Vaccination Protocols

There are a lot of misconceptions about vaccinations. Vaccinating your dog is not a foolproof way of insuring they will not become sick or not contract the disease being vaccinated for. The reason for vaccinating is to decrease the chances of the dog acquiring the disease, and/or reducing the effects of the disease should the dog become sick. They are not a 100% guarantee that your dog will not contract a disease.

There are many variables that affect the effectiveness of a particular vaccine, such as the individual immune system of the dog, the type of vaccine (killed, modified live), how it is stored, method and place of injection site, and the prevalence of disease in the area or the dog's risk of exposure. Some dogs will also react poorly to vaccinations, or, in the case of internasal bordetella occasionally, may actually experience full symptoms of the disease.

There are two basic views on vaccination schedules. One, is to vaccinate at a slightly older age (between 7 and 9 weeks) when theoretically the maternal antibodies are declining and the vaccination can start to take over. Then vaccinate about every three weeks until 15 or 16 weeks. Typically the standard combination shots take three weeks to reach a peak effectiveness, so at about the time one would be topping out, you would give another, etc. This gives the immune system a little breathing time because as the second shot is on the upside, the first is leveling off. The other common method is to vaccinate every two weeks from 6 weeks of age (or earlier). The idea here is to over vaccinate them so if you are at a time when maternal antibody interference occurs, you will catch it early basically by overpowering the maternal antibodies, and the puppy's immune system is hopefully always on the upside as a result of the vaccination. The problem is, usually the puppy's immune system is on the upside and in overdrive all the time in reaction to the vaccines. This has been thought to be the cause of some allergies as the dog gets older. The immune system is so 'busy' responding to the vaccinations it has little time to react to normal environmental things. In either method you run the risk of vaccinating at a time when the maternal antibodies will cancel out the vaccination response leaving the puppy totally unprotected. Both methods have their place in certain situations. All vets are also different, and remember your concerns are what your vet should consider when setting up a vaccination schedule. If they are vaccinating every puppy that comes through the same way like an assembly line, you need to consider what your current situation is and reach a compromise. It is your puppy you are concerned about, not some 'standard' schedule, and your vet should be willing to work with you.

Not all vaccination brands and types are created equal. Make sure you know what your dog has received, and if possible, what the 'peak' period is for the vaccine. For example, if you are coming close to vaccination time, but plan on traveling in the next month somewhere, make sure the dog is vaccinated typically 3 weeks in advance for maximum protection with combination vaccines. (vaccines differ, so you need to check for sure). But if you are mainly interested in a bordetella vaccine, you can give it as late as 24 hrs prior to leaving depending on the type of vaccine. Another option is to consider running titers. Not as many vets offer this option, but it is becoming more widely accepted. We do accept titers in place of vaccination. They should however, be repeated annually.

Colorado State University, Texas A&M, and the University of Wisconsin, to name a few, have implemented what started at Colorado State as "Program 1701". This vaccination protocol recommends three standard vaccinations for puppies in a series three to four weeks apart, a booster at one year, and vaccinations every three years thereafter. An article written by Dr. Susan Thorpe Vargas suggests splitting the early first vaccine to better coincide with maternal antibody drop off. At Stahlrosenhof Kennels we have begun using and recommend the following vaccination schedule. We strongly encourage you to consult with your vet on developing a vaccination schedule for your dog that is suitable for your area as well as your training and travel schedule. You
may also find more valuable information at your nearest veterinary teaching hospital. You can use the checklist that will come with your new puppy packet to help guide you with a vaccination protocol appropriate for your situation. All puppies will be vaccinated before they leave the kennels. So, in some cases, that will mean somewhere between six and eight weeks of age, but no later than eight weeks. Because of the nature of a young pups immune system, as mentioned earlier, the vaccine may do one of three things. 1) The pup could have received little immunity from the mother and the vaccine will help to start an immunity build-up. 2) The pup still has a lot of maternal antibodies, which the vaccine will conflict with, leaving the pup unprotected. 3) The vaccine will be given late enough that the maternal antibodies have started to decrease where the vaccine can pick up and provide some immunity. The problem is that knowing what the perfect time to vaccinate is extremely difficult.

