

Respiratory disease and feline asthma



CATS PROTECTION
VETERINARY GUIDES



Disease affecting the upper respiratory tract in cats is commonly known as 'cat flu' and can be due to a number of infectious agents, including viruses and bacteria. Asthma, however, is a disease that affects the lower respiratory tract or small airways within the lungs.

Cat flu

Cat flu is a common illness that can be life-threatening.

Unfortunately it still persists, despite the availability of vaccines.

The cats most severely affected include the very young, very old and those with a damaged immune system (immunosuppressed cats). Immunosuppressed cats include those infected with the feline leukaemia virus (FeLV), feline immunodeficiency virus (FIV), those with other severe illnesses and those receiving certain medication eg the drugs used in chemotherapy.

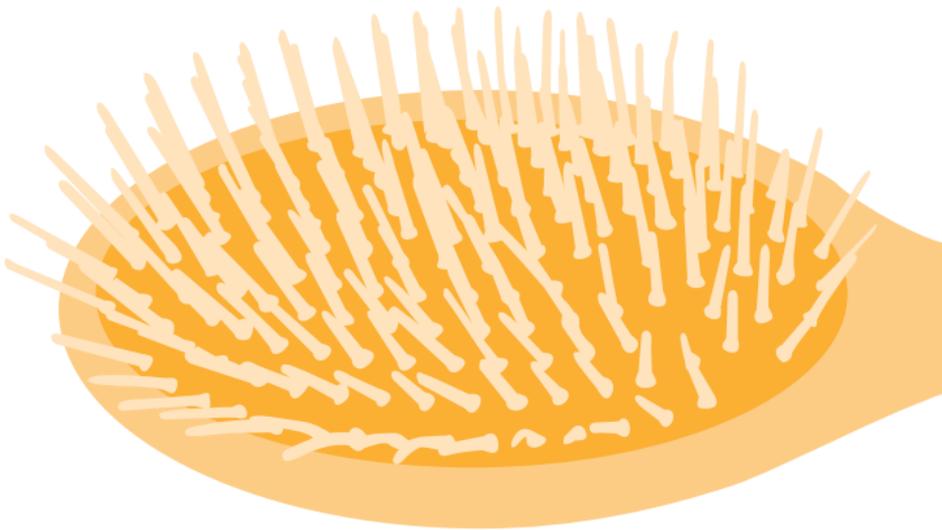
What causes cat flu?

Around 80 per cent of cases are caused by two viruses, feline herpes virus (FHV) and feline calici virus (FCV). The viruses cause cat flu either individually or combined, and can be further complicated by additional bacterial infections. Other causes of cat flu include bacteria such as *Chlamydomphila felis* (previously known as *Chlamydia*) and *Bordetella bronchiseptica*, the 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 who is showing signs of flu – particles of the virus are present in cat's tears, saliva and nasal discharge
- the viruses can survive in the environment for up to a week and can be carried on clothing, food bowls, grooming equipment and other objects – it can also be passed from cat to cat by people
- sneezing can project the particles far enough to infect another cat but this route of infection is less common



What are the signs?

There are many signs to look out for, including:

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

FHV often causes a severe and potentially life-threatening illness. Ulcers may form on the surface of the eye and the eyelids may become inflamed and swollen, becoming stuck to the surface of the eye.

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 in adults is painful ulcers, found on the tongue, roof of the mouth or the nose. Recently, however, a more potent strain of FCV has been identified which has a much higher death rate of 40 per cent.

Chlamydophila can produce a mild form of flu. Discharge and redness of the eyes is a common feature of this infection.

Bordetella causes flu-like signs like those described above, but may also progress to the chest, causing a serious infection and a relatively high death rate in kittens.

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 grown and identified.

How is it treated and managed?

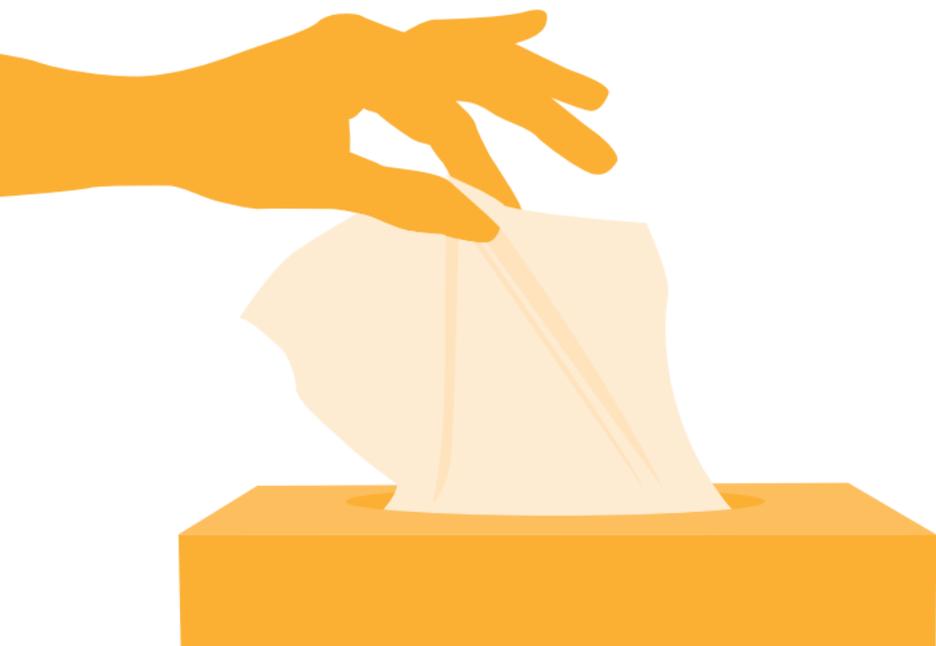
There are currently no drugs available that kill the viruses so treatment of the signs and good nursing care are required. Infectious cats are rarely hospitalised because of the risk to other cats, so nursing care is usually done at home. Management of the condition will include:

