Calici Virus

Calici virus is known either by its full name or by the short form FCV. It is important that you understand this as the virus can be referred to either way and mean the same thing. 1. Calici Virus 2. FCV (Feline Calici Virus)

Calici is the least severe of the two most common upper respiratory viruses. All viruses are small organisms, but Calici is small even for a virus, and affects the mouth, eyes and sometimes lungs of a cat. Feline Calici virus is specific for cats.

***Active Disease*:** The effects of Calici virus vary according to the strain that has infected the cat. There are many strains of Calici, some of which make cats very ill while others cause only mild illness. An awareness of these variable symptoms is important in diagnosis and treatment. Symptoms may range from nothing at all to severe pneumonia. Usually there are mouth ulcers (everywhere in the mouth, including the tongue, and sometimes the lips and nose), clear nose and eye discharge, sneezing, fever, lack of appetite and severe drooling due to the mouth ulcers. The discharge from the eyes and nose is neither as thick nor as profuse as that associated with Rhinotracheitis. The cat may also have swollen eye membranes on the inside of the eye lids. Some strains of Calici have also been known to cause a fever and a limping, stiff walk from muscle and joint soreness in kittens. Other strains can give a pneumonia that makes breathing so difficult that the affected cats/kittens will sit crouched on their bellies trying to ease the discomfort and effort of breathing. FCV can cause death, and it is most often kittens which contract the severe form with pneumonia. How many of the above symptoms a cat gets, and to what degree, is dependent on many important things.

1. *Age*: The very young and the very old are the most affected.
2. *Amount of Virus in Exposure*: The more virus contacted, the sicker the catwill be. This can vary from a few mild signs to very severe.
3. *The Strain of Calici Virus*: The strain will determine the symptoms.

4. *Presence of Other Disease*: The healthier a cat is, the better the natural immune system can work to fight infection. The same amount of infective virus that would make an unhealthy cat very ill may just depress and show mild signs in a healthy individual. FIV/FELV and FIP are examples of disease states which can make cats more susceptible.
5. *Nutrition*: The better the state of nutrition, the better a cat can fight the disease.
6. *Genetics*: All cats have an inherent immune system. It is difficult to explain how this relates to disease, but it has been proven that certain purebred cats are more prone to some diseases than others. The larger the population in a given environment, the more susceptible these cats will be to respiratory disease.

Latent and "Carrier" Disease: Once a cat or kitten has been infected with Calici virus, it will continue to spread it into the environment and to other cats even after recovery. There is no time limit to this, and it can continue for a few short weeks to as long as a few years. Remember, a "carrier" cat is one who has been previously infected (and went through the active phase of the disease) and is now recovered. All carrier cats of Calici virus are active (currently undergoing active virus growth within their bodies) as there is NO latent form of this disease. In other words, recovered cats ARE carrier cats and can shed (spread virus to the environment and other cats) continuously.

All cats must come in contact with the virus to become infected. This virus makes its entrance internally through the eyes, nose or mouth, usually by coming in contact with a carrier or ill cat.
Direct Contact: Direct contact is from a sick or carrier cat directly to another cat. In catteries, multiple cat households and shelters, the chance of this happening are high. As the disease progresses from cat to cat, multiple, repeated infections may occur so that each successive infection produces more virus in each individual.
Indirect Contact: When a cat sneezes and deposits virus to litter pans, furnishings, and food/water bowls, the environment in which it lives

becomes infected. A cat coming in contact with these objects becomes infected indirectly rather than directly from the cat who put it there. People also spread this virus from cat to cat from their hands and clothing. Indirect contact can be a source of infection in shelters, catteries or even veterinary clinics. It is possible for a cat to get infected both directly and indirectly at the same time, especially when living or boarding in the same place for a period of time with the infective cat. Calici virus can survive in the environment for 8 to 10 days, making indirect contact equally important with direct contact as a source of infection. Infected kittens become sicker and shed more virus than adult cats. Accordingly, sick kittens are the worst source of infection to other kittens, who in turn will get even sicker and shed even more virus than the ones who gave it to them. The younger the kitten (under six weeks of age) the greater the reaction and resulting infection.

Most veterinarians will diagnose FCV based on the clinical symptoms they see. Ulcers in the mouth, possibly accompanied by drooling, eye and nose discharge.

A cat/kitten sick with FCV requires mostly supportive care for the symptoms it produces, as this is a virus infection. Veterinarians will often prescribe antibiotics as well, however, because they wish to avoid the resulting bacterial infections that happen along with the damage from the virus infection. Supportive care would depend on the symptoms and what is needed to ease those symptoms and help the cat or kitten to recover.

Prevention of Calici virus is a two-part program, both parts of which are equally important.
Vaccination: This is the safest and easiest way to mount a defense against Calici virus. Vaccine manufacturers try to use Calici virus strains that will give "cross immunity" and protect from one strain to another. Also, once a cat /kitten has been vaccinated, an infection of Calici would /should be much milder than it would have been had the cat/kitten not been vaccinated. It should be done before infection to be most effective. Dependent on the vaccine, timing and formulation of

vaccine used, vaccination can reduce or prevent Calici virus in well-managed, sanitary, multiple cat households.

Immunity: As mentioned before, there are many strains of Calici virus. Immunity to an individual strain occurs at about 10 days; however, immunity to one strain does not necessarily mean immunity to another strain ("cross immunity"). Natural infection also will cause the cats infected to pass the virus to other cats.

Management: Since cats can sneeze this virus all about them, cleaning and disinfection are necessary to reduce the load of virus in the environment. Management is needed in multiple cat catteries/shelters to apply principles such as separation of sick cats from healthy ones, and kittens into separate age groups until 12-16 weeks of age.