

Feline Panleukopenia

What is feline panleukopenia?

The term *panleukopenia* means a decrease in the number of all of the white blood cells in the body. White blood cells play a major role in immunity and are important in defending against infections and diseases. In severe panleukopenia, white blood cell numbers may drop from the normal of several thousand per milliliter of blood to just a few hundred. This makes an affected cat extremely vulnerable to other infections.



What is the cause?

Feline Panleukopenia (FPL) is caused by a virus of the Parvovirus family, Feline Panleukopenia Virus (FPLV). A similar but distinct virus causes Parvovirus disease in dogs. Parvoviruses are among the toughest viruses known and are only killed by strong disinfectants including 2% household bleach. FPLV can survive in some environments for weeks or months.

How is infection transmitted?

The virus is shed in all excretions, particularly feces, of infected cats. It can be ingested directly or transferred to a susceptible cat via contaminated water, feed bowls, or on shoes and clothing. The incubation period from infection until clinical signs develop is typically three to five days, seldom longer than a week.

What are the clinical signs of panleukopenia?

There is some variation in the clinical signs but cats typically experience depression or listlessness which may progress to collapse. Vomiting and diarrhea are frequent and the diarrhea may contain blood. The hair coat quickly becomes dull and rough, and the skin loses its elasticity due to dehydration. Often cats with panleukopenia have other infections because their immune system is weakened. They often have purulent discharge from the eyes and nose. The disease picture is somewhat similar to Canine Distemper; hence an older name for Feline Panleukopenia was "Feline Distemper". It is important to note that Canine Distemper is a very different disease, caused by a different virus. Panleukopenia is also sometimes called "Infectious Enteritis" due to the diarrhea that it often causes. In young kittens with severe infections, sometimes the only clinical sign is sudden death.

Can panleukopenia be treated?

As for most viral diseases, there is no specific treatment for FPL. Antibiotics are ineffective against viruses, but are helpful in controlling the secondary bacterial infections that are common

because of the lack of white cells and reduced immunity. Dehydration and shock are life-threatening components of FPL and intravenous fluid therapy and intense nursing care is critical. If the pet can be supported through the acute illness, prognosis for a full recovery is good.

How can I protect my cat against panleukopenia?

Fortunately, excellent vaccines are available and are routinely recommended by veterinarians as part of a core feline vaccination program. It is important that kittens receive more than one dose because of the interference of maternal antibody (see *Vaccination* topic). The immunity conferred by the panleukopenia vaccine is generally strong but it decreases with time, at a faster rate in some cats than others. Therefore booster vaccinations every one to three years are highly recommended for cats in high-risk situations. Your veterinarian will discuss the appropriate frequency of booster vaccinations for your cat's lifestyle.



Are there any side effects to the vaccination?

Modern panleukopenia vaccines are safe and side effects extremely uncommon. However, as with all vaccines, some cats will show transient lethargy for a day or two after vaccination. Very rarely a more severe allergic reaction called anaphylactic shock may occur due to a particular sensitivity of an individual to one or more components of the vaccine. Such severe reactions, if they occur, usually happen within a few minutes of vaccination, but may be delayed by some hours in certain situations. If you observe signs such as difficulty breathing, facial swelling, or signs of distress in your cat, call your veterinarian immediately.