

VACCINE INFORMATION – FELINE

In general, guidelines for the vaccination of cats have been strongly influenced by the appearance of vaccine associated sarcomas in cats, and in particular their epidemiologic association with feline leukemia virus vaccines and killed rabies virus vaccines. Thus, there is clear evidence for minimizing frequency of vaccination in cats, especially using highly adjuvanted vaccines such as killed virus vaccines. The recommendations below have been made in light of the AVMA/AAHA/AAFP/VCS task force recommendations on vaccine-associated sarcomas in cats. If a cat develops a palpable granuloma at the site of previous vaccination, the benefits vs risks of future vaccinations should be carefully considered.

FELINE CORE VACCINES are recommended for all pets with an unknown vaccination history. The diseases involved have significant morbidity and mortality and are widely distributed, and in general, vaccination results in relatively good protection from disease.

Feline Herpesvirus-1 (FHV1), Feline Calicivirus (FCV), Feline Panleukopenia Virus (FPV) and Rabies Virus.

FELINE NON-CORE VACCINES are optional vaccines that should be considered in light of the exposure risk of the animal, ie. based on geographic distribution and the lifestyle of the pet. Vaccination with these vaccines is generally less effective in protecting against disease than vaccination with the core vaccines.

Feline Leukemia Virus (FeLV), Feline Immunodeficiency Virus, Feline Infectious Peritonitis (FIP), *Chlamydia psittaci*, *Bordetella bronchiseptica*, *Microsporum spp.* (Ringworm), and *Giardia spp.*

Feline Leukemia Virus Vaccine

We suggest vaccination of all kittens under 16 weeks of age and all FeLV-negative cats allowed to go outdoors or cats having direct contact with other cats of unknown FeLV status. Vaccination is most likely to be useful in kittens and young adult cats, because acquired resistance increases with age. Vaccination is not recommended for indoor cats with no likelihood of exposure to FeLV and is controversial in FeLV-positive cats. We currently stock and suggest the use of the recombinant transdermal FeLV vaccine in response to reports that it should decrease the risk of sarcoma formation.

Feline Immunodeficiency Virus Vaccine

Unfortunately, vaccination of FIV-negative cats renders currently available serologic tests (ELISA and Western blot) positive, and information regarding sensitivity and specificity of alternative polymerase chain reaction (PCR)-based tests is currently unknown. These PCR tests have yet to be standardized, and quality control may be problematic. Previous vaccination does not rule out infection, and the significance of a positive test result in a vaccinated cat cannot be assessed. Questions remain regarding the vaccine's ability to protect against all of the FIV subtypes and strains to which cats might be exposed. Therefore, the decision regarding whether to use this vaccine is not straightforward, and the risks and benefits of the use of this vaccine should be carefully considered prior to using the vaccine in cats at risk of exposure. All Caring Animal Clinic does not stock this vaccine, and its routine use in cats is not recommended.

Feline Infectious Peritonitis Vaccine

The FIP vaccine is an intranasal modified live virus product. The efficacy of this vaccine is controversial, and duration of immunity is short. Although exposure to feline coronaviruses in the cat population is high, the incidence of FIP (a mutated pathogenic form of the non-pathogenic feline coronavirus) is very low, especially in single-cat households (where it is 1 in 5000). Most cats in cattery situations where FIP is a problem become infected with coronaviruses prior to 16 weeks of age, which is the age at which vaccination is first recommended. Vaccination could be considered for seronegative cats entering a cattery where FIP is common. We do not routinely recommend vaccinating household cats with the FIP vaccine, and the vaccine is not stocked by our pharmacy.

Feline *Chlamydia psittaci* Vaccine

Chlamydia psittaci causes a rare disease consisting of conjunctivitis and upper respiratory disease in the general cat population (< 5% of all feline URT infections). When it does occur, it is usually mild and generally responds readily to antimicrobial treatment. Immunity induced by vaccination is probably of short duration, provides only incomplete protection, and is associated with adverse reactions in 3% of vaccinated cats. The use of this vaccine should be considered for cats entering a population of cats where infection is known to be endemic. However, we do not recommend routine vaccination of low-risk cats with this vaccine.

Feline *Bordetella bronchiseptica* Vaccine

This is a modified live intranasal vaccine. *Bordetella bronchiseptica* is primarily a problem of very young kittens, where it can cause severe lower respiratory tract disease. It appears to be uncommon in adult cats and pet cats in general, and should respond readily to antibiotics in these older cats. For these reasons, All Caring Animal Clinic does not recommend routine vaccination of pet cats for *Bordetella bronchiseptica* and does not stock this vaccine.

Microsporium Vaccine

This is an adjuvanted inactivated vaccine that may be considered as a component of a comprehensive program in multiple-cat environments in which *M. canis* (one of the fungi responsible for causing “ringworm”) infection is endemic or as adjunctive treatment to hasten resolution of clinic signs in individual cats.

Feline *Giardia* Vaccine

A killed *Giardia* vaccine has been marketed for use in cats. This vaccine has the same limitations as those listed above for canine giardiasis, and has the additional potential to induce vaccine-associated sarcomas. We currently do not recommend routine use of this vaccine in pet cats. All Caring Animal Clinic does not stock this vaccine.

FELINE VACCINATION GUIDELINES

- All kittens under 16 weeks of age will receive a series of vaccinations starting at 6-8 weeks of age and continuing at 3-week intervals until the animal is 16 weeks of age.
- Kittens will receive the modified live combination vaccine containing feline viral rhinotracheitis (herpes) (FHV1), calici (FCV), and panleukopenia (FPV). Feline Leukemia Virus (FeLV) will also be administered.
- All kittens will receive a rabies vaccination at 12 weeks of age (or as soon thereafter as possible) as recommended by Texas law.
- Healthy, adult cats will receive annual boosters at one year and two years of age. Thereafter, unless circumstances dictate otherwise, the booster vaccinations for feline rhinotracheitis virus (herpes), calicivirus, and panleukopenia virus will be given every 3 years, on an alternating basis. Those cats that are not restricted to a closed, indoor, FeLV-neg environment should continue to receive feline leukemia virus vaccine every 3 years.

For the recombinant rabies vaccine, boosters are recommended at yearly intervals. We currently stock and suggest the use of the recombinant rabies vaccine in cats, as it is theoretically less likely to be associated with sarcoma formation. For the killed rabies vaccines, a booster is required at one year, and thereafter, rabies vaccination should be performed every 3 years using a vaccine approved for 3-year administration.

Serum Titers vs Vaccination

Despite the occasional risks associated with vaccination, it is widely accepted that vaccination plays an important role in protecting pets. However, some owners may wish not to have their pet vaccinated. For some vaccines, blood samples can provide evidence of immunity and may indicate that vaccination is not needed. At this time, not all laboratories are standardized to allow accurate interpretation of results, nor can immunity to all diseases be tested this way.