

Feline Vaccination Guideline Recommendations – Comparison tables

As stated in the introduction, the [2020 AAHA/AAFP Feline Vaccination Guidelines](#) update the [2013 AAFP Feline Vaccination Advisory Panel Report](#) and utilises similar recommendations from the [2016 WSAVA \[World Small Animal Veterinary Association\] Guidelines for the Vaccination of Dogs and Cats](#).

While there are many similarities between the guidelines, for example advice on recommended vaccination plans based on risk benefit analysis considering the lifestyle risk factors for the individual cat, and the distinction between core and non-core vaccines, there are also some new additions including a breakdown of recommendations by types of vaccine (attenuated, inactivated or recombinant) as well as the inclusion of intranasal vaccines available for cats in the US.

The new guidelines also provide an update on feline injection site sarcomas and a section on staff and client education, supported by a selection of [online resources](#).

This document provides a series of tables that compare the recommendations in the three guidelines and is intended to act as a quick reference on vaccination recommendations for the most frequently used core vaccines in cats.

To understand the reasoning behind the recommendations you should read the full guidelines. It should be remembered that the recommendations in these tables are general recommendations and should be implemented in conjunction with the information on specific vaccines carried in the summary of product characteristics available via the [Veterinary Medicines Directorate Product Information Database](#).

Abbreviations

FPV - Feline parvovirus

FVH-1 - Feline Herpesvirus

FCV - Feline Calici virus

FelV - Feline Leukaemia virus

Table 1. Recommendations for vaccination of pet kittens (<16 weeks of age)

	AAHA/AAFP-2020	WSAVA 2016	AAFP 2013
FPV-FVH-1 FCV - parenteral	No earlier than 6 weeks of age and then q 3–4 weeks until 16–20 weeks of age	Begin at 6–8 weeks of age, then every 2–4 weeks until 16 weeks of age or older	Administer the first dose as early as 6 weeks of age, then every 3–4 weeks until 16–20 weeks of age
FHV-1-FCV - intranasal	Start at 4–6 weeks of age and then q 3–4 weeks until 16–20 weeks of age		
Feline Leukaemia virus FeLV	Two doses 3–4 weeks apart beginning as early as 8 weeks of age Considered a core vaccine for kittens and young adult cats. Test to establish FeLV antigen status prior to vaccination.	Administer an initial dose as early as 8 weeks of age; a second dose must be administered 3–4 weeks later. Only FeLV-negative cats should be vaccinated. FeLV testing must be performed prior to vaccine administration to avoid unnecessary administration of vaccine	Administer two doses, 3–4 weeks apart, beginning as early as 8 weeks of age The Advisory Panel recommends routine FeLV vaccination for all kittens up to and including 1 year of age
Rabies	Follow vaccine label instructions and local laws	Administer a single dose as early as 12 weeks of age, with revaccination 1 year later.	Administer a single dose at not less than 12 weeks/ 3 months of age

Table 2. Recommendations for initial vaccination of pet cats (>16 weeks of age)

	AAHA/AAFP-2020	WSAVA 2016	AAFP 2013
FPV-FVH-1 FCV - parenteral	Attenuated / Modified live - One or two doses of a combination vaccine, Inactivated - Two doses q 3–4 weeks apart Intranasal – one dose then yearly	Two doses 2–4 weeks apart are generally recommended by manufacturers, but one dose of MLV vaccine is considered protective for FPV	Administer two doses, 3–4 weeks apart
FHV-1 FCV	Inactivated - Two doses q 3–4 weeks apart Intranasal (attenuated live)- One dose and then yearly thereafter	Two doses 2–4 weeks apart are generally recommended.	Administer two doses, 3–4 weeks apart
FeLV	Two doses 3–4 weeks apart. Considered non-core for low risk (indoor) adult cats.	Two doses, 3–4 weeks apart	Administer two doses, 3–4 weeks apart
Rabies	Follow vaccine label instructions and local laws	Administer a single dose with revaccination 1 year later.	Administer a single dose

