

Feline Retroviruses: Seroprevalence & Risk Factors

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In the Literature

Burling AN, Levy JK, Scott HM, et al. Seroprevalences of feline leukemia virus and feline immunodeficiency virus infection in cats in the United States and Canada and risk factors for seropositivity. *J Am Vet Med Assoc*. 2017;251(2):187-194.

FROM THE PAGE ...

Epidemiologic studies attempt to determine the importance of infection and associated disease (ie, prevalence) and to identify cause and effect patterns of infection (ie, risk factors) in a defined population so that preventive healthcare guidelines can be devised. Since feline leukemia virus (FeLV) was discovered in 1964¹ and feline immunodeficiency virus (FIV) in 1986,² many epidemiologic studies regarding these retroviruses have been published. The American Association of Feline Practitioners (AAFP) published feline retrovirus management guidelines in 2008 and is expected to update these guidelines by 2018 (Little SE, personal communication).³

This study sought to update seroprevalence information and to identify risk factors associated with seropositivity for FeLV antigen and anti-FIV antibody in cats in the United States and Canada.

Over a 7-month period in 2010, point-of-care ELISA for FeLV antigen and anti-FIV antibody tests were conducted on 62 301 cats from 1396 veterinary clinics and 127 animal shelters. Seroprevalence was 3.1% for FeLV antigen and 3.6% for anti-FIV antibody, slightly higher than tests performed in 2004.⁴ Adult

age, outdoor access, clinical disease, and being a sexually intact male were identified as risk factors for seropositivity for each virus. Retroviral seropositivity was present in cats with oral disease (4.7% for FeLV and 9.7% for FIV), respiratory disease (8% for FeLV and 6.4% for FIV), and abscesses or bite wounds (5.5% for FeLV and 12.5% for FIV).

Results indicated that seroprevalence of these retroviruses, at a minimum, did not decline in North America between 2004 and 2010. Results also indicated a need for veterinarians and shelter managers to improve compliance with existing guidelines for management of FeLV and FIV. Guidelines include testing of all owned cats, retesting of cats that develop disease or that may have been exposed to infected cats, vaccinating against FeLV for all kittens and for adult cats at risk for exposure, segregating infected cats, and spaying/neutering of unowned free-roaming cats.³

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Compliance with AAEP guidelines should be improved for feline retroviral testing and management.
- 2** Veterinarian and cat owner education and awareness of feline retrovirus seroprevalence and importance of preventive medicine should be improved.
- 3** The paradigm of FeLV as a “friendly cat” disease should be shifted. FeLV can be transmitted through cat bite wounds as well as through prolonged exposure to infected cats via an oral–nasal route (eg, mutual grooming, nursing, sharing dishes). Adult cats develop a natural resistance to FeLV infection, but this resistance is not absolute.

References

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