Cat flu

cats.org.uk



Cat flu is a term used to describe a common illness that affects the upper respiratory tract of cats. It can be caused by a number of infectious agents, including viruses and bacteria, and can be life threatening. Unfortunately, cat flu is still a common disease, despite the availability of vaccines. The cats most severely affected include the very young, very old and immunosuppressed cats with a weakened immune system.

Immunosuppressed cats include those:

- infected with feline leukaemia virus (FeLV). See **cats.org.uk/feline-leukaemia-virus**
- infected with feline immunodeficiency virus (FIV). See cats.org.uk/fiv-in-cats
- with other serious illnesses
- receiving certain medication, for example the drugs used in chemotherapy

What causes cat flu?

Around 80% of cases of cat flu are caused by one of two viruses; feline herpesvirus (FHV) or feline calicivirus (FCV). The viruses may both be present. Once they have damaged the lining of an infected cat's respiratory tract, the disease may be further complicated by additional bacterial infections. Other causes of cat flu include bacteria such as Chlamydia felis and Bordetella bronchiseptica, a cause of kennel cough in dogs.

How is it spread?

The flu viruses are spread in a number of ways, including:

- direct contact with an infected cat showing signs of flu. The virus is present in an infected cat's tears, saliva and snot. Sneezing can project the particles far enough to infect another nearby cat, but this route of infection is less common
- indirect contact with an infected cat's tears, saliva or snot. The viruses can survive in the environment for up to a month. They can be carried on clothing, people's hands, food bowls, grooming equipment and other objects

 contact with a 'carrier' cat. These cats may be infected with and are carrying one or both of the cat flu viruses but are not showing signs of disease. Especially during times of stress these cats may release the virus and infect other cats

What are the signs?

There are many signs to look out for, including:

- sneezing
- runny nose and eyes
- dribbling
- quiet and subdued behaviour
- · loss of appetite
- high temperature
- a cough or loss of voice
- pneumonia

Feline herpesvirus (FHV) typically causes upper respiratory tract disease which can be a severe and potentially life-threatening illness. FHV can also cause eye disease in cats including conjunctivitis. This is where the eyelids become inflamed and swollen.

It is a common cause of eye ulcers, which are defects in the cornea (the surface of the eye). It can occur without any signs of upper respiratory tract disease. In severe cases it can lead to long-term eye complications causing pain and affecting vision. FHV may also contribute to long-term infections and inflammation following damage to the nasal passages and sinuses. More rarely it can also result in skin disease and be a cause of pneumonia in kittens.

Feline calicivirus (FCV) usually causes a milder form of cat flu. In kittens, it can cause lameness and a high temperature. Sometimes the only sign of an FCV infection is painful ulcers, found on the tongue, roof of the mouth or the nose. Rarely, a more severe disease caused by FCV can occur. This is virulent systemic disease (VSD) which is highly infectious and has a much higher death rate (see section on 'Virulent systemic disease'). FCV is also thought to be associated with a dental disease called feline chronic gingivostomatitis in some cats. For more information see cats.org.uk/dental-care

Chlamydia typically causes eye disease. Discharge, swelling of the eyelids and redness of the eyes is a common feature of this infection.

Bordetella causes flu-like signs like those described on the previous page. They may also progress to the chest, causing a serious infection and a relatively high death rate in kittens. Cats infected with Bordetella may develop a cough.

How is it diagnosed?

A diagnosis of cat flu is mainly based on the signs the cat is displaying. Your vet may take swabs from your cat's mouth, nose and eyes to be submitted to a laboratory where the virus or bacteria can be identified.

How is it treated and managed?

Your vet may prescribe treatment to ease the symptoms of cat flu, along with good nursing care. Some antiviral or immune-modulating drugs may help control the infection, though none are currently licensed specifically for cat flu. Whenever possible, your cat will be treated at home under your care. Hospitalisation is only needed for more serious cases.

Management of the condition includes:

- keeping your cat warm and comfortable. Give them easy access to their essential items, such as food, water, litter tray and a bed
- minimising stress. Allow your cat time to rest without being disturbed and keep the area around them calm and quiet
- removing discharge from their eyes and nose with a damp piece of cotton wool
- relieving nasal congestion by placing your cat in a steamy bathroom. Always supervise your cat around hot water
- encouraging eating by warming food. Offer a range of foods little and often, particularly smelly and palatable food such as sardines. If necessary, your vet may prescribe medication to increase your cat's appetite. They can also recommend foods which are soft, tasty and high in calories
- ensuring that lots of clean, fresh drinking water is provided and your cat is encouraged to drink little and often
- treatment of any secondary bacterial infections with antibiotics

- giving prescribed medication to help loosen and break up the nasal snot and make breathing easier
- administering eye ointments
- giving antiviral medication which may help to reduce the severity of the symptoms
- treating for an extended period with oral antibiotics if Chlamydia felis is diagnosed

If hospitalisation is required due to the severity of the flu, treatment may also include intravenous fluids via a drip for dehydrated cats. The cat may need to have a feeding tube if they are reluctant to eat.