Table 3. Recommendations for revaccination of pet cats

	AAHA/AAFP-2020	WSAVA 2016	AAFP 2013
FPV	Consider at 6 months of age rather than 1 year of age to decrease the potential window of susceptibility if the kitten had MDA at the last kitten booster. Revaccinate q 3 years thereafter	Revaccination (booster) at either 6 months or 1 year of age, then not more often than every 3 years.	Revaccinate 1 year after primary series; thereafter, boost every 3 years, lifelong
FHV-1 FCV	Consider at 6 months of age rather than 1 year of age to decrease the potential window of susceptibility if the kitten had MDA at the last kitten booster. Revaccinate q 3 years thereafter. Intranasal (attenuated live) Revaccinate annually	Revaccination (booster) at either 6 months or 1 year of age, then not more often than every 3 years for a low-risk cat [EB1]. Annual revaccination should be provided for a higher risk cat (defined as an animal that regularly visits a boarding cattery or that lives in a multicat, indoor–outdoor household)	Revaccinate 1 year after primary series; thereafter, boost every 3 years, lifelong
FeLV	Revaccinate 12 months after the last dose in the series, then annually for individual cats at high risk of regular exposure through encountering FeLV+ cats and cats of unknown FeLV status either indoors or outdoors. Or Every 2–3 years, where product licensure allows, for individual adult cats less likely to have regular exposure to FeLV+ cats	A single dose 1 year following the last dose of the initial series, then not more often than every 2–3 years in cats determined to have sustained risk of exposure	Administer a single dose 1 year following administration of the initial two-dose series. Thereafter, the Advisory Panel recommends revaccination every 2 years for cats at low risk of infection and annually for cats at higher risk. Another guidelines group (European Advisory Board on Cat Diseases) recommends that for cats older than 3–4 years of age, a booster vaccination every 2–3 years is sufficient.
Rabies	Where rabies vaccination is required, the frequency of vaccination may differ based on local statutes or requirements. When local laws/regulations permit, the Task Force recommends a 3-year vaccination interval using a 3-year labelled vaccine	Revaccination (booster) as per licensed DOI or as required by local regulations.	Where rabies vaccination is required. Administer a single dose 1 year following the initial dose; then repeat annually (or every 3 years if using a vaccine licensed for this interval)

Table 4. Recommendations for vaccination of kittens in a shelter environment

	AAHA/AAFP-2020	WSAVA 2016	AAFP 2013
FPV-FVH-1 FCV	<p>Single dose at intake or where possible at least 1 week before shelter entry; in kittens, the first dose no earlier than 4 weeks, and then q 2 weeks until 16–20 weeks of age.</p> <p>Intranasal vaccines for FPV not recommended in shelter environment.</p>	<p>Administer a single dose prior to or at the time of admission as early as 4–6 weeks of age; then, every 2 weeks until 20 weeks of age if still in the facility</p> <p>MLV preparations are preferable</p> <p>Use of intranasal FPV vaccines is not recommended. Use of intranasal FCV/FHV-1 MLV vaccines may be preferable when rapid onset (48 hrs) of immunity is important. Note that post-vaccinal sneezing is impossible to distinguish from active infection.</p>	<p>Administer a single dose at intake or, where possible, at least 1 week prior to shelter entry. In kittens, administer the first dose as early as 4–6 weeks of age</p> <p>Revaccinate every 2–3 weeks until 16–20 weeks of age</p> <p>Intranasal FHV1-FCV -Single dose at intake or where possible at least 1 week before shelter entry; in kittens, administer no earlier than 4 weeks. Revaccinate every 2–3 weeks until 16–20 weeks of age</p>
FELV	<p>Two doses 3–4 weeks apart beginning as early as 8 weeks of age</p> <p>Optional in individually housed cats but strongly recommended in group-housed cats</p>		<p>Administer a single dose of vaccine at the time of intake if group-housed. If group (rather than individual) housing for kittens is used, vaccinate as early as 8 weeks of age</p>
Rabies	<p>Follow vaccine label instructions and local laws.</p>	<p>Single dose at discharge. The administration of rabies vaccine will be determined by whether the shelter is in a country in which the disease is endemic. and vaccination is required by law.</p>	<p>Necessary for all cats where legally mandated or in an endemic region.</p>

Table 5. Recommendations for vaccination of adult cats (>20 weeks) in a shelter environment

	AAHA/AAFP-2020	WSAVA 2016	AAFP 2013
FPV	<p>Single dose at intake or where possible at least 1 week before shelter entry Second dose 2 weeks later.</p> <p>(inactivated and intranasal vaccines not recommended in shelter environment)</p>	Administer a single dose at the time of admission; repeat in 2 weeks if the animal remains in the shelter.	Revaccinate once, 2–3 weeks following administration of the initial vaccine
FHV-1 FCV	<p>Single dose at intake or where possible at least 1 week before shelter entry Second dose 2 weeks later.</p> <p>Where intranasal vaccine used - Single dose at intake or where possible at least 1 week before shelter entry. Shelters should be aware that post vaccinal signs could be confused with natural infection.</p>	Administer a single dose at the time of admission; repeat in 2 weeks if the animal remains in the shelter.	Revaccinate once, 2–3 weeks following administration of the initial vaccine
FeLV	Two doses 3–4 weeks apart		Revaccinate once, 3–4 weeks following administration of the initial vaccine
Rabies	Follow vaccine label instructions and local laws.	Single dose at discharge. The administration of rabies vaccine will be determined by whether the shelter is in a country in which the disease is endemic. and vaccination is required by law.	Necessary for all cats where legally mandated or in an endemic region.

