

# **Current Vaccination Recommendations for Kittens and Cats**



The following information was derived from:
The 2000 Report of the American Association of Feline Practitioners
and the Academy of Feline Medicine Advisory Panel on Feline Vaccines,
Feline Vaccination Protocols,
Feline Vaccines: Benefits and Risks,
The CDC,
Merial, Heska and Pfizer.

This brochure was prepared by VAS Awareness and the VAS Cat Show Group in collaboration with James Richards, DVM, director of the Cornell Feline Health Center.

## The "Respiratory" Vaccines

Feline Panleukopenia is caused by feline parvovirus and is commonly known as feline distemper. It is a highly contagious and deadly disease in cats. Vaccination against feline parvovirus is **highly recommended for all cats**. Nursing kittens are protected by antibodies that they get from their mother's milk. These antibodies may interfere with any attempt to vaccinate the kitten while it is nursing. These maternal antibodies decrease enough to allow vaccination by 12 weeks of age. Most vaccinated kittens are well protected from development of this disease and its symptoms. Research has indicated that the injectable form of this vaccine can produce an immunity that lasts at least 7 years. This vaccine is available without adjuvant (explained below in the section on rabies vaccines) in an injectable form, or as a nasal spray (intranasal) - eye drop (intraocular) product. The American Association of Feline Practitioners and the Academy of Feline Medical Advisory Panel on Feline Vaccines recommends that this vaccine be given to kittens between 6 and 12 weeks of age at the time of the initial visit, and every 3 to 4 weeks until the kitten is 12 weeks old. If your kitten does not begin kitten shots until he or she is 12 weeks of age or older, the recommendation for this vaccine is for 2 doses, 3 to 4 weeks apart. Following the kitten series, a booster is recommended 1 year later. Following this vaccination, the recommendation is for adult cats to be vaccinated for feline parvovirus no more frequently than once every 3 years. When given as a shot, this vaccine should be administered as low as possible over the right shoulder, avoiding the "scruff" area.

Feline viral rhinotracheitis (feline herpesvirus) and feline calicivirus. These viruses account for up to 90% of all cases of infectious upper respiratory diseases in cats. Once infected, many cats never completely rid themselves of the virus. These "carrier" cats serve as a major source of infection to other cats. Vaccination against these viruses is highly recommended for all cats. This vaccine, known as FVRC, is a combination vaccine, called a "bivalent" vaccine. It is frequently combined with feline parvovirus (above) and referred to as a "trivalent" vaccine called FVRCP. Nursing kittens are protected by antibodies that they get from their mother's milk. These antibodies may interfere with any attempt to vaccinate the kitten while it is nursing. These maternal antibodies decrease enough to allow vaccination by 12 weeks of age. This vaccine is available without adjuvant as an injection, or in an intranasal/intraocular form. The American Association of Feline Practitioners and the Academy of Feline

Medical Advisory Panel on Feline Vaccines recommends that this vaccine be given to kittens between 6 and 12 weeks of age at the time of the initial visit, and every 3 to 4 weeks until the kitten is 12 weeks old. If your kitten does not begin kitten shots until he or she is 12 weeks of age or older, the recommendation for this vaccine is for 2 doses, 3 to 4 weeks apart. Following this vaccination, the recommendation is for adult cats to be vaccinated 1 year later and once every 3 years. When given as a shot, this vaccine should be administered as low as possible over the right shoulder, avoiding the "scruff" area.

Heska and Pfizer, the manufacturers of non-adjuvanted, intranasal/intraocular vaccines, recommend the following vaccination schedule for their products: If your kitten is vaccinated at less than 12 weeks of age, a second dose should be given at 12 weeks of age or older. Kittens not vaccinated until they are over 12 weeks of age can be vaccinated with a single dose. Following the kitten series, Heska recommends a vaccination 1 year later and then no more frequently than once every 3 years. Pfizer recommends annual re-vaccination. Intranasal/intraocular vaccines may be safely administered to kittens as young as 3 weeks of age in households where existing cats already have viral upper respiratory infections. Heska's products are available in both bivalent and trivalent forms. Pfizer's product is available in bivalent form only.

