

# Cat Colds

Your cat is sneezing, runny nose, runny eyes, basically, all the symptoms of a cold. There are two primary viral, and three primary bacterial infections that can cause upper respiratory infections in cats. None of these are contagious to you, and your colds and flu are not contagious to cats. However, these are contagious to other cats.

## Viral Infections:

- The two most common viral infections that can cause cold symptoms in cats are herpes virus and calici virus. They are both very contagious, and they are also both contained in the upper respiratory vaccination that your cat receives on a regular basis, also known in lay terms as the distemper vaccination. While vaccination does not prevent your cats from acquiring this virus, it works more like a human flu vaccination in that it drastically reduces the symptoms. These viruses can last up to 18 hours on any surface, so you can bring these home to your cats on your clothing or skin, even if they never leave the house.
  - **Herpes Virus.**
    - **Type.** This is not the same strain of herpes virus that people get, and it is not contagious to people or vice versa. However, it has very similar characteristics in that once it is acquired, your cat has it for life, and it responds to some of the same medications in cats that people take for herpes virus.
    - **Symptoms.** Herpes virus in cats tends to cause primarily cold like symptoms, and it can also cause some significant eye infections, to the point of in some young unvaccinated kittens even causing them to lose their eyes.
    - **Prevalence.** It is thought that 80-90% of cats have herpes virus in their system. However, they are only contagious when they are showing symptoms, and depending on their immune status and vaccination status, they will usually only show mild cold symptoms when their immune system is stressed.
    - **Vaccination.** Even if your cat was exposed to herpes virus as a kitten, before they received their first vaccination, it is thought that vaccinating them regularly will help them to form more effective antibodies to keep the virus at bay, and in fact intranasal vaccinations are even more effective than injectable vaccinations due to how they cause the immune system to respond.
    - **Treatment.** While there is not an effective treatment to eradicate herpes virus, there are treatments that can be given to minimize symptoms and reoccurrence, almost all of which are also used in human medicine for human herpes virus.
      - **L-lysine.** This is an amino acid supplement. The way it works is that for the herpes virus to replicate, it requires an amino acid called arginine in the replication process. However, L-lysine can go into the same slot in the replication process that arginine can, but herpes virus cannot replicate with

L-lysine in that slot. In addition, herpes virus will take up L-lysine preferentially over arginine. So, by flooding the body with L-lysine, we can stop the replication of the herpes virus, and allow the immune system time to suppress it. L-lysine is a very safe supplement, and is available in a variety of formulations. Dosing is generally 250mg-500mg once or twice daily.

- **Famcyclovir.** This is a prescription anti-viral medication used to suppress the virus. This is more effective than L-lysine, but can have potential side effects, primarily an upset stomach, and this still does not eradicate the virus, it only suppresses it. This is the only anti-viral that is effective against herpes virus that has been shown to be safe to give to cats for either short or long term administration. This can also be somewhat costly.
- **Trifluridine.** This is an anti-viral eye drop used only for severe herpes virus eye infections. This is very effective, but also very painful, it has to be given every couple of hours, and it is very costly. We will generally only use this when an eye is so badly infected with herpes virus that if we don't use this, there is a good chance the kitten will lose their eye.
- **Betadine eye drops.** These are mild eye drops with anti-viral properties that can be used as a mild treatment, or as a preventative for herpes virus eye infection flare ups. This is a 0.05% betadine solution.
- **Other treatments.** There are other treatments currently being experimented with by veterinarians, some with very good success, but unfortunately, almost all of these are still quite costly.

#### ○ **Calici Virus**

- **Types.** This virus is a very challenging and painful virus. The good news is that if your cat gets this, they are immune to that strain for life. The bad news, calici virus is constantly mutating, so there are hundreds of strains, and just because your cat is immune to one strain, doesn't mean they can't get another strain.
- **Symptoms.** For a vaccinated cat who has good immunity, the most they may do is sneeze and have a runny nose for a few weeks. For an unvaccinated cat, or if your cat is exposed to a strain that is so mutated that the vaccination is not protective, then symptoms consist primarily of ulcers on the tongue, roof of the mouth, throat, and nose area. These ulcers are not life threatening, but they are very painful, and can take up to a month to heal. There is also current speculation that calici virus may be linked to stomatitis.
- **Prevalance.** Unfortunately, this is a pretty common virus. In addition, it is possible for a cat to not completely eradicate the virus, and become a lifetime carrier of it. In this event, calici virus can act similarly to herpes virus, and if the carrier cat is stressed, then they will have mild symptoms, but will also shed the virus at the same time.
- **Vaccination.** The current vaccinations available tend to have about 40 different strains of calici virus in them, giving your cat pretty good cross protection against

most mutated strains. However, because the virus is always mutating, there is a slight chance that if your cat is exposed to a strain that is significantly mutated from the strains in the vaccination, that your cat will show the more severe symptoms. Just like herpes virus, the intranasal vaccination has been shown to give better immunity than the injectable vaccination, but the intranasal vaccination must be given at least yearly, and in high risk situations, 2-3 times a year.

