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Cat Tips

# These Viruses May Be Incurable, but Are Not Death Sentences

While feline leukemia (FeLV) or feline immunodeficiency virus (FIV) are considered serious diseases, early diagnosis and proper care can help many kitties live normal lifespans in relatively good health.

**Analysis by Dr. Karen Shaw Becker**

## STORY AT-A-GLANCE

- If your cat has been diagnosed with FeLV or FIV, it's absolutely not an automatic death sentence
- These viruses are quite different, but share certain similarities: both are contagious, incurable, and occur most often in cats allowed outdoors
- FeLV and FIV can cause a progressive deterioration of health, or recurrent bouts of illness interspersed with periods of relatively normal health; the viruses have several symptoms in common
- There is no specific treatment for either virus, however, early detection and lifelong immune system support offer infected cats the best chance to enjoy a normal lifespan in relatively good health

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If your feline family member has been diagnosed with FeLV (feline leukemia virus) or FIV (feline immunodeficiency virus), I'm sure the news that your kitty has a serious disease was devastating to hear. Hopefully, your veterinarian reassured you that while your cat's virus is incurable, it's far from an automatic death sentence.

Although affected cats can die from either disease, with early diagnosis and proper veterinary and at-home care, many live normal lifespans in relatively good health and with a good quality of life. The viruses that cause FeLV and FIV are genetically quite different, as are the proteins they contain, and the ways in which they cause disease also differ. However, they do share certain characteristics:

- Both are cat-to-cat contagious and incurable
- Both are more likely to occur in kitties allowed outside
- Neither can be transmitted to humans or species other than cats

## FeLV — Feline Leukemia Virus

There are three varieties of FeLV infection: FeLV-A, FeLV-B, and FeLV-C. Kitties can be infected with one, two or all three types. FeLV-A occurs in every cat infected with feline leukemia. It severely compromises the immune system. FeLV-B occurs in about half of FeLV-infected cats and causes tumors and other abnormal tissue growths. FeLV-C occurs in only about 1 percent of FeLV-infected cats and causes severe anemia.

Cats at highest risk for infection are those living with infected cats or cats of unknown infection status, those allowed outdoors where they can be bitten by an infected cat, and kittens born to infected mothers. The FeLV virus is shed in bodily fluids including saliva, nasal secretions, urine, feces, and blood. The virus is transmitted through direct contact, primarily mutual grooming, and use of shared litterboxes, food and water bowls.

In addition, FeLV can be passed from a mother cat to her kittens either in utero or while nursing; the disease can also be transmitted through the bites and scratches of an infected cat. It takes large amounts of virus to infect an adult cat, so prolonged contact or a bite is necessary for transmission.

## Stages and Symptoms of FeLV

There are two stages of an FeLV infection. The early stage is called primary viremia, and during this stage some cats are able to fight off the virus and halt progression of the infection to the second stage, called secondary viremia. This stage is characterized by persistent infection of the bone marrow and other tissue and is considered irreversible. Two to four weeks after exposure to the feline leukemia virus, a cat will respond in one of a few ways:

- Some kitties will not become infected due to inadequate exposure and/or a good immune system response.
- Some will develop a latent or regressive infection, meaning they didn't completely clear the virus, but their immune system can hold it in check. These cats typically show no signs of infection and do not shed the virus in their saliva or other bodily fluids.
- Kitties whose bodies do not launch an adequate immune response will become permanently infected with FeLV. These cats will shed large amounts of the virus and begin to develop FeLV-associated conditions within a few years. This happens most often when exposure occurs before a kitten is 8 weeks old.

FeLV is the most common cause of feline cancer. It can also cause various blood disorders and can so decimate the immune system that it can't defend the body against other infections. Common pathogens found in the environment that cause no harm to healthy animals can cause severe illness in an FeLV-infected kitty. Secondary infections are the cause of many of the diseases associated with FeLV.

Early in the infection, many cats show no signs of illness. As the disease progresses, however, a kitty's health may gradually deteriorate, or she may have recurring illnesses followed by periods of relatively good health. Symptoms associated with FeLV include:

- Loss of appetite
- Inflammation of the gums (gingivitis) and mouth (stomatitis)
- Slow, progressive weight loss followed by severe wasting late in the disease process
- Infections of the skin, urinary bladder, and upper respiratory tract
- Poor coat condition
- Persistent diarrhea
- Enlarged lymph nodes
- Seizures, behavior changes, and other neurological disorders
- Persistent fever

- A variety of eye conditions
- Pale gums and other mucus membranes
- Spontaneous abortions in pregnant females, and other reproductive problems

## FIV — Feline Immunodeficiency Virus

FIV is seen most often in free-roaming, aggressive male cats. Indoor kitties are much less likely to be infected. The average age at diagnosis is 5 years, and the risk of infection increases with age. There is no genetic predisposition for the condition, although genetics may play a role in disease progression and severity.

FIV is transmitted primarily through bite wounds. Casual contact doesn't appear to spread the virus, which is why friendly kitties in stable multi-cat households are at little risk of acquiring FIV. Rarely, an infected mother cat can transmit the virus to her kittens either during passage through the birth canal or while nursing. Sexual contact is not considered a major means of transmission.