Using the early split method of vaccinating, based on the "program 1701" puppies will receive a distemper / measles vaccine at 6 weeks, a high titer parvo 7 - 10 days later, and a bordetella / parainfluenza / CAV-2 internasal vaccine before they leave the kennel. The reason for the distemper / measles at 6 weeks is that measles will induce resistance to distemper, without interference to the maternal antibodies. The high titer parvo type vaccines usually have a better chance of over riding maternal antibodies without leaving the puppy vulnerable for a period of time. This method seems to reduce much of the variability in vaccinating pups.

Not too very long ago there was a large push by veterinarians and vaccine companies recommending that puppies be vaccinated every two weeks beginning at about six weeks until 12 - 14 weeks, as previously mentioned. The idea was that you could over vaccinate, and over take the maternal antibodies, thus providing immunity to the puppy. This however caused some problems in the young immune systems. Many dogs as they reached adulthood developed skin and food allergies. Many dogs have also been diagnosed with autoimmune hemolytic anemia, linked to the 'blast' vaccinating as a pup. We will be glad to provide more references on this subject if you are interested. Please read your contract carefully, we will not guarantee any puppy against immune diseases that has had vaccinations less than 3 weeks apart. Vaccinations at less than 3 weeks apart will void your contract.

On a more positive note, with the latest ongoing research, more universities are accepting the less is better idea when it comes to vaccinations. Many are already advocating not vaccinating any more than every 3 years, after the first year. Check your local protocols. Vets, even within the same area, will probably vary quite a bit on their recommendations. Spend some time researching and you will be able to find one you can work with.

When your puppy leaves Stahlrosenhof Kennels, he/she will be accompanied by a certificate of vaccination by the kennel listing what was given, and relevant information regarding the vaccination type. We recommend that pups are vaccinated three to four weeks from the initial one (parvo only), and then again in three to four weeks. We will also provide you with tentative dates for the future vaccinations, and information on the vaccines used, in case your vet has any questions. They should be vaccinated at one year of age, then every three years(*). In fact even the AVMA and AAHA have finally come around to advocating vaccinating every three years, instead of annually. Obviously if you are doing SAR or trialing / showing a lot, this will need to be adjusted to your situation. We do recommend that all dogs in endemic areas, or engaged in SAR or field work, be vaccinated against Lyme disease. Again, titers are an acceptable form of vaccination proof for core vaccines. Keep in mind that the "standard" recommendation for vaccinating annually, was never based on any valid scientific study. So, except for rabies, there is no information on how long a vaccine actually provides immunity. It is known however, that not all vaccines provide the same length of immunity. Bordetella, Lepto, Lyme, Corona and Giardia have significantly shorter protection times, some less than a year.

Until more research is done, many universities and veterinary hospitals have reached a compromise when it comes to vaccinating working dogs, and recommend every two years. Currently there is one documented vaccine, Continuum DAP, approved by the USDA that has shown protective titers at 3 years, and had successful
viral challenge at three years. Certainly more will develop, or current vaccines will be clinically examined for length of protection.

At the kennels we have the ability to personalize vaccination schedules for each dog, and although a bit more work, seems to have proved very successful. Our female is vaccinated or checked with appropriate titers prior to her breeding heat in order to maintain a stable and strong immunity through whelping. Thus, there is also a greater chance that an early typical combination type (such as a 5 way) vaccination will be counteracted by existing maternal antibodies, which is another reason for advocating the early split method. I have seen research that goes both ways, as far as vaccinating prior to a breeding heat being beneficial. However, I feel it is necessary to make sure the female's immune system is checked when possible, and up to par before breeding.

References:

Colorado State University's Small Animal Vaccination Protocol *

“The Vaccine Controversy” Dr. Susan Thorpe Vargas MS, Ph.D.


Kirk's Current Veterinary Therapy XIII “Vaccines and Vaccinations: Issues for the 21st Century” pp 250 - 258