Feline Immunodeficiency Virus

- Feline immunodeficiency virus (FIV) infection is associated with serious and potentially fatal illness in cats.
- FIV is contagious; cats that go outside are at increased risk for exposure.
- Vaccination can help prevent infection with FIV.

What Is Feline Immunodeficiency Virus?
Feline immunodeficiency virus (FIV) is contagious among cats. Although FIV is not contagious to humans, FIV has some similarities to the human immunodeficiency virus (HIV) and has been used to help researchers better understand HIV.

How Do Cats Become Infected With Feline Immunodeficiency Virus?
FIV is generally transmitted to a cat through direct contact with saliva from an infected cat. Most cats are exposed through bite wounds sustained during fights with FIV-infected cats. Due to the territorial behavior and related aggression of cats (particularly male cats), cats that are permitted to roam outside tend to be at increased risk for exposure to FIV.

FIV is killed by many disinfectants and does not live very long in the environment, so contact with an infected cat is necessary for disease transmission.

Signs of Feline Immunodeficiency Virus
Not every cat that becomes infected with FIV develops clinical signs. In fact, some cats can live a relatively normal life span after becoming infected. Similar to HIV, FIV can cause illness by attacking the patient’s immune system. Therefore, FIV-infected cats tend to develop clinical signs related to secondary (related) infections and not necessarily to the presence of the virus itself. Clinical signs and associated illnesses can include the following:

- Fever
- Lymph node enlargement
- Chronic dental, oral, and gum infections
- Chronic eye infections
- Chronic diarrhea
- Chronic respiratory infections
- Chronic skin and ear infections
- Appetite loss, weight loss
- Lymphoma and certain other cancers

When FIV-positive cats continue to spend time outside, they are at increased risk for exposure to other viruses, parasites, and infections that their bodies may be unable to handle. Additionally, they are likely to sustain wounds (through cat fights or other trauma) that may become infected or may fail to heal properly due to the cat’s compromised immune function. Most veterinarians recommend keeping FIV-positive cats indoors. This not only protects them from various injuries and infections that are common in outdoor cats but also reduces the likelihood that they will spread FIV to other cats.

Diagnosis and Treatment
Because FIV can cause various clinical syndromes in the body, routine blood work (such as a chemistry panel and complete blood cell count [CBC]) may show evidence of non-specific infection or other illness, but not necessarily help your veterinarian determine if your cat is infected with FIV.

Many veterinarians use a rapid-result test called a SNAP test to screen for FIV. The SNAP test is very accurate, can be performed in your veterinarian’s office using a very small amount of blood, and takes only a few minutes to complete. Because FIV infection can have many clinical presentations, your veterinarian may want to test your cat if he or she seems to be ill—especially if a fever or chronic, recurring illness is present. More sophisticated FIV testing is also
available, but these tests must be performed at an outside laboratory, from which results take longer to receive.

Kittens whose mothers were infected with FIV may test positive when they are very young but test negative later (as the antibodies they received while nursing from their mother wear off). Therefore, some veterinarians recommend retesting young kittens when they are older (for example, at 6 months of age) to verify their FIV status.

If your cat tests positive for FIV, do not despair! This result does not necessarily mean that your cat will soon become sick and die. Some FIV-positive cats can live a relatively normal life span, as long as precautions are taken to protect them from wounds, parasites, and other infections that can make them sick and shorten their life span.

Treatment options for FIV are limited, and treatment does not eliminate the virus. Antiviral drugs and other medications have been investigated, but most treatments are aimed at managing the clinical signs and associated complications. Keeping cats indoors goes a long way toward protecting them from disease complications.

**Vaccination and Prevention**

There is a vaccine available that can help to prevent infection with FIV. Kittens are generally vaccinated against FIV around 8 weeks of age. Two additional boosters are given 2 to 3 weeks apart (according to the vaccine label), followed by boosters each year as long as the risk for exposure remains. Cats that go outside (particularly male cats) are at greater risk for exposure to FIV compared with cats that stay indoors. If your cat’s exposure risk is low, your veterinarian may not recommend the FIV vaccine for your cat, so be sure to discuss this important point with your veterinarian.

As with other vaccines, the FIV vaccine causes the body to produce antibodies (cells that can recognize FIV and protect the body from infection). However, current FIV tests cannot tell the difference between FIV antibodies obtained through vaccination and those obtained through natural exposure to the disease (such as from a bite wound). This means that once a cat is vaccinated against FIV, there is no reliable way to tell if the cat is FIV-positive or merely FIV-vaccinated. This can become a cause for concern if a roaming cat is picked up by a shelter and subsequently tested for FIV, which is a common practice at shelters. Until this issue can be resolved, many veterinarians recommend implanting identification microchips in FIV-vaccinated cats. This can help shelters identify the cat and avoid euthanasia or another unfortunate consequence of mistaken FIV status.

Because FIV is transmitted through direct contact and is easily killed by common disinfectants, keeping your cat indoors is a good way to reduce risk of exposure. Any new kitten or cat being introduced into the home should be examined by a veterinarian as soon as possible and kept separate from all other household pets for a quarantine period of several weeks. During this time, the new cat should be tested for FIV and monitored closely for signs of illness. Any problems should be reported to your veterinarian before introducing the new cat to your other pets.