- keeping your cat warm and comfortable
- removing discharge from his eyes and nose with a damp piece of cotton wool
- relieving nasal congestion by placing your cat in a steamy bathroom or using a bowl of hot water with a decongestant added to it – always supervise your cat around hot water and keep decongestant well out of reach
- encouraging eating by warming food or offering a range of foods, particularly smelly and palatable food such as sardines. If necessary, your vet may provide a special diet which can be syringe fed
- ensuring that lots of clean, fresh drinking water is provided and encouraging your cat to drink little and often
- treatment of any secondary bacterial infections with antibiotics

- prescribed medication to help loosen and break up the nasal discharge and make breathing easier
- eye ointments

If hospitalisation is required due to the severity of the flu, treatment may also include intravenous fluids via a drip for dehydrated cats and vitamin injections or drugs to help stimulate appetite.

In multi-cat households, infected cats should be isolated and kept in a different room away from all non-infected cats. They should be provided with separate food bowls and litter trays and these should be disinfected with a suitable disinfectant as recommended by your vet. Healthy cats should be attended to first and a change of clothing, footwear or overalls/aprons and gloves should be worn.



What does the future hold?

The majority of cats infected with FHV will make a full recovery, but this can take several weeks. Unfortunately, your cat may suffer ongoing problems, including permanent damage and inflammation of the lining of the nasal passages, eye, sinuses and airways due to secondary bacterial infections. These infections may require antibiotics on a regular basis.

In addition, all cats infected with FHV become 'carriers' of the virus, shedding it intermittently during their lifetime. At these times – usually occurring after a stressful experience but lasting for up to two weeks – your cat will be infectious but will not necessarily show the signs of flu.

After infection with FCV, around half of affected cats become carriers. Those that become carriers shed the virus all the time. This carrier state lasts a variable length of time, in some cases several years, but will often stop quite suddenly.

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. For more information on blind cats see Cats Protection's [*Veterinary Guide: Blind cats*](#).

Can I prevent cat flu?

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

Flu vaccines are not always 100 per cent effective in preventing disease altogether but will usually prevent severe disease. Your cat could still develop a mild form of flu because:

- FCV has many different strains, and vaccines will only contain limited strains
- your cat's immune system could be overwhelmed if he is infected with a high dose of a very virulent virus
- your cat could already be an asymptomatic carrier of the flu viruses before vaccination

Vaccines against Chlamydomphila and Bordetella 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.

Feline asthma

Feline asthma is a term used to describe a number of conditions that generally affect the airways in the lungs. It is also known as feline chronic small airway disease, feline bronchitis and allergic airway disease. It occurs when the smooth muscle in the airways contracts, there is increased production of mucus and the airway tissue becomes inflamed. As a result, the airways become narrowed and the cat develops breathing difficulties. It can affect felines of all types and ages but Siamese cats tend to be more commonly affected.

What causes feline asthma?

The exact cause of feline asthma is not completely understood. In some cases it may be an allergic response to a trigger factor or irritant but in others no allergic cause can be found. Possible irritants include pollens, dust, cigarette smoke and some household sprays.

What are the signs?

The signs can vary and include:

- an ongoing cough
- wheezing
- laboured breathing or respiratory distress occurring suddenly and without warning
- increased rate and effort of breathing

Signs can be mild, ongoing and may come and go. You may not notice anything is wrong for some time.

How is it diagnosed?

Other conditions which may cause similar signs such as bacterial infections, lungworm or heart disease need to be checked before asthma is diagnosed. If these are ruled out, your vet may want to sedate or anaesthetise your cat to take X-rays. This is so your vet can look for changes in the airways. However, this does not always provide a conclusive result as not all cats show changes.

Your vet may also suggest anaesthetising your cat to pass a tiny camera – called a bronchoscope – down your cat's windpipe and into the airways. This technique allows your vet to visually inspect the airways and retrieve fluid to examine under the microscope. This provides useful information on the type and number of inflammatory cells present, which will indicate whether asthma is a likely diagnosis. The fluid collected can also be cultured for bacteria to identify any possible infection.

How is it treated?

Most cats diagnosed with asthma will require treatment to control their coughing and wheezing and prevent permanent and harmful changes occurring within their lungs. If you are aware of a trigger factor that starts your cat's asthma attack, then this should be avoided and attempts made to reduce his exposure to the irritant.

Treatment may include:

- anti-inflammatory drugs in the form of steroids. These can be given by mouth as tablets, by injection or inhaled through an inhaler. Specifically-designed inhalers for cats are available and most cats tolerate them well. This may be easier than giving tablets in the long term. Anti-inflammatory drugs help to reduce the inflammation within the airways and the amount of mucus produced
- bronchodilators, used to open up narrowed airways, can be used alongside anti-inflammatory drugs. They too can be in the form of tablets, injection or inhaled medication
- mucolytics can be added to your cat's food as a powder. They help to break up the mucus which is produced in the airways

What does the future hold?

In the majority of cases feline asthma can be well controlled with appropriate medication and the affected cat will lead a normal, healthy life.

However, it is important that treatment is started as soon as possible as an ongoing, untreated condition may permanently damage and scar the airways and sudden asthma attacks can prove fatal.

This leaflet is one of a range provided by Cats Protection on issues surrounding cat care.

Cats Protection is the UK's leading feline welfare charity and helps more than 193,000 cats and kittens each year. We rely entirely on public generosity to finance this vital welfare work.

For more information on **adopting a cat**, **volunteering for us** or **making a donation**, visit **www.cats.org.uk**



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