

## Chlamydophilosis in Cats

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### What is feline chlamydiosis?

*Feline chlamydiosis* is an infection caused by a bacterial organism now called *Chlamydophila felis* or *C. felis* (an outdated name for this is *Chlamydia psittaci* (feline strain)). It is an unusual bacterium because it must live and multiply inside the body cells of the cat whereas most bacteria live outside cells. Another outdated term for this infectious disease is Feline Pneumonitis. Although the term pneumonitis implies inflammation of the lungs, in a cat with a *C. felis* infection most symptoms involve the eyes or the upper respiratory tract (nose or throat).

### How does a cat become infected with *Chlamydophila felis*?

Because *Chlamydia* lives inside cells of the body and is not able to survive for long in the environment, spread of infection relies on direct or close contact with an infected cat.

Following infection, the incubation period (the time between infection and development of clinical signs of disease) is between three and ten days.

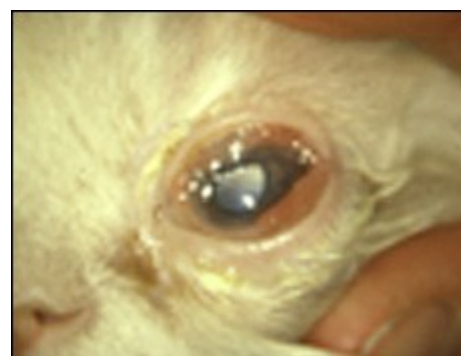
### Which cats are most at risk to this disease?

Young cats and kittens are especially vulnerable to this infection, although *C. felis* can be detected in cats of all ages. It is one of the most common causes of infectious conjunctivitis in cats.

### What clinical signs does a cat infected with *C. felis* develop?

The bacterium primarily infects the conjunctiva, which are the delicate membranes lining the eyelids and covering the edges of the eyeballs. The infection causes inflammation, known as *conjunctivitis*. In normal cats, the conjunctiva is not readily visible and has a pale, salmon pink color. In cats with conjunctivitis, the conjunctiva becomes swollen and red, making it more visible. The nictitating membrane or "third eyelid" in the inner corner of the eye may protrude partially across the eye. One or both eyes may be involved. Affected cats initially develop a watery discharge from the eyes that quickly becomes thicker and is usually a yellow or greenish color. The eyes are uncomfortable and cats often keep the affected eye(s) closed. Many cats remain bright and otherwise appear normal, but some may develop a fever or lose their appetite. After one or two days, sniffles and sneezing may also occur. In adult cats, infertility can result from infection. In kittens, the infection may spread to the lungs and cause a fatal pneumonia.

If left untreated, the conjunctivitis and associated discomfort and discharge may persist for several weeks or months



Picture courtesy of  
Ontario Veterinary College

during which time the cat is a source of infection to other cats. Infected cats may appear to recover and then develop a relapse.

### How can chlamydiosis be diagnosed?

Chlamydiosis can be difficult to diagnose because there are many causes of conjunctivitis and cats may have multiple infections at the same time. The preferred method of diagnosis is by direct isolation of the *C. felis* organism. This involves taking a swab sample from the conjunctival membrane. The swab is then placed in special transport media and sent to a laboratory where the sample is grown in culture and subsequently identified. Occasionally, the *Chlamydomphila* organisms are visible in stained smears prepared from conjunctival scrapings. Another diagnostic option is testing a blood sample for the presence of *C. felis* antibodies. This test can be useful in cases where the laboratory culture result is negative or as a general screening test for catteries or multi-cat households where conjunctivitis is a chronic problem. A new PCR-assay (Polymerase Chain Reaction), which is performed on conjunctival scrapings, is becoming more widely available for diagnosis of this infection.

### Are other cats in the household at risk of infection?

*C. felis* is spread by close or direct contact with an infected cat, so all cats in the home can become infected. For this reason, if one cat in the home is diagnosed with a *C. felis* infection, all cats in the household should be treated.

### Is my family at risk?

There are isolated reports of people who live in the same household as affected cats developing *C. felis*-associated conjunctivitis. Therefore, if anyone in your household develops sore or runny eyes, they should consult their doctor and tell him or her that there is a *C. felis* infection in the household cat. Such infection is uncommon and once diagnosed is readily treatable.

### Is there any treatment for Chlamydia?



*C. felis* can be successfully treated with a course of oral antibiotics. Only certain antibiotics are able to penetrate inside the cells where *C. felis* resides. To Treatment must be continued for a minimum of four weeks and for at least ten days after the eyes appear normal. In some cases, topical antibiotic treatment in the form of eye ointment or drops may also be prescribed.

"Since some cats can be infected sub-clinically (not show signs themselves but act as a source of infection to other cats) treatment should be given to all of the cats in the household."

Although the infection can be debilitating in some cats, it is treatable with a low risk of recurrence as long as the entire household is thoroughly treated.

### How can chlamydiosis be prevented?

Various vaccines are available and are most useful in breeding catteries or animal shelters where it can be difficult to eliminate the organisms completely. In areas where *C. felis* is endemic, routine vaccinations may minimize the risk of future outbreaks.

Vaccination may also be desirable in *Chlamydomophila*-free colonies and in household pets to provide protection for high-risk situations such as boarding catteries and breeding. This vaccine is considered a "non-core vaccine" and is recommended if your cat is at reasonable risk for contracting the disease. The protection afforded by the vaccine is relatively short, and annual boosters are usually required. Your veterinarian will advise you on the appropriate vaccination choices for your cat, based on the prevalence of this disease in your area.

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