

Feline Immunodeficiency Virus (FIV)

What is FIV?

FIV stands for feline immunodeficiency virus, just as HIV stands for human immunodeficiency virus. In fact, these two viruses are closely related and much of the general information that has become common knowledge for HIV also holds true for FIV. FIV is a virus that causes AIDS in cats; however, there is a long period without symptoms before AIDS occurs and our job is to prolong this asymptomatic period. The average life expectancy from the time of diagnosis for FIV is 5 years. Humans cannot be infected with FIV; FIV is a cats-only infection.

For a lengthy description of this virus and an FAQ, we recommend the [Cornell Feline Health Center](#).

Also helpful is information from the [American Association of Feline Practitioners](#).

How is Diagnosis Made?

Most of the time FIV infection is discovered using a screening test done in your veterinarian's office or on a blood panel run at a reference laboratory. Once a screening test identifies a cat as positive, the next step is a follow-up confirming test called a Western Blot. Once this test is positive, the cat is considered to be truly infected.

It should be noted that administration of the new vaccine recently released for commercial use will cause a cat to test positive on both of the above tests. We do not currently do have a test that will distinguish a vaccinated cat from a truly positive cat. Some veterinarians do not recommend the vaccine, and some do.

How did my Cat get Infected?

The major route of virus transmission is by the deep bite wounds that occur during fighting. There are other means of spreading the virus but they are less common. Mother cats cannot readily infect their kittens except in the initial stages of her infection. FIV can be transmitted sexually and through improperly screened blood transfusions. Casual contact such as sharing food bowls or snuggling is unlikely to transmit the virus.

Isolation of an FIV+ cat is not necessary in a stable household unless the FIV+ cat is likely to fight with the other residents.

What do I do Now?

Some lifestyle changes will probably be needed now that you know you have an FIV+ cat.

Keep your Cat Indoors Only

Now that you know your cat has an infectious disease, the responsible thing is to prevent the spread of this disease in your community. This means that your cat will need to be an indoor cat. Cats who are used to living outdoors will make a fuss about being allowed outside. It is crucial that you do not give in as this will simply reinforce the crying and fussing. If you just allow the fussing to run its course, it will cease and the cat will get used to the new indoor only life.

Cats who are inclined to slip past people entering the home when the door is open can be managed by leaving them in a closed room when someone is out of the house. This way, when someone arrives home, the cat does not have access to the front door.

No Raw Foods

There are currently numerous fad diets involving raw foods for pets. It is crucial that one not succumb to these popular recommendations when it comes to the FIV+ cat. Uncooked foods, meats especially, can include parasites and pathogens that a cat with a normal immune system might be able to handle but an FIV+ cat might not. Stick to the major reputable cat food brands.

Vaccination

Vaccination should be continued for these cats just as they are for other cats. Some experts recommend using only killed vaccines to avoid any possible reversion to virulence of the live vaccine virus strains. This has not panned out as a problem in reality, plus the killed vaccines have been associated with vaccine-associated fibrosarcomas, an additional problem an FIV+ cat does not need. We still recommend live virus vaccines for FIV+ cats just as we do for FIV- cats.

Parasite Control

The last thing an FIV+ cat needs is fleas, worms or mites, especially now that he is going to be an indoor cat. There are numerous effective products on the market for parasite control. Consult with your veterinarian about which parasites you should be concerned with and which anti-parasitic product is right for you.

Immune Stimulating Agents

There are numerous products on the market claiming to stimulate the immune system of the FIV+ cat. These include Acemannan, levamisole, ImmunoRegulin®, and interferon alpha. None of these products have been shown definitively to be helpful though it appears that they certainly do not do any harm. I recommend interferon alpha for asymptomatic cats as it is relatively inexpensive and my impression is that it helps. Interferon alpha is used in an extremely dilute form (not the much higher anti-viral doses) and is used as a salty liquid added to the cat's food or administered orally on a daily basis.

A newer product, which is a Lymphocyte T-cell immunomodulator, has been released. This product will increase lymphocyte counts, especially the helper T cells that are so important to immune function. There are other effects as well that may be helpful. The product is given weekly for the first month, then every other week and then monthly as an injection. It is recommended that blood cell counts be performed monthly in cats with low lymphocyte or red blood cell counts. While this sounds like good news, keep in mind that this is a new product and clinical trials have not been published. See more information from the [manufacturer](#).

Antioxidants

Oxidative stress is rather a long story and has been implicated in the development of cancer, age-related degeneration, and in other disease states. In short, oxidative stress stems from reactive oxygen compounds that are generated by our metabolism. The oxygen compounds are able to damage DNA unless they are scavenged (rendered harmless) by either the natural antioxidant systems of our bodies or by antioxidant supplements we take orally. Oxidative stress has been implicated in the progression of HIV infection in humans and it has been extrapolated that the same is true of FIV infection in cats. A 2008 study by Webb et al published in the Journal of Feline Medicine and Surgery looked at an antioxidant called Superoxide Dismutase in FIV cats and found an improvement in the CD4+ to CD8+ ratio in supplemented cats. This is a promising finding though cats were only followed for a 30-day period, which indicates that further studies may show more substantial clinical benefit. What this all means is that oral antioxidant supplementation may be helpful in keeping FIV+ cats healthy. While the jury is still out as to how significant a treatment this is likely to become, it is certainly clear that antioxidant supplementation may be beneficial on a number of planes and may be worth a try.

General Monitoring

While a non-geriatric FIV- cat should have an annual examination, the FIV+ cat should have a check-up twice a year. Annually, a full blood panel and urinalysis is wise. Also, it is important to be vigilant of any changes in the FIV+ cat. Small changes that you might not think would be significant in an FIV- cat should probably be thoroughly explored in an FIV+ cat.

**THE FELINE IMMUNODEFICIENCY VIRUS IS
NOT TRANSMISSIBLE TO HUMANS IN ANY WAY.**

What about Medications Used in HIV+ Humans?

AZT (brand name Retrovir®) is a prominent antiviral medication for treating human HIV infection. Tests in FIV+ cats indicate that those with either neurologic signs or with stomatitis (oral inflammation) may benefit most. At this time, at least in cats, AZT seems to be something to save for when symptoms of viral infection appear. There are some bone marrow issues with red blood production and some periodic monitoring tests are advisable. If problems arise, fortunately, they are reversible and should resolve with a few days of discontinuing medication.

Drugs other than AZT seem to have more potential for toxicity and are not recommended for feline use.

The Immune-Suppressed Owner

Immune-suppressed cats and immune-suppressed owners do not mix well. Those who are immune suppressed, be they human or non-human, are inclined to become infected with opportunistic organisms and in turn shed larger numbers of those organisms than one might naturally come into contact with in the environment. This means that someone who is immune-suppressed (human or not) can serve as an amplifier for infectious agents. An immune-suppressed cat can increase an immune-suppressed human's exposure to infectious agents and vice versa. This is obviously not a good situation. The same is true for multiple immune-suppressed cats living together. If possible, there should be only one immune-suppressed individual per home.

If you have further questions on the FIV virus, do not hesitate to ask your veterinarian or use the Ask a Vet feature on Veterinary Partner's home page.

Read more material for HIV+ individuals concerned about [pet to human disease transmission](#).