



Cat 'flu

**Symptoms,
treatment
and prevention**



Cat ‘flu is a common illness that still persists despite the availability of vaccines. Felines most severely affected include the very young, the very old, immunosuppressed cats (those infected with feline leukaemia virus (FeLV) or feline immunodeficiency virus (FIV)) and some oriental breeds. Although some cats are affected worse than others, any cat could be left with residual effects as a result of ‘flu.

Causes of cat ‘flu

Around 80 per cent of cases occur due to two viruses:

- Feline calicivirus (FCV)
- Feline herpesvirus (FHV) – sometimes known as feline viral rhinotracheitis virus.

The viruses can cause cat ‘flu if they occur alone or together and they are often complicated by additional bacterial infections.

Other major causes of ‘flu include bacteria, eg *Bordetella bronchiseptica* – more commonly known as a cause of kennel cough in dogs and *Chlamydophila* (previously known as Chlamydia).




Photo: Susan Dawson

Recognising the symptoms

There are many signs to look out for:

- Intermittent sneezing
- Watery mouth with saliva running down the chin
- Runny nose and eyes
- Quiet and lethargic
- Loss of appetite
- A cough or loss of voice.

It is very important that cats suffering from cat ‘flu receive veterinary attention.



Serious complication:
Kittens can be at risk of developing pneumonia

Complications

Pneumonia is a serious complication, most particularly when it occurs in young kittens, and it can be a cause of death. Young kittens may also become very dehydrated as a result of cat ‘flu.

Other complications can occur depending on the cause of ‘flu:

- FHV can cause an ulcer on the surface of the eye. In young kittens and cats, the third eyelid (the white membrane at the corner of the eye) can protrude across and become stuck to the surface of the eye.
- FCV can result in painful ulcers in and around the mouth and hard palate (roof of the mouth).
- *Bordetella* infection generates ‘flu-like illness that can progress to bronchopneumonia and may cause a reasonably high level of mortality in young kittens.
- *Chlamydophila* produces mild ‘flu-like signs but discharge and redness of the eyes is a particular feature of this infection.

Spread of infection

‘Flu transmits in a variety of ways:

- Particles of the virus are present in the infected cat’s tears, saliva and nasal discharge. In close contact these virus particles spread, causing ‘flu to develop in other cats.
- Sneezing can project the particles far enough to infect another cat but this route of infection is less common.
- The viruses can live outside the cat for a very short time. So if a person handles an infected cat and then handles an uninfected cat they can pass on the infection.
- The viruses can also live on grooming or feeding equipment and infection can be passed on via this route.



Infected for life: Cats that have had FHV can shed the virus, especially after a stressful experience, ie a stay in a cattery

Carrier cats

Even if a cat has had no contact with an obviously infected cat he could still develop 'flu. This is because after a cat has had a 'flu virus, even if he has apparently made a full recovery, he may be a carrier. These cats are sometimes referred to as 'asymptomatic carriers.' There is no way of telling just by looking at a cat if he could infect other cats, although swabs taken from the back of the mouth and sent off for laboratory analysis may detect that the virus is present.

Post FHV

After infection with FHV, cats are infected for life. At various times the virus may be 'shed', meaning that the cat becomes infective to others. Cats that have had FHV tend to shed the virus for only about one to two weeks at a time – usually around one week after they have experienced a stressful event. This could be anything

from a stay in a boarding cattery, to a sudden change in the weather. As the virus is not shed all of the time it is not always possible to pick up FHV infection from a swab. The best way to try and find the virus is to take a series of swabs about 4–13 days after a stressful event. Some cats may even appear to have another mild bout of 'flu when they are shedding, and swabbing at this time can be useful.

Post FCV

After infection with FCV, around half of the affected cats become carriers. Those that are carriers of FCV will shed the virus all the time. The carrier state may last a variable

amount of time however, and some cats stop becoming carriers of FCV quite spontaneously. Swabbing is more likely to lead to detection of virus but cats are not necessarily carriers for life and also some healthy cats can carry strains of calicivirus that do not cause respiratory disease.

Cats that get 'flu caused by *Bordetella bronchiseptica* may have contracted the disease from an infected or carrier cat. Shedding of the bacteria can continue for up to 19 weeks following the original infection. It is also thought that cats can be infected with this organism by dogs that are suffering from kennel cough. In dog and cat rescue centres, dogs with kennel cough may be temporarily housed with cats to avoid spreading kennel cough to other dogs. This practice has resulted in outbreaks of 'flu in cats.

Vaccination

There are many different makes of vaccine available to protect your cat from this disease. These can be given as single 'flu vaccines, or as part of a combined vaccine against other types of infection (a multivalent vaccine).

Vaccination can start from eight to nine weeks in kittens, with a second dose at 12 weeks. Boosters are required at regular intervals thereafter. It is recommended that a vaccination programme for individual cats be decided in discussion between owner and vet, taking into account the risk of that cat getting the infection.

Unfortunately 'flu vaccines do not always provide complete protection against the disease. There are several reasons for this:

- FCV has many different strains which appear to be very different from each other.
- If a cat is infected with a high dose of a very virulent virus it can overwhelm the cat's defences, causing mild 'flu.

- Cats may already be incubating 'flu at the time of vaccination (it can take two weeks for 'flu signs to appear).
- Cats could already be asymptomatic carriers of 'flu viruses before vaccination is given.

