and Group B received a first vaccine between 8 to 10 weeks and a second at 12 weeks.  When titers were measured, 100% of the puppies vaccinated once at 12 weeks seroconverted whereas only 94% of the puppies in Group B seroconverted – despite receiving two vaccines as opposed to one.  It would appear that if the first vaccine is given too early it could, in some cases, block the the second vaccine.  So vaccinating your puppy twice not only increases his risk for adverse reactions to the vaccine, it appears to make vaccination less effective overall.

Vanguard also tested the Parvovirus response in their combination vaccine. They vaccinated puppies at 6 weeks, 9 weeks and 12 weeks of age and then measured their response to the vaccine by measuring their titers to Parvovirus. At 6 weeks, only 52% of the puppies had seroconverted, meaning that the puppies vaccinated at 6 weeks of age would get all of the risk from the vaccine and none of the benefit because their maternal antibodies inactivated the vaccine. At 9 weeks, 88% of the puppies showed a response to the vaccine. At 12 weeks, 100% of the puppies were protected.

It appears that 12 weeks would be the magic number where vaccines have a nearly 100% chance of working, meaning that your puppy should only need one – for his entire life. Dr. Schultz has done similar research with the distemper vaccine.

In his study at the University of Wisconsin-Madison, designed to mimic an animal shelter environment, Dr. Schultz vaccinated with one dose of Distemper vaccine just four hours prior to the puppies being placed in a room with Distemper-infected/diseased dogs. All of the puppies (which were vaccinated at 12 weeks), were protected against distemper in this challenge study.

Although two and even 3 doses of vaccine were the original recommendations made in the AAHA 2003 Canine Vaccine Guideline, the research shows that the series of vaccinations is unnecessary. Puppies vaccinated once at 12 weeks of age with a high titer vaccine have a virtually 100% chance of being protected. If you feel you must vaccinate your puppy but want to reduce the risk as much as possible, vaccinating once at 12 weeks is a safe and effective approach. If you are not comfortable with just one vaccine, have your vet run a titer test three weeks after the vaccination. If there is circulating antibody (any amount will do), it is highly likely he has seroconverted and he will be protected for life. If you are not sure of this fact, you might want to read [this article](http://www.dogsnaturallymagazine.com/duration-of-immunity-to-canine-vaccines/).

It is important to note that if you wait until 12 weeks of age to vaccinate your puppy, you should keep him away from areas where there is a lot of dog traffic. One such area is the vet’s office! If you must bring your puppy under 12 weeks to the vet, it is important to carry him in and out as this is likely the most likely place for him to pick up viruses. Your best bet is to get the first appointment of the day when you know the floors and tables will be at their cleanest. Despite the heavy vaccination schedules, 28% of vaccinated puppies still get Parvovirus. Part of the reason is that they are exposed to the vet’s office where it is highly likely that he will come into contact with Parvovirus or shed virus from vaccinated dogs on the property.

Vaccination has the very real risk of creating chronic, debilitating disease.  Most vets and dog owners do not see the connection because it can take weeks, months or years after vaccination for these diseases to develop.  Many holistic vets and dog owners avoid vaccinations completely.  If you are not comfortable with this approach, the next best thing you can do to protect your puppy is to vaccinate intelligently.  Needlessly stressing your puppy’s immune system with vaccinations every two to four weeks is no longer a safe option for many dog owners.  Find a vet who agrees with this approach and you will reduce the risk of autoimmune disease in your puppy – now and in the future.