

Feline Distemper and Feline Leukemia

- Feline distemper and feline leukemia are serious infections that can be fatal.
- Cats that go outside are at increased risk for exposure to feline distemper and feline leukemia.
- Vaccination can protect cats from disease associated with feline distemper and feline leukemia.

What Are Feline Distemper and Feline Leukemia?

Feline distemper is the common name for the feline panleukopenia virus (FPV), also called *feline parvovirus*. Despite the name *feline distemper*, this contagious disease does not affect a cat's temperament. Rather, FPV causes serious disease in infected cats and can be fatal.

Feline leukemia virus (FeLV) is also contagious among cats. Unlike many other viruses that enter specific cells in the body and destroy them, FeLV enters certain cells in a cat's body and changes the cells' genetic characteristics. This permits FeLV to continue reproducing within the cat each time infected cells divide. This allows FeLV to become dormant (inactive) in some cats, making disease transmission and prognosis (outlook) difficult to predict.

How Do Cats Become Infected With Feline Distemper and Feline Leukemia?

Once a cat is infected with FPV, it may shed virus in body fluids (most notably urine and feces) for a few days or up to 6 weeks. If another cat encounters an infected cat (or its body fluids) during this time, transmission is likely. However, FPV can also live in the environment, such as contaminated bedding and other items, for up to 2 years, so contact with contaminated objects can also spread the infection.

FeLV is generally transmitted when a cat comes into contact with saliva from an infected cat. Other body fluids, like nasal secretions, urine, feces, and

milk, can also contain virus. Certain "social" behaviors, such as mutual grooming and sharing food or water bowls, can spread the disease; some cats become infected through bite wounds. Kittens can become infected during fetal development or during the first days of life as their mothers nurse and care for them.

Unlike FPV, FeLV does not live for very long in the environment, so contact with an infected cat (or food/water bowls) is the most common way for the disease to spread. However, predicting which cats can transmit the disease is complicated because some cats that are potentially contagious may not show signs of illness.

Cats that go outside are at increased risk for exposure to feline distemper and feline leukemia.

Signs of Feline Distemper and Feline Leukemia

Feline distemper attacks the intestinal tract and the immune system, greatly reducing the number of white blood cells in the circulation. Your cat's body needs white blood cells to help fight infection, so cats with FPV tend to develop severe infections involving the intestines. These infections can quickly overwhelm the body's defenses, causing death. Other clinical signs can include:

- Fever
- Vomiting
- Lethargy (tiredness)
- Dehydration
- Diarrhea

Some cats become suddenly ill from FPV and die within hours of showing clinical signs. For many

other cats, clinical signs become progressively worse over a period of days. Kittens infected before birth or during the first few days of life can develop severe brain and nerve damage, resulting in permanent difficulty standing or walking if the kitten survives the infection.

Not every cat that becomes infected with FeLV develops clinical signs or long-term complications associated with the virus. However, some cats may experience various illnesses and immune suppression before eventually dying of FeLV-associated complications.

Because FeLV can affect almost any organ system in the body, associated clinical signs and illnesses can vary significantly and include:

- Anemia (inadequate numbers of red blood cells)
- Leukemia
- Immune suppression
- Fever
- Lethargy (tiredness)
- Chronic respiratory infections
- Chronic oral and gum infections
- Cancer of the lymphatic system (and other cancers)

Diagnosis and Treatment

Sophisticated testing of blood and body fluids can be used to diagnose FPV infection, but many veterinarians diagnose based on clinical signs and the presence of a severely low white blood cell count. Treatment is mainly supportive and consists of administering fluids to combat dehydration, antibiotics to help treat infections, and other medications to help control vomiting and other clinical signs.

Diagnosis of FeLV infection is more complicated because there are several stages of disease and not every cat handles FeLV infection the same way. Some infected cats test positive on routine FeLV screening tests, whereas specific tests on blood or bone marrow are required to confirm infection in other cats. Some cats may test positive on blood tests when they are young kittens but test negative later. Similarly, some cats may test negative at one point and test positive later as the virus progresses through various stages in the body. Because FeLV 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 is present. Some cats need to have multiple tests done to confirm infection.

Treatment options for FeLV are limited, and no treatment can eliminate the virus. Some antiviral or immunomodulating drugs have been investigated, but most treatments are aimed at managing the clinical signs and complications.

Vaccination and Prevention

Several vaccines are available for preventing disease associated with FPV and FeLV. Most of the available FPV vaccines are combination vaccines that also protect against feline herpesvirus (rhinotracheitis) and calicivirus; some also protect against FeLV. All of the available FPV and FeLV vaccines have been tested and found to be safe and effective when administered as directed.

Kittens are generally vaccinated against FPV and FeLV around 8 to 9 weeks of age. Booster vaccinations are given 3 to 4 weeks later, followed by boosters every 1 to 3 years for FPV (depending on exposure risk) and annual boosters for FeLV (as long as the risk for exposure remains). Cats that go outdoors, live with other cats, or visit grooming or boarding facilities are at greater risk for exposure to FPV and FeLV compared with cats that stay indoors and have limited contact with other cats.

The FPV vaccination is recommended for all cats. But if risk for exposure to FeLV is low, your veterinarian may not recommend the FeLV vaccine for your cat. Ask your veterinarian about his or her recommendations for protecting your cat from FeLV.

Keeping the environment clean can help prevent the spread of FPV and FeLV. Although FPV can be killed in the environment by cleaning with a dilute bleach solution, the virus can live on surfaces for up to 2 years and is resistant to many other cleaning products and disinfectants. Be sure to wash hands and change clothes after handling an infected cat. Similarly, bowls, blankets, towels, toys, litterboxes, and other items should be cleaned with bleach (if possible) to reduce the risk of further disease spread. FeLV is killed by many disinfectants and does not live for very long in the environment, so contact with

Common Conditions

an infected cat (or food/water bowls) is the most common way for the disease to spread. Keeping sick cats separated from healthy cats can reduce the likelihood of spreading FPV and FeLV.

Any new kitten or cat being introduced into the home should be examined by a veterinarian as soon as possible and separated from all other household pets for a quarantine period of several weeks. During that time, the new cat should be tested for

FeLV and monitored closely for any signs of illness. Any problems should be reported to your veterinarian before introducing the new cat to your other pets.

FPV and FeLV are not considered contagious to humans but are contagious to cats. If your cat is known or suspected to be infected with either of these viruses, contact your veterinarian promptly to discuss how you can protect your other pets.