## Rabies Virus

Rabies. Rabies is transmitted mainly through bite wounds of other infected animals. Cats develop rabies more often than any other domestic animal. While data collected by the Centers for Disease Control between 1990 and 2001 show no cases of human rabies contracted via cat bites, rabies remains a concern because it is deadly for the cat and because of the fear that it may be transmitted to humans. Therefore, rabies virus vaccination is **highly recommended for all cats**.

Deadly cancers, called feline vaccine-associated sarcomas, have been more commonly observed since rabies vaccines began to contain an additive called an adjuvant. An **adjuvant** is a compound that is added to the vaccine to trigger a stronger inflammatory reaction at the location of the injection than a non-adjuvant vaccine does. There is concern that the adjuvant and the inflammation may predispose some cats to develop a vaccine-associated sarcoma. All rabies vaccines contain adjuvant with the exception of a product called Purevax ®, which was developed by vaccine manufacturer Merial.

Rabies shots should be given as low as possible in the right rear leg. One dose is recommended for kittens 12 weeks of age or older, followed by a booster vaccination 1 year later. Thereafter, laws governing the administration of rabies virus vaccines vary around the country. These laws dictate how often your cat should receive a rabies vaccination. You will need to check with your city or county animal control to ask about rabies laws in your area. Some areas of the United States do not require rabies vaccines at all, and you will not be required to vaccinate your cat for rabies if you live in one of these areas. Some areas require rabies vaccinations every 3 years, while others continue to require annual rabies vaccinations.

Purevax ®, Merial's non-adjuvant rabies product, can be given to kittens as early as 8 weeks of age. With USDA approval pending to administer this vaccine less frequently, it is currently recommended annually. Adjuvanted rabies vaccines are recommended to be given every three years, but most experts agree that the Purevax ® rabies vaccine given annually is safer than an adjuvanted rabies vaccine given every three years. Because the administration of rabies vaccine is a matter of local or county law, some areas may continue to require annual rabies vaccination.

#### Feline Leukemia Virus

<u>Feline leukemia virus</u>. Feline leukemia virus is abbreviated **FeLV**. It is the leading viral killer of cats. It is spread from cat-to-cat through bite wounds, direct contact with infected cats, and from an infected mother cat to her kittens. Kittens under 16 weeks of age are the most susceptible to infection. Cats at greatest risk for FeLV are outdoor cats, cats that live in environments with other cats going outside, cats living with other FeLV-infected cats, and cats in homes where the FeLV status of other cats in the house is unknown. Resistance to FeLV increases as kittens mature to adulthood. Cats over 16 weeks of age are relatively resistant to FeLV. FeLV vaccines, especially those containing adjuvant, have also been linked to feline vaccine-associated sarcoma. Vaccination against FeLV is **NOT recommended for cats with little or no risk of exposure** (i.e., strictly indoor cats that are never exposed to outdoor cats), especially cats over 4 months of age.

Discuss your cat's age, environment and risk of exposure with your vet. Vaccination against FeLV is recommended for cats that are at risk of exposure, especially those under 4 months of age. Kittens may begin vaccination with 2 doses, 3 to 4 weeks apart, as young as 8 weeks of age, with a recommended annual vaccination thereafter. Some centers now recommend FeLV re-vaccination every 3 years rather than annually. This vaccine is available without adjuvant as a transdermal, non-injectable vaccine, called Purevax ®Vet-Jet TM by Merial. FeLV shots should be administered as low as possible in the left rear leg.

#### Feline Immunodeficiency Virus

<u>Feline Immunodeficiency Virus (FIV).</u> This vaccine was released in July of 2002. This vaccine contains adjuvant and is not available in a non-adjuvanted form.