A cat with an FIV infection can appear normal for years. But eventually, the disease creates a state of immune deficiency that leaves the kitty susceptible to other infections. This means that everyday bacteria, viruses and fungi that cause no problems for healthy animals can cause serious illness in kitties with compromised immune systems. Secondary infections are responsible for many of the diseases linked to FIV.

Early in an FIV infection, lymph nodes throughout the body are affected, resulting in temporary enlargement of the nodes, and often, a fever. This stage of infection often passes unnoticed unless the lymph nodes grow markedly enlarged.

As with FeLV, the course of FIV can cause a progressive deterioration of health, or recurrent bouts of illness interspersed with periods of relatively normal health. Symptoms of immunodeficiency can occur anywhere in a cat's body and include:

- Recurrent minor illnesses, often involving the upper respiratory tract and gastrointestinal tract
- Persistent bacterial or fungal infections of the ears and skin
- Inflammation of the gums is seen in 25% to 50% of cases
- Fever and wasting, especially in the later stages
- Upper respiratory tract disease is seen in 30% of cases
- Cancer, especially lymphoma
- Chronic eye problems, glaucoma
- Chronic kidney insufficiency
- Persistent diarrhea is seen in 10% to 20% of cases
- Poor coat condition
- Nervous system abnormalities, including disruption of normal sleep patterns, behavioral changes (e.g., pacing and aggression), changes in vision and hearing, disorders affecting the nerves in the legs and paws

## Diagnosing FeLV and FIV Infections

There are two types of blood tests for FeLV that look for a specific protein component of the virus. The ELISA (enzyme-linked immunosorbent assay) test detects FeLV in both the primary and secondary stages and can be performed at the veterinary clinic. The IFA (indirect immunofluorescent antibody assay) test picks up secondary viremia only, so the majority of kitties who test positive will be infected for life. This test must be sent out to a diagnostic laboratory and is often used to confirm a positive ELISA test for FeLV.

An antibody test is used to check for the presence of FIV antibodies in the blood of infected kitties. However, false-positive results do occur, so it's recommended that a positive antibody test result be confirmed using a different type of test, typically a polymerase chain reaction (PCR) test.

Infected pregnant cats will transfer FIV antibodies to nursing kittens, and those babies may test positive for several months after birth. Fortunately, most of them aren't and won't become infected. Kittens under 6 months that test positive should be retested every 60 days until they are at least 6 months old.

## Treatment Options

There is no specific treatment for kitties with FeLV or FIV, however, any existing secondary infections will need to be resolved. Cats who test positive for either disease should be kept indoors, which will prevent the spread of the virus to other cats, while also reducing the risk that your kitty will be exposed to pathogens his immune system may not be able to handle. These kitties should not reproduce and should never be vaccinated for anything, ever.

Your cat should be fed a balanced, nutritionally complete, species-appropriate diet. Unless he has a low white blood cell count — in which case I recommend cooked fresh food — a raw diet is fine. You can also feed a commercially available sterile raw food diet that has been high-pressure pasteurized.

Cats with FeLV or FIV should see the veterinarian at least twice yearly to review the health of their eyes, gums, skin and lymph nodes, and to check their weight. At one of the two yearly visits, bloodwork and a urinalysis should be performed. At home, careful, consistent monitoring of your kitty's health and behavior is extremely important so that you can notify your veterinarian right away of any changes.

I've had good success keeping FeLV and FIV patients healthy, and in some cases asymptomatic using a variety of natural supplements to support the immune system, including:

- Standard Process Feline Immune System Support and Feline Whole Body Support
- Medicinal mushrooms
- Turmeric
- IV vitamin C therapy
- **Ozone therapy**
- **Kyosenex Prime** thymus extract
- Chinese herbs
- FeLV and FIV homeopathic nosodes

## Prognosis and Prevention

The goal should always be to identify FeLV and FIV cats before they become symptomatic and offer lifetime immune system support. In these cases, many of these kitties can live a completely normal life. Unfortunately, the majority of leukemia-positive cats whose immune systems aren't supported typically have complications from a secondary disease within 2 years of becoming infected.

Cats that acquire one or more serious virus-related illnesses, kitties with persistent fevers and weight loss, and those with cancer, can be expected to have a much shorter survival time as well. The only foolproof way to keep your cat safe from these viruses is to prevent exposure to them. This obviously means keeping him away from potentially infected cats.

If he goes outdoors, it should be under your close and constant supervision, or in a safe, secure outdoor enclosure — one that prevents other cats from getting in, and as much as possible, prevents them from being able to bite or scratch your kitty through the sides or top of the enclosure.

If you have an uninfected cat, never allow untested or at-risk kitties to mingle with yours. House FeLV-positive cats separate from viral-free cats. FIV-positive and negative cats can live under the same roof as long as they don't fight or bite. I don't recommend the FeLV or FIV vaccines as they are often ineffective and have been linked to the development of vaccine-associated sarcomas in cats.

**Sources and References**

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