



## **Feline Leukemia Virus**

Feline leukemia is a retrovirus, which means the virus inserts its genetic material into that of the cells it infects. This is a fatal disease in cats, usually due to a progressive anemia as the bone marrow loses its ability to produce red blood cells. Immune suppression can also result and the virus is known for inducing lymphoma in leukemia positive cats. Viral particles are shed in the saliva, nasal secretions, feces, urine and milk of infected cats. Feline leukemia can be transmitted by bite wounds, grooming and rarely by sharing litter boxes and feeding dishes. An infected mother can transmit the virus to her kittens before birth or through her milk after birth. The cats most at risk are outdoor cats which come into contact with other cats that may be infected. We recommend testing all newly adopted kittens or cats of ambiguous status followed by an initial and booster vaccination for cats at risk.

The clinical signs of the virus can include anemia, jaundice, depression, weight loss, decreased appetite, diarrhea or constipation, blood in stool, respiratory distress, lethargy, excessive drinking and urination, secondary infections, neoplastic disease (primarily lymphoma), and infections from immune suppression. The major causes of death for infected cats are tumors, anemia and chronic infections.

Feline leukemia is diagnosed by a simple blood test that detects the presence of the viral antigen.

There is no cure for this virus and the only treatment is supportive care for the secondary infections that develop. If a cat without severe symptoms is diagnosed with leukemia it can be managed at home as an indoor cat as long as the risk is low it will infect other cats. In multiple-cat houses there is about a 10-15% chance of a leukemia positive cat infecting a leukemia negative cat if they are exposed to each other for several months. The virus dies within twenty four hours in the environment so close, prolonged contact is required for transmission. The virus is killed easily by heat, drying, soaps and disinfectants. Euthanasia may be recommended for cats that test positive and exhibit clinical signs that compromise their quality of life or for cats that are likely to infect others.

Preventing the spread of Feline leukemia virus involves responsible pet ownership in the form of testing and vaccination for cats at risk. The vaccine doesn't completely protect all cats from leukemia but offers increased protection and has decreased the incidence of the disease as a whole.