Feline Leukemia

Feline Leukemia Virus

What is feline leukemia virus?

Feline leukemia virus (FeLV) is a retrovirus found in domestic and some wild/exotic cats. It appears to be a specific viral infection of cats and their relatives and is disease causing virus in the United States and worldwide. The incidence of FeLV in cats is approximately 1-8% in healthy cats in the United States and may affect up to 20 - 75% of cats with certain feline leukemia virus diseases. Feline leukemia virus is particularly common in large populations of cats (catteries, feral cats).

*H*ow do cats become infected with FeLV?

Most cats become infected with FLV by being in contact with a cat which is carrying the virus. FeLV is shed mainly in saliva and nasal secretions, so bites from an infected animal and intimate grooming or contact with infected cats may spread the disease. Kittens may contract FeLV from the mother, either before birth or through suckling milk. The virus does not survive well in urine, feces or in the environments, so cats will not be infected just because another cat with FeLV has lived in a house before them or comes into their garden or yard. Very young kittens (0 – 8 wks) are very susceptible to the virus. Cats older than 16 weeks are less likely to be infected, but cats of any age may acquire FeLV, particularly through prolonged contact. Indoor cats, which do not contact strange cats at all, are at minimal risk of infection.

How can I tell if my cat is infected with FeLV?

All cats and kittens should be tested for FeLV at the time they are acquired and before being introduced to the household. Additionally, the cat or cats they are going to come in contact with should be tested if this has not been done previously. The virus can be detected in a blood sample, saliva or tears. Currently, the VTH uses a small blood sample. Most cats which test negative do not have the virus but an early infection may be missed by the blood test. A retest in one month may be suggested. If it is still negative, the risks are minimal for the cat to have FeLV. A negative test in an adult cats, which is kept indoors and does not contact other cats means that either the cat is clear of the virus, or rarely, that there is a latent (hidden) infection.

If your cat becomes ill, especially with an infectious disease, develops fevers with no apparent cause, loses its appetite, develops weight loss or has cancer, your veterinarian may want to test it again for FeLV, to determine whether your cat has become infected with FeLV or whether latent or reactivated infection is contributing to disease signs. Occasionally, cats need to be retested even though they have been kept indoors or vaccinated consistently in case of latent infection acquired very early in life. When testing cats for FeLV, you should also consider testing for feline immunodeficiency virus (FIV). Approximately 1.5% of cats may have both FeLV and FIV.

How can I reduce the chances of my cat(s) acquiring FeLV?

The best way to prevent cats contracting FeLV is to avoid exposure to the virus. Contact with infected cats and strange cats whose status is unknown, should be avoided. If new cats are brought into a household, they should be kept isolated from other cats until they have been tested negative. Immunization against FeLV is available. The initial course consists of two vaccinations, given 3 weeks apart, then a yearly booster. FeLV vaccines may be administered at the same time as other vaccines. Efficacy of the vaccine is not 100%. Any cats which are going to have contact with animals of unknown status should be vaccinated in an attempt to prevent them developing the infection. Cats which are always indoors and only contact other cats in the same household, who are known to be FeLV negative, are at minimal risk of acquiring the infection and probably do not need to be vaccinated.

How can my vaccinated cat have become FeLV positive?

FeLV vaccination does not provide 100% protection against the virus. Other reasons for a cat which has previously tested negative for FeLV suddenly developing a positive blood test include a previously latent infection that has reactivated or an inaccurate blood test. Both situations are rare.

What happens if my cat or kitten becomes infected with FeLV?

Three different situations may occur with infection. First, the cat's immune system may eradicate the infection completely. A latent infection may develop which under times of stress may reactivate the virus that may cause bone marrow disorders. Lastly, the cat may become persistently viremic (presence of virus in the blood) and may be at increased risk for a number of diseases. These diseases include cancer (particularly lymphoma), immunosuppression (leads to infections, nonhealing wounds), oral ulcers, reproductive problems, bone marrow failure and neurologic disease. It has been estimated that cats with persistent FeLV viremia die of virus related illnesses within 2 to 3 years of diagnosis.

What should I do if my cat is FeLV positive?

Kittens which test positive should be tested again in 1-2 months. During this waiting period, they should be isolated from other cats. Cats which are persistently viremic should not be allowed outdoors because they are a health risk to other cats in the area. They are also more susceptible to infections. They should be neutered to reduce the likelihood of roaming and to decrease kittens being born to infected females. Flea control should be stringent if a cat is FeLV positive because of the risk of an immunosuppressed animal contracting infection with blood parasites spread by fleas. There is no benefit in continuing to vaccinate cats which are FeLV positive against FeLV. Vaccinations for other infectious diseases should be continued.

Decisions about a FeLV positive cat depend on whether there are other cats in the household, the contact they have with the infected cat and the infected animal's general health. Your veterinarian will help provide you with the necessary information about your situation. Treatment of FeLV infection is symptomatic at this time and may include antibiotics (control secondary bacterial infection), force feedings, blood transfusions for anemia and chemotherapeutic agents for cancer treatment.