

Feline Upper Respiratory Infection

SYMPTOMS:

- SNEEZING
- NASAL DISCHARGE
- RUNNY EYES
- COUGH
- ORAL OR NASAL ULCERS
- SNIFFLES
- FEVER
- HOARSE VOICE
- OR ANY COMBINATION THEREOF



WHAT CATS ARE AT RISK?

Despite the highly contagious nature of all the feline upper respiratory agents, it is important to realize that most cats are at very small risk for exposure. In other words, in order to get this kind of infection, a cat must be in the same home as an infected cat or share the same human caretaker, toys or food bowls. Typically infected cats come from the **shelter**, are **outdoor cats**, or are housed in close contact with lots of other cats (**experiencing crowding stress**). **Persian cats are predisposed** to upper respiratory infection due to their inherent facial flattening. The average house cat who is not exposed to any rescued kittens, lives with only one or two other cats at most, and never goes outside is unlikely break with infection. **Kittens are predisposed** due to their immature immune systems and are usually hit the hardest.



The chief infectious agents that cause feline upper respiratory infections are: herpesvirus and calicivirus, together accounting for about 90% of infections. Other agents include: Chlamydomphila, Mycoplasma, Bordetella, and others. Of course, a cat or kitten may be infected with more than one agent.

Viruses are spread by the wet sneezes on infected or carrier individuals. The herpesvirus is very fragile, surviving only 18 hours outside its host; caliciviris is tougher, lasting up to 10 days. Bleach will readily inactivate either virus but calici is able to withstand unbleached laundry detergents.

COURSE OF INFECTION

To some extent, the combinations of symptoms and course of infection is determined by which of numerous infectious agents is responsible. Ninety percent of feline upper respiratory infections are caused by either **feline herpes** (also called the “rhinotracheitis” virus) or **feline calicivirus**. Neither of these infections is transmissible to humans or to other animals.

Most feline colds run a course of 7 to 10 days regardless of treatment but it is important to realize that these infections are permanent and that herpesvirus infections are recurring (a property of all types of herpes infections). In kittens herpes infections are notorious for dragging out. Stresses such as surgery (usually neutering/spaying), boarding, or introduction of a new feline companion commonly induce a fresh herpes upper respiratory episode about a week following the stressful event with active virus shedding for another couple of weeks. These episodes may recur for the life of the cat though as the cat matures, symptoms become less and less severe and ultimately may not be noticeable to the owner. Cats infected with calici may shed virus continuously, not just in times of stress, and may do so for life, though about 50% of infected cats seem to stop shedding virus at some point.

A cat with herpes is contagious to other cats for a couple of weeks after a stressful event. Cats infected with calici are contagious for several months after infection but do not appear to have recurrences the same way cats with herpes do.

WHEN TO BE CONCERNED

SIGNS A CAT REQUIRES HOSPITALIZATION

- Loss of Appetite
- Congestion with open mouth breathing
- High fever or the extreme listlessness that implies a high fever (if one cannot take the cat's temperature.)

A cold for a cat is usually just a nuisance as a cold usually is for one of us. Sometimes though an upper respiratory infection can be serious. If a cat is sick enough to stop eating or drinking, hospitalization may be needed to support him or her through the brunt of the infection. A cat (usually a kitten) can actually get dehydrated from the fluid lost in nasal discharge. Painful ulcers can form on the eyes, nose or in the mouth. Sometimes fever is high enough to warrant monitoring. In young kittens, pneumonia may result from what started as an upper respiratory infection.

If you think your cat or kitten is significantly uncomfortable with a cold you should seek veterinary assistance with an office visit.

HOW IS THIS USUALLY TREATED?

Since 90% of cases are viral in origin and we have no antibiotics against viruses, it seems odd that most feline upper respiratory infections are treated with anti-bacterial medications. The reason for this is that it is common for these viral infections to become complicated by secondary bacterial invaders. The **antibiotics** act on these. Further, the next most common infectious agents (after herpes and calici) are *Chlamydomphila felis* (formerly known as *Chlamydia psittaci*) and Bordetella bronchiseptica, both organisms being sensitive to the **tetracycline family** (such as doxycycline). For this reason, when antibiotics are selected, tetracyclines and their relatives are frequently chosen. (Since tetracycline use can permanently stain the teeth of immature animals, these medications are generally not chosen for younger pets.) Oral medications, and/or eye ointments are commonly prescribed.

For congestion, some human nose drop products can be used for relief. Consult your veterinarian before attempting any sort of home treatment. Other therapies frequently employed include low doses of interferon-alpha (to generally stimulate the immune system) and oral lysine supplementation (which interferes with herpesvirus reproduction).

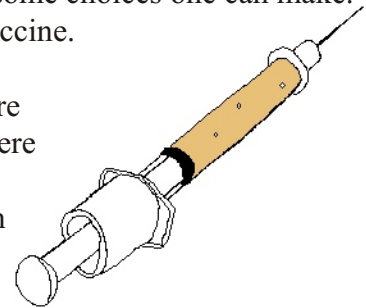
For younger kittens that are infected, often the most significant factor in their throwing off infection is maturation and gaining a more effective immune system with growth.

Occasionally infections can lead to more chronic symptoms, such as gingivitis (gum inflammation), conjunctivitis, or nasal congestion.

WHAT ARE THE VACCINATION OPTIONS?

In selecting a vaccine against upper respiratory infections, there are some choices one can make. First, one must choose between a **nasal** vaccine and an **injectable** vaccine.

The injectable vaccines which typically include feline distemper, were developed first and when vaccines for upper respiratory infections were created, they were simply added to the basic distemper injectable vaccine. Since that time science has developed a more localized form of vaccination to better address more localized types of infections.



If one selects the injectable route of vaccination, one must then decide if one wants a “**four in one**” or a “**three in one**” vaccine. You may vaccinate your cat for distemper, herpesvirus, and calicivirus or you may vaccinate for distemper, herpesvirus, calicivirus, and *Chlamydomphila felis*. Because herpes and calicivirus together account for 90% of upper respiratory infections and *Chlamydomphila* accounts for less than 10% of upper respiratory infections, the American Association of Feline Practitioner vaccination guidelines favor the “three in one” vaccine and consider the *Chlamydomphila* vaccine optional.

There is some feeling that nasal vaccines may provide a more complete stimulation to the area of the immune system responsible for defense against the infection in question. Nasal vaccination provides protection especially rapidly (3 or 4 days). Herpes and calicivirus vaccines can be given either nasally or injectably.



A FEW WORDS ABOUT “HEMORRHAGIC CALICIVIRUS”

A particularly virulent strain of calicivirus, commonly referred to as “hemorrhagic calici,” has appeared to “pop up” out of nowhere. While few outbreaks have been reported, it is possible more have occurred and gone unrecognized. Hemorrhagic calici is highly contagious and rapidly fatal. A special vaccine, called “Calicivax,” has become available from Fort Dodge Animal Health just for this special form of calici. While the infection is very rare, you may wish to vaccinate your cat for it and/or may wish to discuss this option for completely with your veterinarian.



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