FELINE INFECTIOUS ENTERITIS (PARVOVIRUS, PANLEUKOPENIA VIRUS) IN CATS.

What Causes It

Feline infectious enteritis (FIE) is a disease caused by infection with feline parvovirus (FPV), also known as feline panleukopenia virus or feline distemper.

Feline parvovirus infection is probably the greatest major disease threat to any cattery or cat kennels. Infection carries a very high death rate, particularly in unvaccinated kittens.

Parvoviruses are particularly dangerous as they are able to survive for long periods (up to several years) in the environment, and are resistant to many disinfectants.

How is it Transmitted

Feline parvovirus is spread by direct faeces-mouth contact, and indirectly following contamination of the environment or equipment, such as on food dishes, brushes, bedding, floors, clothing or hands.

Cats infected with FPV can continue to be infectious for at least six weeks following infection.

Which Cats Are At Risk?

Cats that live in a colony are very susceptible to the parvovirus. Likewise, rescue kennels and boarding kennels and catteries, may harbour the virus. This could put your cat at risk if you placed it in a kennel during holiday trips.

Signs and Symptoms.

If a pregnant queen is infected with parvovirus, the virus can spread to the unborn kittens. It could interfere with the developing brain and the kittens might then be born with a condition known as cerebellar hypoplasia. This would
result in a problem with the development of the cerebellum, a part of the brain needed for fine co-ordination of movement. Kittens could initially seem fine, but when they started to walk, their lack of co-ordination would become obvious.

This could also happen in very young kittens (less than 4 weeks of age) infected with FPV as the cerebellum is still developing at that age.

In kittens over three or four weeks of age and in adult cats, after an incubation period of five to nine days, the virus causes severe damage to the lining of the intestine and also travels via the blood to the bone marrow and lymph glands.

Affected cats can develop the following symptoms:-

- Diarrhoea/bloody diarrhoea
- Vomiting
- Dehydration
- Weight loss
- High fever
- Anaemia (due to lowered red blood cells)
- Rough hair coat
- Depression
- Complete loss of interest in food
- Some cats may hide themselves for a day or two
- Hanging head over water bowl or food dish but does not drink or eat
- Feet tucked under body for long periods
- Chin resting on floor for long periods
- Neurological symptoms in those cats in which virus attacks brain (e.g., lack of coordination)
- Lethargy
- Tail and back leg biting

Some cats may die before even showing any symptoms.

**Diagnosis**
FPV can exhibit the same symptoms as many other types of diseases in cats, including feline leukaemia (FeLV), feline immunodeficiency virus (FIV), and pancreatitis amongst others and even those of poisoning. It is therefore very important to give your veterinary surgeon as much detail as possible so that the appropriate treatment can be started immediately.

The vet will also examine the cat and can use routine laboratory tests including a complete blood count, biochemistry profile, and urine analysis, to help identify the disease. A faecal sample may also show microscopic remnants of the parvovirus.

**Treatment**

Since the disease can kill within a day, treatment has to be immediate and aggressive. Because the disease affects the immune system, affected cats usually receive antibiotics, to prevent subsequent bacterial infections and vitamin injections blood transfusions, to combat other symptoms of the disease. It is also very important to restore body fluid levels and electrolyte balance, as soon as possible.

Anti-vomiting drugs may also be used and feeding the cat small meals as soon as the vomiting has ceased is also important.

Good veterinary and nursing care is vital to help cats, especially young kittens, to live and to recover from the disease.

The cat will need to:
- be rested until it is out of danger.
- be provided with a quiet, warm space to recover in.
- be separated from other animals.
- have food and water dishes close by
- have a litter box close by so that it doesn’t have to exert itself unnecessarily. You will need to isolate your cat from other cats. However,
- receive affection from it’s owner to combat the depressing effect of the disease

But even with all these measures in place, a high proportion of affected cats may die.
If your cat is treated promptly and effectively and is able to survive the first 48 hours, it is likely that your cat will recover fully, although it might take a few weeks for your cat to feel completely back to normal. Once your cat has been exposed to this virus and has had an immune response to it, it will be immune from catching it again.

**Prevention.**

Feline parvovirus is much better prevented than treated.

Highly effective vaccines are available and all cats and kittens should be vaccinated (including indoor-only cats).

*Modified live vaccines are usually used, but should not be used in pregnant cats or in cats that have suppressed immune system. In such cases, inactivated (killed) vaccines are recommended.*

Vets see very few cases of feline panleukopenia among vaccinated cats, but infection rates remain high in unvaccinated populations.

In order to prevent feline panleukenia, you should vaccinate your cat and keep it away from unvaccinated and feral animals.

When faced with an outbreak of FPV in a colony of cats, vaccinating all the cats would help.

*Control of the spread of FPV relies on both vaccination and practicing good preventative measures, including:*-

- *the practice of strict hygiene*

- *the use of isolation procedures.*

- *flea control is necessary both in the environment and on your cat*

- *regular cleaning of materials such as bedding, food dishes and equipment*

This virus can remain on many surfaces, for as long as a year, so it is important to practice safe and clean methods to prevent transmitting the disease.
However, even under the cleanest conditions, traces of the virus may remain in an environment in which an infected cat has been. The feline parvovirus is resistant to disinfectants and the careful use of bleach is recommended, but the best way to be sure that you have cleared your home of any traces of the virus, is to replace all of your cat’s belongings with new ones. While your cat will have a resistance to the disease, other cats will still be at risk.

**Prevention** is covered fully in the “PREVENTION OF DISEASES IN CATS” section above.