



# WINN FELINE FOUNDATION

For the Health and Well-being of All Cats

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637 Wyckoff Ave., Suite 336, Wyckoff, NJ 07481 • [www.winnfelinefoundation.org](http://www.winnfelinefoundation.org)  
Toll Free 888-9MEOWIN (888-963-6946) • Local Phone 201-275-0624 • Fax 877-933-0939

## **FIV and FeLV- The Feline Retroviruses**

Dr. Matthew Kornya, DVM

Cats, like humans, can be infected with a type of infection known as a retrovirus. These viruses are spread by direct contact between cats and do not survive for long in the environment, however they have a large potential to affect the health and wellbeing of infected animals. There are two significant retrovirus infections in domestic cats; Feline Immunodeficiency Virus (FIV) and Feline Leukemia Virus (FeLV). Though they are in the same family, these two diseases are very different in their treatment and prognosis and should never be considered interchangeable.

Both viruses are easily screened for with “bedside” tests than may be done with a small blood sample in the course of a visit to your veterinarian. The American Association of Feline Practitioners recommends testing all cats being introduced into a household to prevent exposing any existing cats to the virus. Testing is also often recommended for sick cats, cats with potential exposure to these viruses, and cats with recent bite wounds.

Each of the feline retroviruses is discussed independently below.

### **Feline Immunodeficiency Virus (FIV)**

This virus is related to HIV (the virus that causes AIDS), but can only infect cats, humans are not at risk. Cats can sometimes get FIV from their mother prior to birth, but are usually infected via bite wounds from fighting with other cats. Rarely, FIV can be spread through other types of contact, such as during mating. For this reason, free roaming cats (especially intact males) are most commonly infected (however any cat is at risk of infection). The average age for infected cats is 3-5 years. Overall in North America, ~5% of cats will test positive for FIV.

While FIV is a contagious disease, the risk of spread in stable households (where all cats get along and do not generally bite each other deeply enough to draw blood) is extremely low. Several studies have shown that infected cats can live with healthy cats for many years without disease transfer.

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The best prevention for FIV is keeping cats neutered and indoors, removing them from potential sources of infection. While a vaccine for FIV exists, it is not very effective against the strains of FIV that are found in North America (though it is much more effective in other parts of the world, such as Australia). Vaccinated cats will also test positive on most tests, making vaccination a confounding issue with diagnosis. For these reasons, FIV vaccination is not routinely recommended for cats in North America and should be discussed thoroughly with your veterinarian before being considered. Cats who test positive for FIV may need confirmation testing done (using methods called “Western Blot” or “PCR”) to confirm that it is a true positive.

Cats with FIV may experience a brief period of flu-like symptoms immediately after infection, associated with mild diarrhea, fever, large lymph nodes, and a decrease in white blood cells. This period is generally quite mild and is often missed or misdiagnosed by owners and veterinarians. After this, there is usually a period of months to years without any overt clinical signs. During this time, white blood cell numbers may slowly drop and there may be problems associated with a weak immune system. These may include infections of the mouth, upper respiratory infections, diarrhea, or skin disease. Cats with FIV may have more side effects with certain medications that affect the immune system, such as steroids or cyclosporine.

While some cats will enter a “feline-AIDS” stage late in life when they become very prone to infections, cancers, and other diseases, this is the exception and not the rule. FIV+ cats require close care and adherence to vaccine, deworming, and other preventative medicine schedules, but generally have a good quality of life. With careful management, FIV+ cats can live a normal lifespan. Diagnosis of FIV is not a reason for euthanasia.

## **Feline Leukemia Virus (FeLV)**

FeLV is a retrovirus found exclusively in cats, other animals and humans cannot be infected. Despite its name, FeLV causes a wide range of diseases in cats including many types of cancer, anemia, and immune system suppression. Cats may become infected through mutual grooming, sharing water bowls, mating, or at birth. Any cat can be infected, and cats sharing a home with infected cats are at high risk of disease. Unlike with FIV, cats do not need to draw blood on each other to become infected. In North America, approximately 3.5% of cats are infected with FeLV.

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Cats that are positive for FeLV can have months to years of no symptoms, much like FIV. They may also be more prone to dental disease, infections, and slower wound healing. Unlike in FIV, cats with FeLV generally experience a precipitous decline in health several months to years after infection. Depending on the strain of disease and the cat's immune system, this may entail the development of anemia, a weakened immune system, or certain types of cancer (including lymphoma and leukemia).

Cancers associated with FeLV are generally less responsive to therapy than in FeLV- cats, and are more likely to reoccur. Prognosis is poor for these cats, who often survive only weeks to months after diagnosis.

Cats who present with FeLV associated with anemia or a weakened immune system may be more responsive to therapy. Corticosteroids, immune modifying drugs, and supportive care are used to restore quality of life in these cats. Though prognosis is still poor, they may survive for months or rarely years with therapy.

Some experimental therapies are currently being investigated for FeLV. These include immune response modifiers, interferons, immunostimulants, and integrase inhibitors. Currently, these medications either have minimal effect on survival or are exorbitantly expensive. Hopefully new medications and therapies will be available and affordable in the near future.

There is an effective vaccine available for FeLV, which the American Association of Feline Practitioners (AAFP) recommends all cats receives in their kitten series and 1 year booster, followed by additional vaccines for high-risk animals. This vaccine is safe and very effective at preventing infection. Prior to the development of this vaccine, infection rates in some areas approached 20%, and have now fallen much lower.

## **For More Information**

American Association of Feline Practitioners

<http://www.catvets.com/guidelines/practice-guidelines/retrovirus-management-guidelines>

Cornell Feline Health Center

[http://www.vet.cornell.edu/fhc/Health\\_Information/brochure\\_felv.cfm](http://www.vet.cornell.edu/fhc/Health_Information/brochure_felv.cfm)

[http://www.vet.cornell.edu/fhc/Health\\_Information/brochure\\_fiv.cfm](http://www.vet.cornell.edu/fhc/Health_Information/brochure_fiv.cfm)

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