## Chlamydiosis/Psittacosis

### Summary Guidance for Veterinarians

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<th>Agent</th>
<th><em>Chlamyophila psittaci</em> (a Gram negative, obligate intracellular bacterium)</th>
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| Susceptible species | • Birds are reservoirs: all avian species are susceptible to infection with *C. psittaci*  
  • Most commonly in psittacines, and pigeons (10-30% of avian populations are positive)  
  • Six known serovars with differing host species: serovar A is predominately found in psittacines birds, serovar B in pigeons and serovar D in turkeys. Among poultry, turkeys and pigeons are most commonly infected; chickens and ducks are rarely affected  
  • Has been reported occasionally in mammals, including dogs, cats, horses, cattle, sheep.  
  • Humans are readily infected |
| Occurrence in BC and the world | • *C. psittaci* can be found worldwide. It is particularly common among psittacine birds in tropical and subtropical regions  
  • It has been diagnosed in BC in pet birds, pigeons, owls, raptors and turkeys  
  • 8 reported human infection cases in BC, 1993-2002; no reported human infections in the last 10 years in BC |
| Transmission | • Fecal-oral and respiratory routes (bacteria are shed in feces and respiratory discharges of infected birds)  
  • Vertical transmission has been reported but appears infrequent  
  • Asymptomatic carriers can shed the organism intermittently for extended periods (weeks to months). |
| Diagnosis Clinical | Incubation period: 3 days to 4 weeks. Lifetime latent infection is possible  
Infection can be asymptomatic, acute, subacute or chronic in both wild or domestic birds. Most common clinical signs in birds: nasal and ocular discharge, conjuntivitis, sinusitis, green droppings, ruffled feathers, inactivity, fever, weakness, loss of appetite, weight loss. Death can occur in severe infections. Young birds are more susceptible to severe infection  
*Differential diagnoses include:* Influenza, herpesviruses, paramyxovirus, Enterobacteriaceae, Pasturella |
| Laboratory | Culture, detection of antigens or nucleic acids, histochemistry, immunohistochemical staining and serology. |
| Prevention and control | • Prevention and containment through biosecurity practices including:  
  • Isolate newly acquired, ill or known-exposed birds (including housing in a separate airspace)  
  • Prevent transfer of fecal matter, feathers etc through cleaning and disinfection and appropriate housing layout  
  • Treatment with long term antimicrobial therapy |
| Zoonotic implications | • Humans can become infected from apparently sick or healthy birds, usually through the respiratory route  
  • Effective treatment is available to treat psittacosis  
  • Personal protective equipment should be considered for high risk occupations  
  • Screen birds with frequent public contact |
| Reporting | • Chlamydiosis is a notifiable disease to the Chief Veterinary Officer (CVO) in BC  
  • All laboratory-confirmed cases should be reported within 24 hours (604-556-3013)  
  • Veterinarians may be contacted by public health authorities for follow-up  
  • Chlamydiosis is a CFIA Immediately Notifiable Disease  
  • Laboratories must immediately contact the CFIA regarding the suspicion or diagnosis of avian chlamydiosis  
  • Email notification: notification@inspection.gc.ca  
  • Fax: 450-763-0364 (attention notification) |