

2007 AKC CHF Annual Conference

Below is a synopsis of the Canine Health Foundation vaccination talk given by Dr. Ronald Schultz, one of the foremost authorities on the topic.

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Which vaccines?

The core vaccines, which every puppy should receive, are:

Parvo (CPV-2)

Distemper (CDV)

Canine adenovirus type 2 (CAV-2)

Rabies (RV).

At minimum, a puppy should get one dose of these at age 16 weeks or older.

Better, they should be given one dose at 6–9 weeks, another dose at least 2–4 weeks later, and then a third at 14–16 weeks. After that, revaccination should follow one year later.

Revaccination following that should be done at most every three years (except for places which by law require annual rabies. Note, however, that there is no medical reason to annual rabies vaccination. The one and three year vaccines are usually the same.)

The minimum duration of immunity for core vaccines (except rabies) is at least 7 years based on current challenge/titer studies. Revaccination before then will not improve immunity, given that immunity was accomplished with the initial vaccination.

The dog's immune system is like a person's, so why are they given annual boosters when people only need one or two vaccinations for a disease and then receive lifetime immunity? Dogs are the same.

Immunological memory is very long, in some cases life-long, for modified live viruses (MLV) vaccines. It is usually shorter for killed viruses and bacterial vaccines.

Non-core vaccinations:

Leptosporosis: only if dog is in high-risk area. Vaccination's duration of immunity is less than one year, so boosters may be needed every 6-9 months. Use the vaccine with four serovars.

Bordatella: Kennel cough is caused by several organisms. CAV-2 immunity lasts at least 7 years; CPI at least 3 years; bordatella may be less than 1 year. If used, intranasal vaccine preferable.

Lyme disease: Only for use in endemic areas. In these areas, many cases of Lyme disease are seen in both vaccinated and unvaccinated dogs. Tick prevention and antibiotic therapy must also be used. Vaccination lasts for up to 1 year.

Giardia: May be of benefit in certain cases, but not advised as a widespread preventative.

Coronavirus: To date, nobody has demonstrated a benefit of using it.

New vaccines:

Snakebite: Now available for both Eastern and Western diamondback. No good data available, but it should theoretically work. One drawback is that owners whose vaccinated dogs are bitten have not sought medical treatment because they assumed the dog was protected. The vaccine may reduce effects of the toxin, but does not do away with it. Vaccinated dogs that are bitten dogs must still be treated. But may be advisable for dogs that are often in rattlesnake areas.

Also new vaccines available for periodontal disease and as a therapy for canine melanoma.

Various facts and advice:

- * * Never mix different vaccines together unless the data sheet advises it.
- * * You can give a dog different vaccines, but not in the same syringe or at the same injection site. The different injection sites should be drained by different lymph nodes.
- * * No matter the size of the dog, the same amount of vaccine should be used.
- * * It is preferable not to vaccinate an anesthetized dog because of the risk should a reaction occur.
- * * Do not vaccinate pregnant dogs with either MLV or killed products.
- * * Do not vaccinate a dog on immunosuppressive therapy, especially with MLV, but also not with killed. Wait at least 2 weeks after therapy has discontinued.
- * * Never vaccinate more often than once every two weeks, even when different vaccines are being used.
- * * Never use a killed vaccine, followed by a MLV vaccine, because it could reduce the effectiveness of the MLV.
- * * Never inject an intranasal bordatella vaccine. Very bad, even fatal, adverse reactions.
- * * Never place a killed bordatella vaccine meant to be injected in the nose. Not effective.
- * * Nosodes do not work. They contain no antigen.
- * * You may use different vaccine brands during the vaccination program. In fact, this may be preferable.
- * * Do not use alcohol or other disinfectant on the injection site. It doesn't provide any benefit, and may inactivate an MLV product.
- * * Vaccines do not cause autoimmune disease, but can trigger it in susceptible dogs.
- * * You may split out components in combination products. For example, Lepto bacterins are often the diluent for some viral vaccines. You can re-suspend the viral cake in sterile water, and give the lepto at a separate site or discard.
- * * A single vaccination with an MLV product will provide immunity when given to dogs at or after 16 weeks of age.
- * * A single vaccination with a two-dose vaccine (such as with a killed lepto product) will NOT provide immunity. If a second dose is not given within 6 weeks of the first, you must start over.
- * * MLV vaccines must never be given to wild species or any species other than the one it is licensed for.

* * Kennel cough vaccines do not provide any immunity to the new canine influenza virus found in greyhounds.

* * Serum antibody titers are useful in determining vaccine immunity, especially for CDV, CPV-2, and CAV-1.

* * Puppies develop a period of immunosuppression that starts about 3 days after the MLV-CDV or MLV-CAV-2 vaccine is given and lasts about a week.

The following statements are NOT TRUE, yet some veterinarians believe them or say them:

* * The annual revaccination recommendation on the vaccine label means it only provides immunity for one year. NOT TRUE

* * If a veterinarian does not revaccinate annually, he/she could be held liable if the dog develop that disease. NOT TRUE

* * Not revaccinating will cause the dog to become susceptible soon after that one year deadline. NOT TRUE

* * If the dog isn't revaccinated on schedule the whole vaccination program needs to be restarted. NOT TRUE

* * If dogs are not revaccinated annually, many of these diseases will reemerge and cause widespread disease. NOT TRUE

* * That while a vaccination may not help, it won't hurt. NOT TRUE

* * Giving a vaccination annually that has a duration of immunity for 3 or more years provides even better immunity. NOT TRUE

* * Parvovirus vaccines provide only 6 months immunity. NOT TRUE

* * Cheaper to revaccinate annually than to treat the disease, so better safe than sorry. NOT TRUE

* * New dogs at a vet clinic should be revaccinated to make sure the history is documented and the vaccinations are done right. NOT TRUE

* * Dogs must be revaccinated annually up until 5-7 years, and only then can the go to a 3 year schedule. NOT TRUE

* * Dogs should be revaccinated before undergoing surgery because it's immunosuppressive. NOT TRUE

* * Because boarding kennels often require frequent vaccinations, vets must continue to provide them. NOT TRUE