

Feline Leukemia Virus (FeLV)

By Virginia Clemans, DVM

What is feline leukemia virus?

Feline leukemia is a viral disease seen only in cats. It is not transmissible to humans (even children) or to any other species, such as dogs. FeLV is caused by a type of virus, called a retrovirus, which infects the cat's cells and reprograms them to continually produce copies of the virus. This produces a condition in the cat called persistent viremia, which makes the disease impossible to cure.



What happens to a cat who has contracted the virus?

The virus adversely affects the cat's bone marrow and immune system. An infected cat becomes anemic and is unable to fight off even routine infections. Cats with feline leukemia are commonly jaundiced and lethargic, and they experience weight loss, enlarged lymph nodes, and poor stamina.

After exposure to the feline leukemia virus, some cats also develop a type of tumor called lymphosarcoma, a type of cancer that can affect many different organs, beginning with the lymph nodes and possibly spreading to the intestines, liver, spleen and brain.

Is FeLV contagious to other cats?

Since the virus is in the blood, saliva, mucus, urine and feces of infected cats, any contact by an uninfected cat with these body fluids can result in transmission of the virus. The virus is fragile in the environment, however, so fairly direct contact is necessary for it to be transmitted. Fighting, sharing food and water bowls, sharing litter boxes, and mutual grooming are the most common means of transmission. Some experts feel that fairly long-term contact is necessary to pass the virus from cat to cat, but this point is still under debate. The virus can also be transmitted from mother to kittens before birth.

Is there a test to determine if a cat has FeLV?

There are two types of blood tests available, both of which detect the actual protein of the virus circulating in the blood. The ELISA (or "kit" test) is the one most commonly used in the veterinarian's office. The IFA (immunofluorescence assay) must be performed by a veterinary diagnostic laboratory.

If a cat tests positive for the ELISA test, then a follow-up test with the IFA method will confirm the diagnosis. Each method tests for the disease in its different stages, so the veterinarian's interpretation of the test results is necessary.

Is there a cure for FeLV?

Although a variety of treatments have been tried, presently there is no effective cure for feline leukemia. The cat should be supported with good nutrition, a low-stress environment and regular veterinary care at the first sign of illness.

There is a vaccine for feline leukemia that should be given to cats considered to be at risk for exposure. The vaccine is as safe as other commonly used feline vaccines and is reasonably effective in preventing the disease if the cat is exposed. No vaccine is 100% effective, however, and a small number of cats who are vaccinated will not be protected. Therefore, even vaccinated cats should not be exposed to infected cats.

How long can cats live with the virus?

Most cats survive less than two years following diagnosis. How long a particular infected cat will live is impossible to predict, however. Since the disease affects the immune system, close monitoring for signs of illness and prompt treatment of these illnesses can help prolong the cat's life.

Dr. Virginia Clemans was Best Friends' chief veterinarian from 2001 to 2004. She now resides in Salt Lake City, where she is chief of staff for the Utah County Fix, a low-cost, high-volume spay/neuter and vaccine clinic sponsored by No More Homeless Pets in Utah, Maddie's Fund and Best Friends Animal Society.