

# Chlamydiosis/Psittacosis Summary Guidance for Veterinarians

<b>Agent</b>	<i>Chlamydophila psittaci</i> (a Gram negative, obligate intracellular bacterium)
<b>Susceptible species</b>	<ul style="list-style-type: none"> <li>Birds are reservoirs: all avian species are susceptible to infection with <i>C. psittaci</i> <ul style="list-style-type: none"> <li>Most commonly in psittacines, and pigeons (10-30% of avian populations are positive)</li> <li>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</li> </ul> </li> <li>Has been reported occasionally in mammals, including dogs, cats, horses, cattle, sheep.</li> <li>Humans are readily infected</li> </ul>
<b>Occurrence in BC and the world</b>	<ul style="list-style-type: none"> <li><i>C. psittaci</i> can be found worldwide. It is particularly common among psittacine birds in tropical and subtropical regions</li> <li>It has been diagnosed in BC in pet birds, pigeons, owls, raptors and turkeys</li> <li>8 reported human infection cases in BC, 1993-2002; no reported human infections in the last 10 years in BC</li> </ul>
<b>Transmission</b>	<ul style="list-style-type: none"> <li>Fecal-oral and respiratory routes (bacteria are shed in feces and respiratory discharges of infected birds )</li> <li>Vertical transmission has been reported but appears infrequent</li> <li>Asymptomatic carriers can shed the organism intermittently for extended periods (weeks to months).</li> </ul>
<b>Diagnosis</b>	<p>Incubation period : 3 days to 4 weeks. Lifetime latent infection is possible</p> <p>Infection can be asymptomatic, acute, subacute or chronic in both wild or domestic birds. Most common clinical signs in birds: nasal and ocular discharge, conjunctivitis, 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</p> <p><i>Differential diagnoses include: Influenza, herpesviruses, paramyxovirus, Enterobacteriaceae, Pasturella</i></p>
<b>Clinical</b>	
<b>Laboratory</b>	<p>Culture, detection of antigens or nucleic acids, histochemistry, immunohistochemical staining and serology.</p>
<b>Prevention and control</b>	<ul style="list-style-type: none"> <li>Prevention and containment through biosecurity practices including: <ul style="list-style-type: none"> <li>Isolate newly acquired, ill or known-exposed birds (including housing in a separate airspace)</li> <li>Prevent transfer of fecal matter, feathers etc through cleaning and disinfection and appropriate housing layout</li> </ul> </li> <li>Treatment with longterm antimicrobial therapy</li> </ul>
<b>Zoonotic implications</b>	<ul style="list-style-type: none"> <li>Humans can become infected from apparently sick or healthy birds , usually through the respiratory route</li> <li>Effective treatment is available to treat psittacosis</li> <li>Personal protective equipment should be considered for high risk occupations</li> <li>Screen birds with frequent public contact</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Chlamydiosis is a notifiable disease to the Chief Veterinary Officer (CVO) in BC <ul style="list-style-type: none"> <li>All <u>laboratory-confirmed</u> cases should be reported within 24 hours (604-556-3013)</li> <li>Veterinarians may be contacted by public health authorities for follow-up</li> </ul> </li> <li>Chlamydiosis is a CFIA Immediately Notifiable Disease <ul style="list-style-type: none"> <li>Laboratories must immediately contact the CFIA regarding the suspicion or diagnosis of avian chlamydiosis</li> </ul> </li> </ul>