Multi-cat households

- Keep infected cats isolated in a different room away from all non-infected cats
- Provide separate food bowls and litter trays.
 These should be disinfected with a suitable disinfectant as recommended by your vet
- Attend to non-infected cats' needs first
- Separate clothing, footwear or overalls/aprons and gloves should be worn when caring for infected cats

What does the future hold?

The majority of cats infected with feline herpesvirus (FHV) will recover, but this can take several weeks. Some cats may suffer ongoing problems from an FHV infection. This can include a condition called chronic rhinitis. This results from permanent damage and inflammation of the lining of the nasal passages. Cats with chronic rhinitis will have ongoing symptoms of upper respiratory disease (including sneezing and snot). They will also be more vulnerable to secondary bacterial infections. Ongoing eye problems can also result, including conjunctivitis and ulceration of the surface of the eye.

On some occasions, cats may be so severely affected by an infection that they have to have one or both eyes removed. Early treatment is vital in preventing this outcome.

In addition, all cats infected with FHV remain infected for life. They will shed the virus intermittently during their lifetime. These times usually occur after a stressful experience and can last for up to two weeks. Your cat will be infectious but will not necessarily show the signs of flu.

In contrast, cats are able to clear feline calicivirus (FCV) after a period of time. Most cats will clear the infection and no longer be infectious after a few weeks or months. A small minority may remain infected for several years.

Can I prevent cat flu?

Regular vaccination against feline herpesvirus (FHV) and feline calicivirus (FCV) is the most effective way of reducing the risk of developing cat flu. Vaccination can start at eight to nine weeks of age in kittens, with a second dose at 12 weeks. Boosters are required at regular intervals thereafter.

Flu vaccines are not always 100% effective in preventing disease altogether but help prevent severe disease. If, in spite of vaccination, your cat does still develop flu it will usually be milder and may be because:

- there are many strains of FCV and vaccines may only protect against some of them
- your cat's immune system is overwhelmed if they are infected with a high dose of a very virulent (severe and harmful) virus
- your cat may have other disorders affecting their immune system. These reduce their immune response to infection

 your cat could already be an asymptomatic carrier of the flu viruses due to infection before vaccination

Vaccines against Chlamydia felis and Bordetella bronchiseptica are also available but are not usually given on a routine basis to all cats. Your vet will decide if these are necessary by evaluating your cat's lifestyle to assess the risk of infection.

Virulent systemic disease (VSD)

A more potent form of feline calicivirus (FCV) called virulent systemic disease (VSD) can occur. As the virus multiplies, it can sometimes change into a more harmful or 'virulent' strain. As a result this severe disease has a high death rate of up to 70%. Cats who become infected with this strain of FCV may have:

- · swelling of the face and paws
- a high temperature
- severe ulcers on the head, legs and feet
- jaundice; yellow gums, eyes and skin
- bleeding from the mouth and nose may also be seen as the disease progresses

Unusually, adult cats seem to be more commonly affected by this strain than kittens and even vaccinated cats can be infected.

The VSD virus is readily transferred on people's clothing and hands. Strict barrier nursing and isolation of affected individuals is extremely important to try to limit the spread of this fatal disease.

Each outbreak occurs as a result of mutation of FCV. This is often due to the mixing of cats carrying different strains of FCV. This mutation in a single cat can then cause illness in other cats. Each outbreak is a unique event and fortunately seems to naturally burn out quickly. However, it can be devastating for those cats and owners affected.

Looking for cat advice?

The following vet-approved guides are available to download from cats.org.uk/information-leaflets

Essential guides

Behaviour: Understanding your cat's behaviour W84009

Behaviour: Managing your cat's behaviour W84010

Bringing your cat home W84002

Caring for your cat W84001

Caring for your kitten W84015

Cats and people W84014

Cats living together W84011

Elderly cats W84016

End-of-life, grief and loss W84007

Feeding and obesity W84004

Feral cats W84017

Indoor and outdoor cats W84012

Keeping your cat safe W84005

Microchipping W84008

Moving home W84003

Neutering W84006

Pregnant cats, birth and care of young kittens W84018

Veterinary guides

Arthritis W83201

Cat flu W83216

Digestive disorders: vomiting and diarrhoea W83218

Feline immunodeficiency virus (FIV) and feline leukaemia virus (FeLV) W83209

Feline lower urinary tract disease (FLUTD) W83202

Fleas and other parasites W83215

Heart murmurs and heart disease W83211

Hyperthyroidism W83212

Infectious disease and vaccination W83217

Kidney or renal disease W83206

Skin disorders W83204

Teeth and oral health W83214

Please see cats.org.uk for more information on:

Cats and pregnant women: toxoplasmosis

Cats and the law

Cats with disabilities

Diabetes

Feline asthma

Feline coronavirus (FCoV) and feline infectious peritonitis (FIP)

Feline parvovirus (FPV)

Hypertension

You and your vet

For more information about Cats Protection or to find out how you can support us, go to **cats.org.uk**



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