

Calicivirus

A Devastating New Threat to Cats



Awareness and Prevention are Key to Protecting Cats from This Virulent New Strain

It's most veterinarians' worst nightmare—a perfectly healthy animal dies within hours of first exhibiting signs of trouble. But with a new strain of calicivirus attacking a handful of clinics across the country, this nightmare has become a reality for some practitioners.

Virulent systemic feline calicivirus (VS-FCV) infection has a mortality rate of more than 40 percent—even among cats vaccinated with current calicivirus vaccines.¹ Clinical signs usually include high fever and limb swelling; ulceration and hair loss on the face, feet, and ears; and ocular and nasal discharge. The virus affects adult cats more seriously than kittens and an otherwise healthy animal can die within 24 hours of displaying signs.

According to a study published in the Jan. 15, 2004, issue of *JAVMA*, outbreaks in Los Angeles began when four shelter cats introduced an especially virulent strain of calicivirus into a hospital. The virus spread to two clinics and a rescue organization via infected surfaces, cat-to-cat contact, human-to-cat contact, and fomites — objects such as clothing that transmit disease. Out of 54 suspected cases, 59 percent of adult cats and 14 percent of kittens younger than one year old died.¹

No vaccination exists for the VS-FCV strain, and it would pose a considerable risk if it were to spread widely among today's cat population.

In contrast to VS-FCV, the more traditional strains of calicivirus (FCV) are usually not fatal by themselves. About 50 percent of cats - but more in shelters - test positive for FCV, whether they develop clinical disease or not. In high-density populations like shelters, FCV is nearly endemic, says Janet Foley, DVM, University of California-Davis. Dr. Foley and her UC-Davis colleagues have been investigating VS-FCV since its discovery in the late 1990s.

Dr. Foley says veterinarians should always test for FCV in respiratory disease cases. "Part of the reason we don't test for FCV is that we don't have treatment options other than supportive care," she says. "But it makes a difference in your strategy when you know exactly what you're looking at." For example, veterinarians can administer antibiotics if secondary bacteria are present.

Kittens are much more susceptible to FCV than adult cats. "When I adopted my kittens from a shelter a couple of years ago, they developed an upper respiratory infection within days," Foley says.

Dr. Foley says that practitioners need to be aware of the signs of VS-FCV and take immediate preventive action if a case is suspected. "If you deal with it immediately, quarantine sick and exposed animals and follow sanitation protocols, you can stop this virus in its tracks," she says. "A few practices have closed down completely while dealing with this virus. It's a lot of work, but if you weigh the deaths of perfectly healthy cats with the nuisance of using bleach, there is no contest."

Dr. Foley also recommends you educate your clients about vaccination and what it will and will

not protect against. Current calicivirus vaccines don't protect against the VS-FCV strain, but investigations are under way. "As we learn more about these new calicivirus strains," says Dr. Foley, "vaccine research will be one of the most important factors."

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1. Hurley KF, Pesavento PA, Pedersen NC, et al. An outbreak of virulent systemic feline calicivirus disease. *J Am Vet Med Assoc* 2004;224:241-249.

