



## **FELINE IMMUNODEFICIENCY VIRUS**

The Feline Immunodeficiency Virus (FIV), sometimes called the Feline AIDS Virus, is an important disease agent of the cat. It is likened to the AIDS virus which affects humans because of the similarities in the two diseases which result. Fortunately, most viruses are species specific. This is the case with the human AIDS virus and with FIV. The AIDS virus affects only humans, and the FIV affects only cats.

### **What cats are likely to be infected with the FIV?**

The FIV is transmitted primarily through bite wounds that occur in cat fights. Other interactions of cats, such as sharing common food and water bowls or grooming each other, have not been shown to be significant in transmission.

### **What are the clinical signs?**

An FIV infected cat will generally go through a prolonged period of viral dormancy before it becomes ill. This incubation period may last as long as six years. Thus, we generally do not diagnose FIV in sick cats who are relatively young.

When illness occurs, we can see a variety of severe, chronic illnesses. The most common illness is a severe infection affecting the gums around the teeth. Abscesses from fight wounds which would normally heal within a week or two may remain active for several months. Respiratory infections may linger for weeks. The cat may lose weight and go through periods of not eating well; the hair coat may become unkempt. The cat may have episodes of treatment-resistant diarrhea. Ultimately, widespread organ failure occurs, and the cat dies.

### **How is the diagnosis made?**

Evidence of exposure to the FIV can be detected by a simple blood test. A positive test means the cat has been infected with the virus and will likely remain infected for the

remainder of its life. A negative may mean that the cat has not been exposed; however, false negatives occur in a few situations.

### **Adult cats**

1. From the time of initial virus inoculation into the cat, it may take up to two years for the test to turn positive. Therefore, for up to two years, the test is likely to be negative even though the virus is present in the cat.
2. When some cats becomes terminally ill with FIV, the test may again turn negative. This occurs because antibodies (immune proteins) produced against the virus become attached and bound to the large amount of virus present. Since the test detects antibodies which are free in circulation, the test may be falsely negative. This is not the normal occurrence, but it does happen to some cats.

### **Kittens**

The vast majority of kittens under 4 months of age who test positive have not been exposed to the virus. Instead, the test is detecting the immunity (antibodies) that were passed from the mother to the kitten. These antibodies may persist until the kitten is about 6 months old. Therefore, the kitten should be retested at about 6 months of age. If it remains positive, the possibility of true infection is much greater. If the kitten tests negative, there is no cause for worry.

If a kitten is bitten by an FIV-infected cat, it can develop a true infection. However, the test will usually not turn positive for many months. If a mother cat is infected with the FIV at the time she is pregnant or nursing, she can pass large quantities of the virus to her kittens. This means of transmission may result in a positive test result in just a few weeks.

### **Is treatment possible?**

No treatments are available to rid the cat of the FIV. However, the disease state can sometimes be treated with antibiotics or with drugs to stimulate the immune system restoring the cat to relatively good health. However, the virus will still be in the cat and may become active at a later date. Therefore, the long term prognosis is unfavorable.

If you have a cat which tests FIV-positive but is not ill, it is not necessary to immediately euthanize it. As long as it does not fight with your other cats or those of your neighbors, transmission is not likely to occur. However, if it is prone to fight or if another cat often instigates fights with it, transmission is likely. In fairness to your neighbors, it is generally recommended to restrict an FIV-positive cat to your house.

Owners of infected cats must be responsible so that the likelihood of transmission to someone else's cat is minimized.

**What is the prognosis?**

The long-term prognosis is poor, however infected cats may experience prolonged periods of reasonably good health.

**Can this virus be transmitted to me or my family?**

The feline immunodeficiency virus is cat-specific; it does not infect humans.

***How can I prevent my other cats from getting infected with the FIV?***

Neutering of male cats and keeping cats indoors are the only available preventive measures which can be recommended. No vaccine is currently available to prevent infection from this virus.