

DISEASE INFORMATION FACT SHEET **Chlamydophila felis**



This Disease Information Fact Sheet accompanies the 2013 AAFP Feline Vaccination Advisory Panel Report published in the *Journal of Feline Medicine and Surgery* (2013), Volume 15, pp 785–808.



Chlamydophila felis (formerly Chlamydia psittaci var felis) is a bacterial pathogen with worldwide distribution. The organism predominantly infects the conjunctiva and causes conjunctivitis but has also been associated with upper respiratory tract disease (URD). Isolation rates have been reported to range from approximately 1–5% for cats without signs of respiratory tract disease to approximately 10–30% for cats with conjunctivitis or URD.^{1–6}

Transmission of C felis is mainly through direct cat-to-cat contact. The organism is very labile outside of the host and remains infectious in the environment for only short periods of time. Serous conjunctivitis, which may initially affect only one eye, is the most common clinical sign, but bilateral disease with chemosis and mucopurulent discharges can develop 5-10 days after infection. Mild sneezing or nasal discharges are sometimes reported. Although primarily an ocular pathogen, C felis has also been isolated from other mucosal and epithelial sites including the lower respiratory tract, the gastrointestinal tract and the reproductive tract.^{7–9} While *C felis* infection was associated with pneumonitis in some experimentally inoculated cats, lower respiratory disease associated with infection appears to be rare or non-existent in client-owned cats. Clinical signs usually resolve and infection can be eradicated with appropriate antimicrobial treatment.⁵

There is some limited evidence that the organism may occasionally be transmitted between cats and humans, causing conjunc-

The 2013 Report of the Feline Vaccination Advisory Panel of the American Association of Feline Practitioners (AAFP) provides practical recommendations to help clinicians select appropriate vaccination schedules for their feline patients based on risk assessment. The recommendations rely on published data as much as possible, as well as consensus of a multidisciplinary panel of experts in immunology, infectious disease, internal medicine and clinical practice. The Report is endorsed by the International Society of Feline Medicine (ISFM).

tivitis.^{10,11} Therefore, direct contact with respiratory discharges and ocular secretions from infected cats should be avoided, especially by immunocompromised people.¹² This finding has also been used as a justification for *C felis* vaccination.

Vaccine types

Inactivated adjuvanted and modified-live (ML) injectable vaccines are available, depending on the country. Immunity to *C felis* is believed to involve a combination of cell-mediated and humoral mechanisms. However, sterilizing immunity is not induced by natural infection or vaccination and infected cats typically continue to shed the organism for many months.^{7,9} Thus, similar to feline calicivirus (FCV) and feline herpesvirus-1 (FHV-1) vaccines, the primary goal of *C felis* vaccine administration is to lessen the potential for clinical disease if a vaccinated cat is exposed to the agent.



AAFP FELINE VACCINATION ADVISORY PANEL

Margie A Scherk DVM Dip ABVP (Feline Practice) Advisory Panel Chair*

Richard B Ford DVM MS Dip ACVIM DACVPM (Hon)

Rosalind M Gaskell BVSc PhD MRCVS

Katrin Hartmann Dr Med Vet Dr Med Vet Habil Dip ECVIM-CA

> Kate F Hurley DVM MPVM

Michael R Lappin DVM PhD Dip ACVIM

Julie K Levy DVM PhD Dip ACVIM

Susan E Little
DVM Dip ABVP (Feline Practice)

Shila K Nordone MS PhD

Andrew H Sparkes BVetMed PhD DipECVIM MRCVS

*Corresponding author: Email: hypurr@aol.com





Onset and duration of immunity

Little information is available concerning onset of immunity after *C felis* vaccine administration. However, a significant reduction in clinical signs after challenge has been demonstrated at 1 year.^{13,14}

Vaccine safety

C felis is combined with other antigens in multivalent vaccines. Recent studies have shown that use of these combinations is unlikely to decrease efficacy for any vaccine component.15,16 While reactions following C felis-containing vaccines are relatively uncommon, in one large study administration of a multivalent product (FPV, FHV-1, FCV, C felis) was significantly associated with increased risk of lethargy, with or without fever.¹⁷ Another study found transient pyrexia, anorexia, lethargy and limb soreness in some cats 1-3 weeks after vaccination with a combined FPV, FHV-1, FCV and C felis vaccine; similar signs were not seen after administration of a similar vaccine without the Chlamydophila component.¹⁸ Inadvertent ocular inoculation of modified-live Chlamydophila vaccines will cause typical clinical disease.¹⁹

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Advisory Panel Recommendations

Vaccination against *C felis* is considered non-core. Vaccination may potentially be considered as part of a control regime for cats in multiple-cat environments where infections associated with clinical disease have been confirmed. If used, the Advisory Panel recommends following the manufacturer's guidelines for the primary immunization series. *C felis* risk should be reassessed for all cats annually and the vaccine administered, if deemed necessary.

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