Non-core vaccines

Vaccines against *Chlamydomphila* and *Bordetella* are also available. Your vet will decide if these are necessary by evaluating the cat's lifestyle to assess the risk of infection. These are often described as 'non-core vaccines' to reflect the fact that they are not usually given on a routine basis to all cats.

The level of reported adverse reactions to vaccines remains very low. There are very positive benefits of vaccination in relation to the small numbers of cats suffering mild after effects.



Photo: Michael Scates

Individual needs: It's a good idea to discuss a vaccination programme with your vet

Treatment and recovery

Cats with the disease are treated with antibiotics. Eye ointments may also be prescribed. Throat, nose, or eye swabs can be taken to identify the bacteria or viruses that are involved in the infection. Treatment could also include intravenous fluids (a drip) for dehydrated cats, and vitamin injections to stimulate appetite.

Providing care

Good nursing can make a major difference to a cat suffering from 'flu and this duty normally falls to the cat owner, as infectious cats are rarely hospitalised because of the risk to other patients. The cat should be kept warm and comfortable and any discharge from eyes and nose wiped away using plain or salt water (one teaspoon of salt to one pint of water). Nasal congestion can often be partly relieved by placing the cat in a steamy bathroom (don't leave hot water in a bath or sink), or using Vick Vapo-rub on the cat's chin. Provide lots of clean, fresh, drinking



Photo: CP Library

Encourage appetite: Kittens may need to be hand-fed

water and encourage him to drink little and often. Ensure that his food and water is easily accessible and provide a litter tray with shallow sides.

Encourage him to eat by offering a range of foods, eg a small amount of raw liver, or strong-smelling sardines or pilchards. If painful ulceration of the mouth is preventing him from eating, cream or ice cream offers a cooling alternative. Vets can provide suitable proprietary convalescent diets. Avoid any stress at this time and prevent any cat owners from visiting as they could inadvertently infect their own cat.

Residual effects

Recovery from cat 'flu can take one to four weeks or longer. Some cats are left with a constantly snuffy and discharging nose because of damage to the internal structures. The damaged nose is very prone to bacterial infection and courses of antibiotics are needed on a regular basis. Some cats recover with no apparent ill effects.



Caring for the sick:
Good nursing can make
a major difference

Photo: CP Library

Special precautions in catteries

Good cattery construction helps to reduce the spread of disease. Advice and information is available from the Feline Advisory Bureau (FAB) – tel: 01747 871 872 or at www.fabcats.org.uk

The use of disposable food bowls and other equipment can reduce the spread of infection. Alternatively equipment should be disinfected using Virkon, Parvocide or similar, or soaked in a 1:32 dilution of bleach plus detergent for several hours, rinsed well and dried before use.

Healthy or vulnerable cats should be attended to first when cleaning the cattery to avoid introducing infection from unhealthy cats, or carriers. Ideally there should be separate clothing, footwear and gloves for each pen.

Rescue catteries

Cats should be penned singly or in small groups that are eventually rehomed. No new cats should be introduced to an established group and the pen should be thoroughly cleaned after the last cat in the group has left. Cats known to be carriers, or with active infections, should be housed separately from other cats. Where possible, healthy cats should be vaccinated prior to entering the cattery.

**Care in catteries:
Precautions must be
taken to reduce the
spread of disease**

Breeding catteries

The ideal situation for a breeding cattery is to have minimal movement of cats in and out of the facility but this is rarely practical. Other ways to reduce the level of disease include:

- Keeping show cats in a separate area from breeding cats or, if possible, keeping cats re-entering the cattery in isolation for at least two weeks before allowing them to mix with others.
- Keeping queens and newborn kittens in isolation.
- Vaccinating adult cats regularly.
- Rehoming carrier queens; these cats should not be used for breeding as they could pass infection on to their kittens. 'Flu signs could also appear in the queen due to the stress of kitting.

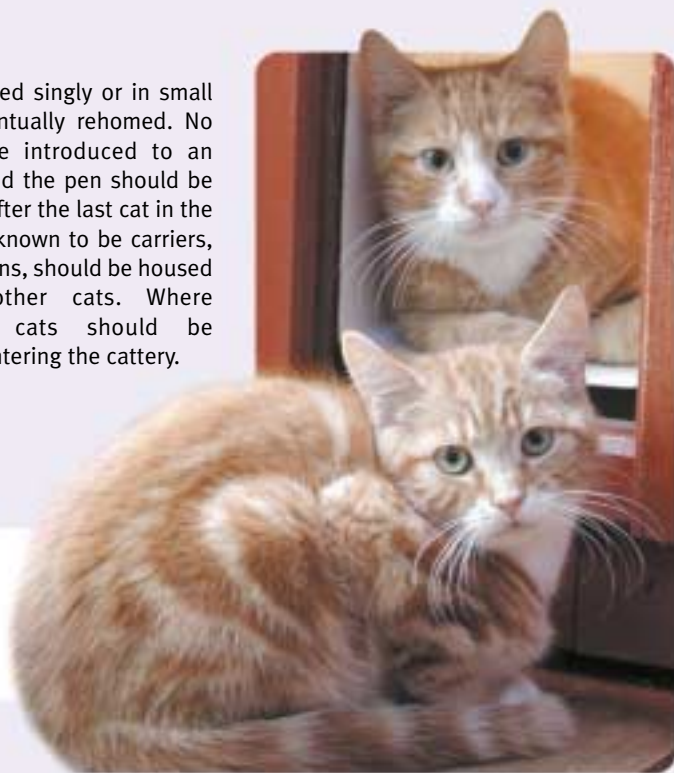


Photo: CP Library



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