

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.

"Severe panleukopenia, white blood cell numbers may drop from the normal of several thousand per milliliter of blood to just a few hundred."

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 known as Feline Panleukopenia Virus (FPLV). A similar but distinct virus causes parvovirus disease in dogs. Parvoviruses are extremely tough viruses and are only killed by strong disinfectants including 2% household bleach. FPLV can survive in some environments for a year or more.

How is infection transmitted?

The virus is present in all excretions, particularly the feces, of infected cats. A susceptible cat can be infected by direct contact with an infected cat, or the virus can be transferred 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. Since the virus infects and destroys rapidly growing cells, the intestinal tract is often affected. 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.

"In young kittens with severe infections, sometimes the only clinical sign is sudden death."

Often cats with panleukopenia develop other infections because their immune system is weakened. They may 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 intensive nursing care is critical. If the cat receives aggressive supportive care 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 part of the core feline vaccination program.

"The immunity conferred by the panleukopenia vaccine is generally strong but it decreases with time..."

It is important that kittens receive more than one booster because of the interference of maternal antibody, which may block an effective immune response to the vaccine (for further information, see our *Vaccination* handout). 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 strongly recommended. 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 are extremely uncommon. However, as with all vaccines, some cats will be lethargic 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 any other signs of distress, call your veterinarian immediately.

Be sure to discuss any concerns you may have about vaccinations with your veterinarian.

This client information sheet is based on material written by: Ernest Ward, DVM

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