Table 6. Recommendations for titre testing of cats

	AAHA/AAFP 2020	WSAVA 2016	AAFP 2013
FPV	Useful for assessment of immunity because presence of antibodies correlates strongly with protection. Result can be used to decide whether to vaccinate (i.e., only vaccinate antibody-negative cats)	There is excellent correlation between the presence of antibody and resistance to infection. The FPV test kit is reported to have high specificity and moderate sensitivity, when compared with a haemagglutination inhibition test. A negative test result indicates that a cat has little or no antibody, and that revaccination is recommended. However, some seronegative cats are in fact immune (false-negative) and their revaccination would be unnecessary. In contrast, a positive test result would lead to the conclusion that revaccination is not required.	In general, cats having a ‘positive’ antibody titer against FPV are immune. The protective immunity that develops following FPV vaccination is expected to be sustained for several years.
FHV-1 FCV	Not reliable for assessment of immunity. Effective immunity against FHV-1 requires both an antibody and cell-mediated immune response. Result should not be used to decide whether to vaccinate.	The correlation between circulating serum antibody and protection against FCV and FHV-1 infection is less robust than the presence of adequate local mucosal immunity and cell-mediated immunity, respectively. For that reason, a negative test result for FCV or FHV-1 antibody would not necessarily indicate lack of protection in a particular cat.	Serum antibody titers for FHV-1 and FCV may not necessarily correlate well with protective immunity and should not be used to predict protection.
FeLV	Useful for assessment of exposure and/or diagnosis of infection (in combination with other testing methodologies). Results from FeLV antigen testing (and not antibody testing) should be used to decide whether to vaccinate. Rapid in-clinic FeLV test kits detect soluble p27 antigen in whole blood, serum, or plasma and are not affected by FeLV vaccination. The AAFP recommends testing all cats for FeLV p27 antigen prior to initial vaccination.		Antibody titers to FeLV do not correlate with immunity and should not be used to determine the need for vaccination.
Rabies	Serum neutralization results cannot be used to decide whether to vaccinate against rabies		A rabies titre is only an indication of serological response to vaccination. Rabies titres are not recognised as an index of immunity.

Table 7. Miscellaneous recommendations

	AAHA/AAFP 2020	WSAVA	AAFP 2013
Trap neuter return			It is the recommendation of the Advisory Panel that cats in TNR programs receive FPV, FHV-1, FCV (and rabies) vaccines at the time of surgery.
Pregnant queens	<p>Vaccination of pregnant queens (and kittens < 4 weeks old) with MLV against FPV should be avoided because of theoretical concern about cerebellar hypoplasia.</p> <p>Inactivated vaccines are likely safer for use in pregnant cats and those with retrovirus infections.</p>	<p>MLV FPV vaccines should never be used in pregnant queens because of the risk of transfer of virus to the fetus and fetal damage.</p> <p>Vaccination with MLV and killed products during pregnancy should be avoided, if at all possible. There are exceptions, especially in shelters, where vaccination would be advised if the pregnant animal has never been vaccinated and there is an outbreak of disease (e.g. CDV or FPV).</p> <p>In some countries, inactivated FPV vaccines are licensed for use in pregnant queens, but in general, unnecessary administration of products to pregnant queens should be avoided.</p> <p>Killed vaccines may be beneficial (in wild and exotic species), pregnant queens or retrovirally-infected cats, where MLV vaccines are not recommended.</p>	<p>Vaccination of pregnant or lactating cats is generally not recommended. Whenever possible, queens should be vaccinated before breeding. However, benefits of vaccination may outweigh risks in endemic disease situations.</p> <p>Modified-live FPV vaccines should not be administered to pregnant queens as this has been associated with cerebellar hypoplasia in the kittens.</p> <p>For pregnant queens, risk of exposure versus risk of vaccination should be balanced.</p> <p>Queens may be vaccinated during lactation if the benefits outweigh the risks.</p>
Immunocompromised patients	<p>Inactivated vaccines are likely safer for use in pregnant cats and those with retrovirus infections.</p>	<p>A FeLV or FIV positive cat that is clinically well would ideally be housed indoors away from other cats to minimise the risk of exposure to infectious disease. However, if it were deemed necessary to vaccinate with core components (FPV, FCV and FHV-1) expert groups currently recommend that this should be with killed (not MLV) vaccines. Such cats should not be vaccinated against FeLV or FIV.</p>	<p>Because immune responses are hampered in immunocompromised patients, vaccination should ideally be updated before immunosuppressive therapies are started. Retrovirus-infected cats should not be vaccinated against the retrovirus they are infected with.</p>

References

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