



## Cotswold Animal Hospital

401 South Sharon Amity Rd., Suite A, Charlotte, NC, 28211

**Phone:** 704-365-3787

**Fax:** 704-625-7112

**Email:** [contact@cotswoldanimalhospital.com](mailto:contact@cotswoldanimalhospital.com)

**Website:** [www.cotswoldanimalhospital.com](http://www.cotswoldanimalhospital.com)

# Feline Leukemia Virus Vaccination

Author: Ernest Ward, DVM

## What is Feline Leukemia Virus (FeLV)?

Feline leukemia virus (FeLV) is one of the most important viruses infecting cats. FeLV tends to become a persistent infection and depresses the immune system of cats. FeLV is an important cause of anemia in cats and can cause cancers of several types. For further details on this important disease, see our handout "Feline Leukemia Virus Disease Complex".

## How common is FeLV?

FeLV infection is found worldwide. Because cats may become persistently infected, carrying the virus for long periods before showing any clinical signs, your cat may have been exposed to FeLV without you realizing it.

"The virus is shed in saliva and nasal discharges from an infected cat."

The virus is shed in saliva and nasal discharges from an infected cat; it can be spread to other cats through bite wounds or by prolonged direct contact (such as mutual grooming or sharing of food and water dishes). Infected pregnant cats may transmit the infection to their kittens across the uterus or through their milk; however, it is more likely that the infection is passed to the kittens by grooming.

## What diseases does the virus cause?

"FeLV infection can also change the genetic code in infected cells."

FeLV invades and replicates in various cells of the cat's immune system and blood-forming tissues, as well as other cells. The immune system becomes suppressed, making the FeLV-infected cat more susceptible to chronic or recurrent infections. Death or dysfunction of infected cells may give rise to enteritis (inflammation of the intestine) or anemia (low red blood cell numbers). FeLV infection can also change the genetic code in infected cells. The genetic code programs the cell's functions. Changes in genetic code due to FeLV infection may eventually give rise to cancer such as leukemia, lymphosarcoma or other tumors. These tumors may affect one or many tissues, organs or body sites.



FeLV is usually fatal. Studies have shown that 80-90% of FeLV-infected cats will die within three to four years of the initial diagnosis.

### **Is there any treatment for FeLV infection or disease?**

There is currently no specific treatment for FeLV-infected cats. Treatment is usually aimed at easing the symptoms and treating secondary infections. Most FeLV-infected cats will eventually die of diseases related to their infection or will require humane euthanasia.

### **Is there a test for FeLV infection?**

Special blood tests have been developed. Most tests are designed to detect the presence of viral antigen in the cat's blood. In general, these tests are very reliable although rarely a false positive result occurs. In some situations, it may be necessary to confirm infection with the virus through repeated blood testing at a later date.

### **Does my cat need to have a blood test before vaccination?**

"Approximately 30% of cats infected with FeLV will eliminate the virus and will not contract the disease."

For the vast majority of cats, this is highly recommended. It is important to realize that not all cats that test positive become sick. Approximately 30% of cats infected with FeLV will eliminate the virus and will not contract the disease. Some FeLV-infected cats may not show signs of disease for months or even years.



### **How safe is the vaccine?**

FeLV vaccines have been specially developed so that they do not contain any infective virus material. You are unlikely to see any adverse effects apart from some mild sluggish behavior a day or two after the vaccine is given. A very few cats may have a mild allergic reaction. Most vaccine reactions occur almost immediately and your veterinarian will provide appropriate treatment. If you are concerned that your cat is experiencing an abnormal reaction in the hours or days following any vaccination, please call us.

A rare form of soft tissue sarcoma known as "vaccine-associated" or "injection-site" fibrosarcoma has been associated with a reaction to vaccine components in "killed adjuvanted" vaccines (vaccines that contain a substance designed to enhance the immune stimulation induced by the vaccine). This association is controversial, and a considerable amount of research is underway to determine what, if any, role vaccines may play in the development of sarcomas. The benefits of vaccination greatly outweigh these small risks in most situations (for further information, see our handout "Post-vaccination Sarcoma" :).

### **How effective is FeLV vaccination?**

"Vaccination is not recommended for cats that are exclusively indoors."

FELV vaccines have now been available for many years and they have been continuously improved. They are helpful in preventing infection with FeLV and thus in controlling FeLV-related disease. Unfortunately, no vaccine is 100% protective. Where possible do not allow your cat, particularly a kitten, to come into close contact with known FeLV-infected cats or cats of unknown vaccination history. Feline leukemia vaccination is not considered a core vaccine by the American Association of Feline Practitioners, the organization that makes vaccine recommendations to veterinarians, based on current research and expert opinion. Vaccination is not recommended for cats that are exclusively indoors. Your veterinarian can discuss the pros and cons of vaccinating your cat against this disease, based on its specific lifestyle and risk of exposure.

The incidence of FeLV disease has dramatically declined over the past several decades. This is likely due to a combination of the availability of accurate screening tests, improved client awareness of the disease, a change in the lifestyle of the average cat (more cats are kept indoors rather than being allowed to roam freely) and vaccination of at-risk cats.

### **How often is revaccination necessary?**

In the initial vaccination series, two doses of vaccines administered 1 month apart are necessary to provide strong, lasting immunity. Even so, this immunity will decline over time and periodic revaccination will be necessary. Your veterinarian will advise you of the recommended revaccination schedule, based on your cat's lifestyle and needs.