Information about the Kentucky State University Cooperative Extension Program

2021

# Common Questions about Feline Leukemia Virus and Feline Immunodeficiency Virus in Cats

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Feline Leukemia Virus and Feline Immunodeficiency Virus are both viruses that are contagious between cats that have, at this time, no cure. These viruses are most commonly transmitted between cats through cats fighting, although feline leukemia can also be transmitted through close contact. Cats are solitary hunters and are territorial in the wild (especially males), which lends this disease to be more common in populations of feral cats and cats that live or spend much time outdoors. Infected mothers may also transmit to her kittens. All newly acquired cats should be tested. Vaccines are available and may be recommended by a cat owner's veterinarian depending on risk factors, such as indoor versus outdoor or exposure to other cats.

# Feline Immunodeficiency Virus (FIV)

Feline Immunodeficiency Virus is NOT contiguous to humans but does act similarly in cats as the Human Immunodeficiency Virus acts in people. The virus causes a weakened immune system, which makes infected cats more susceptible to all other infections. Infected cats may appear healthy and show no symptoms; it may be years before they succumb to another disease. The primary transmission or way cats become infected is through bite wounds. As cats, especially male cats, are territorial, fighting promotes the spread of the virus. There is no cure or treatment once a cat is infected. A vaccination is available but not effective for all cats and not considered a core vaccine. The best prevention is to avoid bite wounds. This is much easier when cats are strictly indoors versus outdoor or feral cats.

FIV causes the immune system to be suppressed and not fight off diseases as it should. This causes infected cats to be affected more often and more severely to other viruses, bacteria or fungus. These cats may have long



periods of health and intermittent periods of illness. Some symptoms may include recurrent infections of the mouth, eyes or bladder, and occasionally persistent diarrhea.

# Feline Leukemia Virus (FeLV)

Feline Leukemia Virus may also be transmitted through bite wounds; however, it is much more contagious because it is also shed through mutual grooming, sharing water or food bowls or sharing litter boxes, or from an infected mother to her kittens. Feline Leukemia Virus is also the most common cause of cancer in cats. Unlike FIV, the leukemia virus itself does cause disease; however, it may be years between infection and clinical symptoms. In the late stages of disease, cats may show progressive or reoccurring weight loss, poor appetite, fever, poor hair coat, enlarged lymph nodes, pale gums/anemia, severe inflammation of the mouth or eye conditions, respiratory infections, or other infections. Most infected kittens/cats will only live a few years after diagnosis.

Your local veterinarian will likely recommend FIV/Feluk testing of any newly acquired cats.

#### What are the symptoms?

Cats infected with FIV or FeLV often show no symptoms for years, which may make it hard to detect infected cats and increases transmission. Both viruses do cause a weakened immune system; consequently, they will often develop symptoms of other illness, such as respiratory infections.

Feline Leukemia Virus usually causes very few symptoms, if any, in the early stages of the disease. Over the course of 1-3 years, recurrent infections of other diseases begin. In later stages, cats may show a variety of symptoms, depending on how the virus attacks the body. These include, but are not limited to, recurrent respiratory, eye, mouth, or skin infections. Cats may have poor appetite or persistent diarrhea. In later stages, cancers like lymphoma may develop.



# How do you know if a cat is infected?

Testing for FIV/FeLV is recommended for all new cats adopted and routinely for cats that are outdoor at increased risk. A screening test is generally done by your veterinarian collecting a small blood sample; most will know results in about 20 minutes. If the initial test is positive, a blood sample may be sent to a laboratory for confirmation. Testing is reliable and, in most cases, accurate. With FIV, young kittens may occasionally be a false positive, so retesting in 6 weeks may be recommended.

#### Is there a cure?

There is no cure for FIV or FeLV once a cat is infected. Secondary illness may be treated, but the cat will always be infected with the viruses and suffer from a weakened immune system.

#### Is it contagious?

FIV and FeLV are both contagious to other cats (they are not contagious to humans or dogs). FIV is transmitted almost exclusively through bites. So it is easier to manage an FIV positive cat in a household with other cats, if the cats are not aggressive with each other.

Feline Leukemia Virus, on the other hand, may be spread by bite wounds, sharing food or water bowls, sharing litter boxes, or mutual grooming. This does make this virus more contagious, and infected cats should be kept completely separate from healthy cats.

#### How can it be prevented?

Testing cats and vaccines for those at high risk is the best way to prevent cats from being infected. All newly acquired cats should be tested before bringing into your home, or kept in quarantine away from other cats until testing has come back negative. Preventing exposure to the virus is much easier for indoor cats as their surroundings are controlled. Outdoor cats are at more of a risk because of the likelihood of a "stray," feral or neighbor's cat exposing them to the virus.

A vaccine is available for FeLV. It is not considered core for all cats but is highly recommended for any cats that will be going outdoors or may potentially be exposed to cats that could be infected.

In the case of Feline Immunodeficiency Virus, the vaccine is not effective against all strains. After a cat has been vaccinated it will test positive, so the vaccine for FIV is only recommended for cats that are in the highest risk categories.

# How can I protect my other cats from being infected?

Feline leukemia is shed in all body fluids, including saliva, urine, and feces. Positive cats should always be kept separate from non-infected cats, with no comingling or socializing at all. Water/food bowls should not be shared and litter boxes should not be interchanged between the infected and non-infected.

Feline Immunodeficiency Virus is also shed in saliva and almost primarily spread by bite wounds. It is less likely to be transmitted by simply sharing water bowls or litter boxes, so in houses where the cats are not aggressive with each other they may share common areas. But if the cats do fight, the potential is there for the disease to spread.

### Can my cat still go outside?

It is not recommended for positive cats to be outdoors, as they put any other cats they may come into contact with at risk, including any neighbors' cats or feral cats. Feral cats may travel long distances and then spread these viruses even further.

If your cat is negative, it should be vaccinated at least for feline leukemia if it is allowed to go outdoors; however, with both viruses, it is still more likely for them to be exposed outdoors.

# Should I adopt a positive cat?

As both of these viruses are contagious, the first thing to consider is if you have other cats in the home and if you have the ability to keep them separate. With Feline leukemia, they will need to be kept completely separate. FIV-positive cats may be in mutual areas if they are not aggressive with each other; however, that is difficult to determine without introducing the cats and risking bite wounds/transmission.

Being infected with FIV does not mean that cats will not have a normal life span; owners should expect that their positive cats will be more susceptible to other illnesses. Care will need to be taken to provide quality foods and clean food/water bowls regularly. Infected cats may require more veterinary care during episodes of illness.

Feline Leukemia Virus positive cats will likely have a shortened life span, usually of only a few years. They also will have more health issues directly related to the virus, such as infections of the mouth or types of cancer. These cats may have increased needs for veterinary care and expenses.

## What if I can't keep my infected cat?

In some situations, owners are not able to keep or care for infected cats. It is very important to inform anyone that your cat is positive before sending to a new home or shelter. There are a few organizations that are willing to help find homes for these cats, but it is more difficult. Infected cats should NEVER be released outdoors.

#### References

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