- **Treatment.** There are some treatments for calici virus, but they just lessen the symptoms, and can be either hard to get, or quite costly.
  - **Supportive Care.** This is our primary treatment for calici virus. This consists of pain medications, antibiotics to help ward off secondary infections, and force-feeding and fluids when your cat's mouth is too painful to eat.
  - **Omega interferon.** This has been shown to be fairly effective against calici virus. The primary problem? It is not available in the United States.
  - **Alpha interferon.** This has been shown recently in very high doses to be somewhat effective in treating calici virus. The primary problem is that the dosing is so high, that you are looking at upwards of \$150 or more for the cost of the medication. However, this is worth trying if cost is not an issue.

### **Bacterial Infections:**

- The three most common infectious bacterial infections in cats that can cause cold like symptoms are *mycoplasma pneumoniae*, *bordatella bronchiseptica*, and *chlamydia psittaci*. While there are vaccinations for Bordatella and Chlamydia, these vaccinations can have side effects and so are not commonly used, and all three bacterial infections respond fairly well to an antibiotic called doxycycline. In fact, in shelter situations, upper respiratory symptoms are loosely known as "doxycycline deficiency". Now that does not mean that every cat will respond to doxycycline, but it will eradicate the infection for most cats.
  - **Mycoplasma.**
    - **Symptoms.** The primary symptoms of Mycoplasma are runny nose, sneezing, and conjunctivitis. Conjunctivitis is when the third eyelid becomes very reddened and inflamed. Mycoplasma can sit and simmer for years in a cat, causing very few symptoms other than when their immune system is stressed.
    - **Prevalance.** In a recent shelter study, Mycoplasma was found to be the causative agent for conjunctivitis in 90% of the cats with upper respiratory symptoms. This shows this bacterial infection to be fairly common.
    - **Treatment.** The primary treatment for Mycoplasma is doxycycline, but in some cases, other antibiotics such as Baytril or Clavamox will be effective, and in some cases, more effective. Regardless of antibiotic used, a minimum of 3 weeks of treatment are required, and in some cases terramycin or tetracycline eye drops are also needed to eliminated the infection from the eyes.

- **Bordatella.**
  - **Symptoms.** The primary symptoms of Bordatella are coughing or gagging like there is something in the throat that your cat just can't get up. That is because Bordatella likes to sit in the trachea and results in mucous buildup. In very severe cases, cats have been known to have trouble breathing because their trachea is so full of mucous. This is the same bacteria that causes kennel cough in dogs, but cats tend to be more resistant to it.
  - **Vaccination.** There is a vaccination for Bordatella, but since most cats that are exposed to Bordatella do not develop it, it is not routinely used in cats.
  - **Prevalence.** This is not a common bacterial infection in cats, but if we see a cat that is gagging like there is something in their throat, this is one of the diseases that we think of.
  - **Treatment.** The primary treatment for Bordatella is doxycycline, but Clavamox can also be effective, and in some cases, Baytril or clindamycin.
- **Chlamydia.**
  - **Symptoms.** The primary symptoms of Chlamydia are conjunctivitis, sneezing, and runny eyes and nose. This bacterial infection tends to cause symptoms shortly after it is acquired. It does not simmer like Mycoplasma can.
  - **Vaccination.** There is a vaccination for Chlamydia, but it has a very high rate of vaccination reaction, and since Chlamydia responds well to antibiotics, the vaccination is generally only used in high risk situations like shelters and catteries.
  - **Prevalence.** This is not a common bacterial infection, and we do not see it very often.
  - **Treatment.** Once again, the primary treatment is doxycycline, but azithromycin has also been shown to be fairly effective. Regardless, the treatment must be given for at least a month to eradicate the infection.

While there is no easy way to differentiate between the 5 primary causes of cat cold symptoms, we can do a PCR to try and look for evidence of these infections in the eye and in the throat. But, this test is costly, and not guaranteed to give an answer. If it comes back positive for one, then we know that particular infection is present, but it may not necessarily be causing the symptoms, and if it comes back negative, it doesn't mean one of those infections aren't there, it just didn't detect it. However, for cats that are having chronic symptoms that are unresponsive to medications, this can be a way to help narrow down treatment options.

If you have any questions or concerns on any of the above, please contact us at All Feline Hospital at 402-467-2711 or [info@allfelinehospital.com](mailto:info@allfelinehospital.com).