Collection and submission of specimens for Feline Upper Respiratory Tract (URT) & Chlamydia diagnostic PCR

Pathogens: Feline herpesvirus (FHV), Feline calicivirus (FCV), *Chlamydophila* spp, including *C. psittaci* and *C.felis*.

Specimen collection & submission:

- Moisten a clean, dry swab with tears/exudate
- **Do not place the swab in transport medium**
- Firmly and vigorously swab both the conjunctival sacs (a local anaesthetic may be used)
- Nasopharyngeal and oropharynx swabs and swabs of mouth lesions should also be taken if clinical signs are evident in these areas
- Tissues biopsies, e.g. of the conjunctiva, can also be sent for testing
- Place the swab/s or tissue in a sterile container and keep refrigerated until submission
- Send the specimens as soon as possible after collection, preferably by express post with an ice brick enclosed if possible

Chlamydia only testing:

- Specimens can be accepted for chlamydia only testing from a range of species, including all avian species, sheep, cattle, reptiles and koalas (detecting a range of *chlamydia/ chlamydophlia* species)
- Samples should be collected from sites as appropriate
- Please follow the instructions above for sending these samples

Please note we do not recommend testing feline samples for chlamydia only, as it difficult to distinguish between feline herpesvirus, feline calicivirus and feline chlamydia infections based on clinical symptoms. In addition, all assays for detection of pathogens have limited sensitivity and this is particularly the case in chronic infections. The failure to detect chlamydia in a sample cannot be construed as evidence that chlamydia are not the cause of disease. However if one of the other two pathogens is detected, this could be viewed as stronger evidence that chlamydia were not involved.

Please include a completed sample submission form with each sample

Cost: Please contact us for a current test price list.

Run times: PCR runs are currently conducted on **Wednesdays** and samples must be received by **3pm Tuesday** to be included in the run. Results will usually be issued by fax or email on Thursday. The run day may alter periodically, but will remain one run per week.

Postal address
Asia Pacific Centre for Animal Health
The University of Melbourne
APCAH PCR Laboratory
Faculty of Veterinary and Agricultural Sciences
250 Princes Highway
WERRIBEE VIC 3030

Contact details

Email: apcah-diagnostic@unimelb.edu.au

Phone: (03) 9731 2059

Frequently asked questions

Is the PCR test capable of picking up latent infections of FHV?
During latent infection the feline herpesvirus resides in the trigeminal ganglion, which is not accessible for sampling. Subclinical infections may be detected.

What effect does antibiotic treatment have on detection by the test?
Chlamydia can still be detected if the animal has only been on treatment for 2-3 days.

What is the sensitivity of the PCR test?
The PCR test is as sensitive or more sensitive then detection by culture. The sensitivity decreases as the disease become more chronic.

The following papers detail the research and development of the PCR diagnostic test.
If you would like a copy of any of the papers listed, please contact our Laboratory Operations Manager using contact details shown on page 1.

Differential sensitivity of culture and the polymerase chain reaction for detection of feline herpesvirus 1 in vaccinated and unvaccinated cats. J. Sykes, G. Browning, G. Anderson, V. Studdert and H. Smith, Archives of Virology, 1997, 142, pp 65-74.

Detection and strain differentiation of feline calicivirus in conjunctival swabs by RT-PCR of the hypervariable region of the capsid protein gene. J. Sykes, V. Studdert and G. Browning, Archives of Virology, 1998, 143, pp 1321-1334.

Comparison of the Polymerase Chain Reaction and culture for the detection of feline *Chlamydia psittaci* in untreated and doxycycline-treated experimentally infected cats. J. Sykes, V. Studdert and G. Browning, J Vet Intern Med, 1999, 13, pp 146-152.

Prevalence of feline Chlamydia psittaci and feline herpesvirus 1 in cats with upper respiratory tract disease. J. Sykes, G. Anderson, V. Studdert and G. Browning, J Vet Intern Med, 1999, 13, pp 153.

Characterization of *Chlamydiaceae* species using PCR and high resolution melt curve analysis of the 16S rRNA gene. T. Robertson, S. Bibby, D. O'Rourke, T. Belfiore, H. Lambie and A.H. Noormahammadi, Journal of Applied Microbiology, 2009.

Identification of chlamydial species in crocodiles and chickens by PCR-HRM curve analysis. T. Robertson, S. Bibby, D. O'Rourke, T. Belfiore, R. Agnew-Crumpton, A.H. Noormohammadi, Vet. Microbiol. 2010.