

# Appendix A: Disease-Specific Chapters

Chapter: Psittacosis/Ornithosis

## Psittacosis/Ornithosis

- Communicable  
 Virulent

**Health Protection and Promotion Act:  
Ontario Regulation 558/91 – Specification of Communicable Diseases**

**Health Protection and Promotion Act:  
Ontario Regulation 559/91 – Specification of Reportable Diseases**

<b>1) Aetiologic Agent:</b>	Psittacosis/Ornithosis is caused by <i>Chlamydophila psittaci</i> (formerly <i>Chlamydia psittaci</i> ), an obligate intracellular bacterial pathogen (2).
<b>2) Case Definition:</b>	
Surveillance Case Definition	<a href="#">See Appendix B</a>
Outbreak Case Definition	<p>The outbreak case definition varies with the outbreak under investigation. Consideration should be given to the following in establishing an outbreak case definition:</p> <ol style="list-style-type: none"><li>1. Clinical, laboratory and/or epidemiological criteria;</li><li>2. The time frame for occurrence;</li><li>3. The geographic location(s) or place(s) where cases live or became ill/exposed, and</li><li>4. Special attributes of cases (e.g. age, underlying conditions).</li></ol> <p>Cases may be classified by levels of probability (i.e. confirmed, probable and/or suspect).</p>
<b>3) Identification:</b>	
Clinical Presentation	Onset of psittacosis is usually abrupt with fever, headache, photophobia, and myalgia and upper or lower respiratory tract symptoms, and non - productive cough. Complications can occur occasionally and include, encephalitis, myocarditis and thrombohebitis (1, 2). Mild forms of the illness may be mistaken for common respiratory infection and may go unnoticed (3).
Diagnosis	<a href="#">See Appendix B</a>  More information on diagnostic testing is available in the Ministry of Health Long-Term Care, Public Health Laboratory. <a href="#">Specimen Collection Guide, Testing Guidelines, June 2008</a> ).

## 4) Epidemiology:

Occurrence	Worldwide; most human cases are sporadic and many infections are probably not diagnosed (1). Cases of Psittacosis / Ornithosis have fluctuated in the province of Ontario over the years and remain fairly low, with less than 5 cases reported from 2003 to 2007.
Reservoir	This agent can be carried by many species of wild and domestic birds. Most human cases have been caused by psittacine birds such as parakeets, parrots and lovebirds and less often by poultry, pigeons, canaries and sea birds (1). Healthy birds can be carriers and shed the infectious agent, particularly when subjected to stress through crowding and shipping (1).
Modes of Transmission	Infection is generally acquired by inhaling dust from dried feces or dried ocular and nasal secretions from infected birds. Direct contact with birds is not required; rare person-to-person spread has occurred (1).
Incubation Period	From 1- 4 weeks (1).
Period of Communicability	Birds may shed the agent intermittently and sometimes continuously for weeks or months (1).
Susceptibility and Resistance	Susceptibility is general; persons in contact with infected birds are at highest risk and older adults may be more severely affected (1); there is no evidence that persons with antibodies are protected, post infective immunity is incomplete or transitory (1).

#### 5) Reporting Requirements:

To Local Board of Health	Confirmed and suspected cases shall be reported to the medical officer of health by persons required to do so under the <i>Health Protection and Promotion Act</i> , R.S.O. 1990.
To Public Health Division (PHD)	<p>Report only case classifications specified in the case definition to PHD using the integrated Public Health Information System (iPHIS), or any other method specified by the Ministry <b>within five (5) business days of receipt of initial notification</b> as per <i>iPHIS Bulletin</i> Number 17: Timely Entry of Cases (4).</p> <p>The minimum data elements to be reported for each case is specified in the following:</p> <ul style="list-style-type: none"> <li>• <i>Ontario Regulation 569</i> (Reports) under the Health Protection and Promotion Act (HPPA);</li> <li>• The disease-specific User Guides published by the Ministry, and</li> <li>• Bulletins and directives issued by the Ministry.</li> </ul>

