

# Feline Leukemia and FIV



The feline leukemia virus (FeLV) and feline immunodeficiency virus (FIV) are both contagious diseases found in cats throughout the world. These viral infections can cause serious illness and can not be cured but may be managed with medication.

## What is the Feline Leukemia Virus?

Feline leukemia virus (FeLV) is a type of virus known as a retrovirus that inserts pieces of itself into the genetic material of an infected cat's cells. The virus gets into the blood stream of a cat and can cause a wide variety of illnesses.

## Who gets it?

All cats worldwide are susceptible to infection with FeLV, particularly cats less than 2 years of age. The infection is more common in cats that are ill, very young, or have another reason to be at higher risk of infection such as living with an FeLV-infected cat. Cats do not transmit FeLV to people.

## How is it spread?

Cats get infected with FeLV when they come into direct contact with an infected cat. The virus is shed in high levels in the saliva, and transmission during grooming, from a bite wound, or even sharing food and water bowls may occur. An infected cat may spread the virus to her kittens, either while nursing or even before birth. Cats most at risk are those living with or born to an FeLV-infected cat and those cats allowed outdoors.

## What are the symptoms?

FeLV infection can cause a wide variety of symptoms in cats. It can cause cancer and anemia or other blood disorders and also hinders a cat's ability to fight off infection. As a result, frequent infections that do not typically affect healthy cats may be found in FeLV-infected cats and cat even be fatal. Infected cats are usually asymptomatic at first, but develop increasingly severe health problems.

## How is it diagnosed?

There are two types of tests for FeLV infection commonly in use, both of which look for pieces of the virus in the blood. The most commonly used tests, known as ELISAs, are screening tests that can be performed at a veterinarian's office and look for free pieces of the virus in the bloodstream. Another type of test, usually used as a confirmatory test, is known as an IFA and looks for pieces of the virus inside the cat's white blood cells; this test must be sent to a diagnostic laboratory.

## What is the treatment?

Unfortunately there is no treatment to cure FeLV infected cats. All treatment is supportive and aimed at preventing or minimizing symptoms and secondary infections that result from suppression of the immune system. Infected cats should be spayed or neutered and kept indoors only, away from uninfected cats. Balanced proper nutrition and regular veterinary visits are critical to maintaining the health of infected cats. With appropriate care infected cats may remain apparently healthy for many months or even years, but most infected cats with succumb to fatal FeLV-associated disease within two to three years of infection.

## How do I prevent it?

All preventive measures centered around prevention of exposure of cats to FeLV-infected cats. These include:

- Keeping cats indoors or, if allowed outdoors with supervision or in an enclosure only.
- If you have both FeLV-infected cats and non-infected cats, keep them separate and do not allow them to share food bowls, water bowls, or litter boxes.
- Know the status of any cat before introducing him or her to your household, and the status of all cats in your household.
  - Cats should be tested for FeLV before introduction to a new household. If negative, cats should be re-tested again 60 days later to ensure the first test did not miss a very recent infection.
- Talk to your veterinarian about FeLV vaccination to see if it is appropriate for your cat(s).

## What is the Feline Immunodeficiency Virus?

The feline immunodeficiency virus (FIV) is a type of virus known as a retrovirus that inserts pieces of itself into the genetic material of an infected cat's cells. It is similar to the human immunodeficiency virus (HIV) and may cause similar disease, but FIV does not infect people.

### Who gets it?

All cats worldwide are susceptible to infection with FIV. Because bite wounds are the primary means of transmission, un-neutered male cats that roam unsupervised and get into fights are most frequently infected. Outwardly healthy cats may be infected, but FIV is more commonly found in sick cats.

### How is it spread?

Cats typically get infected with FIV when they are bitten by an infected cat. Casual transmission from grooming or sharing food and water bowls does not appear to be a common way that FIV is spread, unlike FeLV. Infected cats rarely spread the virus to their kittens although it does occasionally happen.

### What are the symptoms?

FIV infection can cause a wide variety of symptoms in cats. Infected cats are usually asymptomatic at first and may remain apparently healthy for long periods of time (years) or may develop increasingly severe health problems. FIV infection damages a cat's immune system and makes them susceptible to infection from common viruses, bacteria, and fungi that usually do not make healthy cats sick.

### How is it diagnosed?

Blood tests look for antibodies against the virus in a cat's blood stream. The most commonly used tests, known as ELISAs, are screening tests that can be performed at a veterinarian's office. Another type of test, usually used as a confirmatory test, is known as a Western Blot; this test looks for antibodies to the virus but in a different way than the ELISA test does. Unfortunately, currently available tests are unable to distinguish antibodies produced during natural infection from those produced as a result of vaccination or even transmission of maternal antibodies to kittens.

### What is the treatment?

Unfortunately there is no treatment to cure FIV infected cats. All treatment is supportive and aimed at preventing or minimizing symptoms and secondary infections that result from suppression of the immune system. Infected cats should be spayed or neutered and kept indoors only, away from uninfected cats. Balanced proper nutrition and regular veterinary visits are critical to maintaining the health of infected cats. With appropriate care infected cats may remain apparently healthy for many months or even years, and there have been cases where FIV-infected cats live a long life and die from non-FIV associated illness.

### How do I prevent it?

All preventive measures center around prevention of exposure of cats to FIV-infected cats. These include:

- Keep cats indoors or, if allowed outdoors with supervision or in an enclosure only.
- If you have both FIV-infected cats and non-infected cats, keep them separate if they are likely to fight and bite each other.
- Know the status of any cat before introducing him or her to your household, and the status of all cats in your household.
  - Cats should be tested for FIV before introduction to a new household. If negative, cats should be re-tested again 60 days later to ensure the first test did not miss a very recent infection.
  - Kittens can be tested for FIV but results but results but interpreted carefully. A negative test in a kitten less than 5 months of age is almost always accurate, but positive results in young kittens are frequently inaccurate because the test will pick up antibodies from the mother cat as well. Kittens with a positive FIV test result should be retested when they are 5-6 months of age to confirm their status.
- Talk to your veterinarian about FIV vaccination to see if it is appropriate for your cat(s).



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