All cat owners need to know that if you consent to vaccination of your cat using this vaccine, your cat will test positive for the infection. If your cat should be picked up by Animal Control and taken to a shelter, it is likely that your cat will be tested for this infection. Most shelters will euthanize stray cats that test positive for FIV. There is no way for a shelter to tell the difference between a cat that is actually infected with the virus and one that is vaccinated against it. In our view, this is a significant drawback to this vaccine and something that you will need to seriously consider before you consent to this vaccine for your cat.

Because cats will test positive for FIV infection as a result of this vaccine, many experts are not recommending this vaccine for routine use.

The position of the American Association of Feline Practitioners regarding the use of this vaccine recommends that cat owners who are considering this vaccine have an in-depth discussion with your vet prior to consent for this vaccine. Should you decide to consent for your cat to be vaccinated against FIV, you will need to be sure that your cat is tested for infection prior to this vaccination, and that the results of that test are negative.

Currently, there is no "official" specified injection site for this vaccine. However, Dr. James Richards of the Cornell Feline Health Center presently suggests that it be given as low as possible on the left front limb.

### Vaccines not recommended for routine use

# The following vaccines are not recommended for routine use in cats.

Chlamydiosis, Feline Infectious Peritonitis (FIP), Dermatophytosis (ringworm), Bordetella, and Giardiasis.

Be aware: Chlamydiosis vaccine is sometimes combined with FVRCP as a "4 in 1" combination vaccine.

# Vaccines manufactured without adjuvant

### The following vaccines are manufactured without adjuvant:

All "modified live virus" vaccines are adjuvant-free, regardless of the manufacturer.

Merial: Purevax ® Brands: Leucat (FeLV), Feline3 (FVRCP), Purevax ® Rabies Vaccine (Rabies),

Purevax ® Vet-Jet TM transdermal (FeLV)

Heska: Bivalent Intranasal/Intraocular (FVRC), Trivalent Intranasal/Intraocular (FVRCP)

Pfizer: Felomune ® CVR: intranasal/intraocular bivalent (herpesvirus/calicivirus) vaccine (FVRC).

Intervet: ProTex ® -FeLV

#### References

The information provided in this brochure has been derived from the following references:

- 1) 2000 Report of the American Association of Feline Practitioners and the Academy of Feline Medicine Advisory Panel on Feline Vaccines (74 references). You can find a link to this report at www.vas-awareness.org
- 2) Feline Vaccines: Benefits and Risks. Cornell Feline Health Center, Cornell University, College of Veterinary medicine, Ithaca, New York 14853-6401. http://web.vet.cornell.edu/Public/FHC/vaccbr.html
- 3) American Association of Feline Practitioners Information Brief in response to inquiries regarding Fel-O-Vax ® FIV, September 2002.
- 4) CDC: Table of Human Rabies Cases from 1990-2001. http://www.cdc.gov/ncidod/dvrd/rabies/Professional/publications/Surveillance/Surveillance01/Table2-01.htm
  - http://www.cdc.gov/ricidod/dv/td/rables/170fessional/publications/Surventance/Surventance/
- 5) Merial Purevax ® Rabies: http://us.merial.com/pdf/Labels/PurevaxFelineRabies.pdf
- 6) Merial Purevax ® Feline3: http://us.merial.com/pdf/Labels/PurevaxFeline3.pdf
- 7) Merial Purevax ® Leucat: <a href="http://us.merial.com/pdf/Labels/PurevaxLeucat.pdf">http://us.merial.com/pdf/Labels/PurevaxLeucat.pdf</a>
- 8) Heska website: http://www.heska.com/products/lm bivalent.asp
- 9) Pfizer Felomune ® CVR: http://www.pfizer.com/ah/vet/tref/merch/3695125.html
- 10) Intervet ProTex ® -FeLV: http://www.intervetusa.com/default.asp?C=2&SC=3&Sec=Products&Id=138
- 11) Merial Purevax ® VET JET TM FeLV: <a href="http://us.merial.com/merial\_corporate/news/press\_releases/01-05-2005">http://us.merial.com/merial\_corporate/news/press\_releases/01-05-2005</a> Feline Leukemia Vaccine-PUREVAX.asp



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