UPPER RESPIRATORY TRACT INFECTIONS
'CAT FLU'

'Cat flu' is a common disease in unvaccinated cats of all ages, but tends to be particularly severe in young and especially purebred cats. A number of infectious agents have been found to cause 'cat flu' but the vast majority of cases will be caused by one of two viruses, feline herpes virus type 1 (FHV-1) and feline calicivirus (FCV). FHV-1 is also known as feline rhinotracheitis virus.

What are the clinical signs of 'cat flu'?

Signs of 'cat flu' are similar to colds and flu in people. FHV-1 tends to cause more severe disease, the major signs are inflammation of the lining around the eye (conjunctivitis) and nose (rhinitis). This causes a clear discharge from the nose and eyes which becomes thickened and purulent as the disease progresses due to secondary bacterial infection. Cats tend to be dull and depressed with a raised temperature, sneezing and are reluctant to eat. Coughing is also a feature in some cases. Rarely the virus will cause skin lesions and invade the lungs causing pneumonia. Without treatment signs usually resolve in 2-3 weeks but some cats are left with a chronic, intermittent nasal discharge or eye disease. Treatment can significantly aid recovery.

FCV tends to cause less serious disease, but clinical signs are dependent on the strain of virus that is involved. Mouth ulceration can be a prominent feature of the disease causing severe lack of appetite. Ulcers may also sometimes occur on the tongue, nose and hard palate. Some strains of FCV cause a lameness and fever syndrome in young kittens. FCV is commonly isolated from cats with long-standing (chronic) inflammation of the gums (gingivitis) and from cats with ‘faucitis’ (inflammation of the recesses at the back of the throat).

Deaths following respiratory virus infections are rare, usually occurring in young kittens that have advanced disease before being presented for treatment.

How is 'cat flu' diagnosed?

In most cases the diagnosis is made on clinical signs but in cases where there is recurrent disease or in vaccinated cats a specific diagnosis may be required. This can be achieved by swabbing the cat's mouth and sending the swab in viral transport medium to a laboratory where the virus can be grown in culture and identified. (This service is not generally commercially available).

What treatments are available?

As for colds and flu, specific anti-viral treatments are not generally available. Treatment is aimed at controlling secondary bacterial infection (with antibiotics) and stimulating eating and drinking as, particularly dehydration, is a major cause of worsening disease. Anti-viral ointment (e.g. acyclovir)
used to treat herpes virus infections in people (cold sores) has been used in cats, but generally the response is not as good and the drug needs to be used early in the course of infection.

What can be done to help treatment?

Your cat can be encouraged to eat and drink using drugs such as multivitamins and mucolytics (which help dissolve secretions) but good nursing plays a crucial role. The eyes and nose can be kept clear of secretions by gently bathing the area with cotton wool and by steaming. Steaming needs to be undertaken carefully, the cat is placed in a wire basket and a bowl of steaming water is placed outside the basket, the two are then covered by a towel and the cat left for up to 5 minutes. The steam acts to loosen secretions making the cat feel better, oils such as eucalyptus should be avoided as they can cause ulceration of the nose in cats. Your cat can be encouraged to eating by providing highly flavoured foods e.g. sardines warmed to body temperature. Hand feeding can also help.

Severely ill cats may need nursing in hospital, this allows rehydration with intravenous fluids and feeding by naso-oesophageal tube.

How can 'cat flu' be prevented and controlled?

For most households, with a few cats, vaccination is sufficient. Vaccination may not prevent your cat becoming infected but will drastically reduce the severity of the disease, often to the point that all that is noticed is mild transient lethargy and inappetance for a few days. A variety of vaccines are available depending on the circumstances (see vaccination leaflet). Neither virus is very hardy, FHV-1 will survive for a maximum of 48 hours in the environment, FCV lasting 7-10 days.

In multi-cat households, particularly where new cats are continually arriving (rescue, boarding or breeding), vaccination alone may not be sufficient to control the problem. In these households isolation and quarantine is also required. Disinfection, whilst an important part of disease control generally, is of limited value in respiratory virus control as most cats become infected by aerosol droplets sneezed or coughed out by infected cats. Clinically ill cats or those suspected of being carriers should be isolated and handled last, their food bowls and litter trays disinfected and your hands, face and boots washed before handling other cats. Where possible separate clothing or overalls should be worn. New arrivals to the group should be quarantined for 7-10 days in case they are incubating 'cat flu'. Unfortunately, quarantine will not identify carrier cats. In households where 'cat flu' is endemic, queens should be kittened in isolation from other cats and, where possible, the kittens remain in isolation until vaccinated.

What are carrier cats?

Carriers are animals that are infected with 'cat flu' but are not showing any clinical signs. Carriers are only infectious to other animals when shedding the virus. Viral shedding can be continual or intermittent. Around 80% of cats that have been infected with FHV-1 become carriers, they shed the virus intermittently usually during periods of stress e.g. re-homing, lactation trauma, early weaning, cold and remain carriers for life. About 50% of cats infected with FCV are still excreting virus 3 months after they were originally unwell, some of these cats continue to excrete for up to 18 months. FCV carriers excrete continually so are always potentially infectious to unvaccinated cats.

Can I check to see if my cat is a carrier?
In some special circumstances it may be helpful to identify carriers but this is not usually important for pet cats. A swab can be taken from your cat's mouth which will show if it is a FCV carrier. FHV-1 carriers are only diagnosed if they are excreting the virus at the time the swab is taken which is unlikely. Unfortunately virus isolation from swabs is not generally commercially available.

**What should I do if my cat is a carrier?**

Nothing can be done to change the carrier status of your cat. Therefore it is important that your cat does not come into contact with unvaccinated cats or kittens. All cats that have had 'cat flu' and specifically FHV-1 infection should be assumed to be carriers.

**My cat has had 'cat flu' should I bother to vaccinate it?**

**YES!** Your cat is likely to have been infected with only one of the viruses so will still be susceptible to infection with the other, or with other strains of calicivirus.