

## **Feline Immunodeficiency virus, FIV**

*FIV, Feline AIDS*

### **Affected Animals:**

Cats. Outdoor male cats are at increased risk of being infected by FIV due to territorial fighting.

### **Overview:**

There is a vaccine for the prevention of FIV, however it may provide only limited protection. Vaccinated cats will test positive for FIV on routine screening tests as well. Consult your veterinarian to determine if this is a vaccine that your pet would benefit from. The best prevention is eliminating possible contact with the virus. General recommendations include keeping all cats indoors to deter them from fighting with potential carriers of FIV. New cats should be tested for FIV before being housed with other cats that do not have the virus. FIV is not transmitted commonly by casual contact and is destroyed easily by disinfectants and routine cleaning.

Kittens that are born to FIV infected mothers should not be allowed to nurse because the virus can be passed through the milk. Also, they should be tested at 14 weeks of age to check if they were infected with the virus while in the uterus.

### **Clinical Signs:**

Cats infected with FIV may have a fever; lymphadenopathy, or enlarged lymph nodes; anorexia; weight loss; depression; stomatitis, or ulcers in the mouth; dermatitis, or skin disorders; conjunctivitis; and any other signs that go along with specific organ disease. Some cats will show behavioral signs such as dementia, inappropriate elimination, hiding, and roaming. Neurological clinical signs can include seizures and ataxia or problems maintaining balance. Cats with FIV also may develop cancer.

### **Symptoms:**

See clinical signs.

### **Description:**

Although it cannot be transmitted to humans, feline immunodeficiency virus often has been referred to as "feline AIDS" because of its similarity to the human immunodeficiency virus, or HIV. Both viruses impair the ability of the immune

system to function normally, causing infections, cancer, and debilitation. Cats typically die from complications caused by the virus.

When a cat becomes infected with FIV, the virus begins to replicate in the immune cells of the body, causing fever and swollen lymph nodes. After this, FIV goes into a latent or dormant state for several years, during which time the cat does not show signs of the disease. After two to ten years, the virus emerges from its dormant state and causes the clinical signs of terminal disease.

#### **Diagnosis:**

Following a thorough medical history and physical exam, an FIV test can be performed at most veterinary hospitals using a serology test called an ELISA assay. Using a few drops of blood, this test detects the presence of antibodies to the virus. Most veterinarians recommend that the test be conducted on kittens older than 14 weeks of age.

A false positive is possible in kittens younger than 14 weeks, because FIV antibodies can be transmitted during nursing from an FIV positive mother and take time to leave the kitten's system. However, the virus itself also can be passed by nursing, which is another reason why kittens should be retested after 14 weeks of age.

Cats that are sick or showing clinical signs of disease will need to have blood tests done to detect any abnormalities. The virus can affect organs such as the kidneys and liver, as well as the bone marrow. Involvement of the bone marrow can cause abnormal development of red blood cells, white blood cells, and platelets.

#### **Prognosis:**

Once cats begin to show signs of serious disease due to repeated bacterial or viral infections, organ disease, or a failure to thrive, the life expectancy is a year or less. However, it may take cats anywhere from two to 10 years before reaching this stage of the disease. Each cat is different and one cannot predict how long a cat with FIV will live.

#### **Transmission or Cause:**

Feline immunodeficiency virus is transmitted through blood and saliva. Most often, it is spread when an infected cat bites another cat.

Unneutered, outdoor, male cats that roam and fight with other cats are at greatest risk for developing FIV because they are more likely to defend their territory by fighting. Less common routes of infection include kittens nursing from an FIV positive mother or viral infection while in the uterus.

#### **Treatment:**

At this time, there is no treatment that will eliminate the virus or treat it specifically. Medications that stimulate the immune system have been used in

some cats, which may improve the quality and duration of the cat's life. Because the virus can damage the immune system, treatment generally is directed at controlling any secondary bacterial infections through the use of antibiotics.

**Prevention:**

There is a vaccine for the prevention of FIV, however it may provide only limited protection. Vaccinated cats will test positive for FIV on routine screening tests as well. Consult your veterinarian to determine if this is a vaccine that your pet would benefit from. The best prevention is eliminating possible contact with the virus. General recommendations include keeping all cats indoors to deter them from fighting with potential carriers of FIV. New cats should be tested for FIV before being housed with other cats that do not have the virus. FIV is not transmitted commonly by casual contact and is destroyed easily by disinfectants and routine cleaning.

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