#### 6) Prevention and Control Measures:

Personal Prevention Measures	<p>Preventive measures:</p> <ul style="list-style-type: none"> <li>• Educate the public about the risk of household or occupational exposure to infected pet birds;</li> <li>• Use of cage cleaning and feeding methods that minimize air circulation of feathers, dust and droppings;</li> <li>• Wear gloves and dust masks when cleaning cages and birdfeeders, and</li> <li>• Treat and eliminate infections of pet birds and disinfecting premises.</li> </ul>
Infection Prevention and Control Strategies	Routine practices are recommended for hospitalized cases.
Management of Cases	<p>Investigate the case to determine source of infection and type of exposure. Regulation 569 under the HPPA for relevant data to collect and ensure to inquire about the following:</p> <ul style="list-style-type: none"> <li>• History of occupational exposure, and</li> <li>• History of exposure to birds such as the parrot family, other caged birds, or on poultry farms and contact with bird droppings.</li> </ul> <p>Identify others that may have had the same exposure. If contact with a known source has occurred, trace the origin of the suspected birds in collaboration with the Canadian Food Inspection Agency (CFIA).</p> <p>Isolation of case is not required. The case should be instructed on using proper hand hygiene and proper cough etiquette (1). Treatment with antibiotics is under the direction of the attending health care provider.</p>
Management of Contacts	No public health follow-up required of contacts of human cases, however people exposed to common sources of infection should be observed for the development of symptoms, such as fever, respiratory tract symptoms, and coughing. Early diagnostic tests should be performed and therapy should be initiated if symptoms appear.
Management of Outbreaks	<p>An outbreak is defined as two or more cases linked in place and time.</p> <p>As per this protocol, outbreak management shall comprise of but not be limited to the following general steps:</p> <ul style="list-style-type: none"> <li>• Confirm diagnosis and verify the outbreak;</li> <li>• Establish an outbreak team;</li> <li>• Develop an outbreak case definition;</li> <li>• Implement prevention and control measures;</li> <li>• Implement and tailor communication and notification plans depending on the scope of the outbreak;</li> <li>• Conduct epidemiological analysis on data collected;</li> <li>• Conduct environmental inspections of implicated premise where applicable;</li> </ul>

	<ul style="list-style-type: none"> <li>• Coordinate and collect appropriate clinical specimens where applicable;</li> <li>• Prepare a written report, and</li> <li>• Declare the outbreak over in collaboration with the outbreak team.</li> </ul> <p>Refer to the document “Management of Psittacosis-Ornithosis in Birds” (MOHLTC 2004) for the management of outbreaks in birds.</p>
<p><b>7) References</b></p>	<p>(1) Heymann D, editor. Control of communicable diseases manual. 18th ed. Washington: American Public Health Association; 2004.</p> <p>(2) Pickering LK, Baker CJ, Long SS, McMillan JA, editors. Red book: 2006 report of the Committee on Infectious Diseases. 27<sup>th</sup> ed. Elk Grove Village, IL: American Academy of Pediatrics; 2006. Section 3, Summaries of infectious diseases; p. 251-2.</p> <p>(3) Acha PN, Szyfres B. Zoonoses and communicable diseases common to man and animals. 3<sup>rd</sup> ed. Washington: Pan American Health Organization; 2001.</p> <p>(4) Ministry of Health and Long-Term Care. Timely entry of cases. iPHIS Bulletin. 2007 May 11;17.</p>
<p><b>8) Additional Resources</b></p>	<p>Schlossberg D. Chapter 178: Chlamydophila (Chlamydia) psittaci (Psittacosis). In: Mandell G, Bennett J &amp; Dolin R, editors. Mandell, Douglas, and Bennett’s principles and practice of infectious disease. 6<sup>th</sup> ed. Philadelphia, PA: Elsevier; 2005, p. 2656-8.</p> <p>Canadian Food Inspection Agency. Import procedures for animals / animal products and by-products [Internet]. Ottawa: Canadian Food Inspection Agency; c2002-2009. Importation of pet birds for countries other than the United States; 2008 Jan 29 [cited 2009 Feb 10]. Available from <a href="http://www.inspection.gc.ca/english/anima/heasan/import/birds_other_e.shtml">http://www.inspection.gc.ca/english/anima/heasan/import/birds_other_e.shtml</a>.</p> <p>Ministry of Health Long Term-Care, Public Health Laboratories. Specimen collection guide: testing guidelines. Toronto: Queen’s Printer for Ontario; 2008. Available from <a href="http://www.health.gov.on.ca/english/providers/pub/labs/specimen_guide/testing_guidelines.pdf">http://www.health.gov.on.ca/english/providers/pub/labs/specimen_guide/testing_guidelines.pdf</a>.</p> <p>Ministry of Health and Long-Term Care. Management of psittacosis-ornithosis in birds. Toronto: Queen’s Printer for Ontario; 2004.</p> <p>Ministry of Health and Long-Term Care. Infectious diseases protocol. Toronto: Queen’s Printer for Ontario; 2009. Available from <a href="http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/infdispro.html">http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/infdispro.html</a> (or as current)</p> <p><i>Health Protection and Promotion Act</i>, R.S.O. 1990, c. H.7. Available from <a href="http://www.e-">http://www.e-</a></p>



