

## FELINE VACCINATION INFORMATION



### FVRCP (Panleukopenia, Rhinotracheitis, and Calicivirus)

- **Panleukopenia**

Feline panleukopenia, also called feline infectious enteritis, is a leading cause of death in kittens. It has been called feline distemper, but it bears no relation to the virus that causes distemper in dogs. There may, however, be crossover infectivity between cats and the newer forms of parvovirus isolated in dogs.

The panleukopenia virus is present wherever there are susceptible animals. Mink, ferrets, raccoons, and wild cats all serve as a reservoir. The virus is highly contagious. It is spread by direct contact with infected animals or their secretions. Contaminated food dishes, bedding, litter boxes, and the clothes or hands of people who have treated an infected cat are other routes of exposure.

Diarrhea may appear early in the course of the disease but frequently comes on later. The stools are yellow or blood-streaked. In young kittens (and some older cats), the onset can be so sudden that death occurs before the owner realizes the cat is ill. It may seem as if the cat was poisoned.

Panleukopenia can be transmitted to kittens both before and shortly after birth. In such cases, the mortality rate is 90 percent. Kittens recovering from neonatal infection may have cerebellar brain damage and exhibit a wobbly, jerky, uncoordinated gait that is noted when they first begin to walk. Secondary bacterial infections are common. The bacterial infection, rather than the virus itself, may be the cause of death.

The panleukopenia virus is hardy. It can survive in carpets, cracks, and furnishings for more than a year. It is resistant to ordinary household disinfectants but can be destroyed using a bleach solution (diluted with water at 1:32). Most cats are exposed to panleukopenia sometime during their life. Vaccination is the most effective way to prevent serious infection.

- **Rhinotracheitis & Calicivirus**

Feline viral respiratory diseases are highly contagious, often serious, illnesses that can spread rapidly through a multi-cat home, a cattery, or a shelter. They are one of the most common infectious disease problems a cat owner is likely to encounter. Although few adult cats die of upper respiratory disease, the death rate among young kittens approaches 50 percent.

Recently, it has been recognized that two major viral groups are responsible for the majority of clinical upper respiratory infections in cats (80 to 90 percent). The first is the

herpesvirus group, which includes feline viral rhinotracheitis (FVR). The second is the calicivirus group, which includes feline caliciviral disease.

There are two distinct stages in the feline viral respiratory disease complex: The acute stage is followed by the chronic carrier state.

With acute viral respiratory infection there is considerable variation in the severity of illness. Some cats have mild symptoms, while in others the disease is rapidly progressive and sometimes fatal.

The disease is transmitted from cat to cat by direct contact with infected discharge from the eyes, nose, and mouth, by contaminated litter boxes, water bowls, and human hands; and rarely, by airborne droplets. The virus is stable outside the host for as little as 24 hours or as much as 10 days, depending on conditions.

Illness begins with severe bouts of sneezing followed by conjunctivitis and watery discharge from the eyes and nose, fever, apathy, and loss of appetite. Further signs depend on the particular respiratory virus in question. A cat with herpesvirus develops a spastic cough. If the surface of the eye is severely inflamed, the cat may develop keratitis or corneal ulcerations.

In a cat with calicivirus, you may see ulceration of the mucous membranes of the mouth (stomatitis). This is particularly disabling because the cat loses its taste for food and refuses to eat and drink. Drooling is common. Shortness of breath and viral pneumonia can occur. Secondary bacterial infection, dehydration, starvation, and rapid weight loss are all complications that can lead to death.

Almost all the cats who have been infected with FVR will become chronic carriers. FVR lives and multiplies in the cells lining the throat. During periods of stress (such as illness, anesthesia, surgery, lactation, medication with steroids, or even emotional stresses), the cat's immunity breaks down and the virus is shed in mouth secretions. At this time, the cat may exhibit signs of a mild upper respiratory illness.

By far the most effective step is to vaccinate all cats, but even then, control is not 100 percent. Vaccination will not eliminate the chronic carrier states.