Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

Disease: Psittacosis/Ornithosis

Effective: February 2019
Psittacosis/Ornithosis

1.0 Provincial Reporting
Confirmed and probable cases of disease

2.0 Type of Surveillance
Case-by-case

3.0 Case Classification

3.1 Confirmed Case
Laboratory confirmation of infection with clinically compatible signs and symptoms:

- A significant (i.e., fourfold or greater) rise in antibodies to *Chlamydia* (formerly *Chlamydophila*) *psittaci* (C. *psittaci*)
  - OR
- Isolation of the infectious agent from a clinical specimen (e.g., blood, sputum)
  - OR
- Positive for nucleic acid amplification testing (NAAT) for *C. psittaci* specific targets

3.2 Probable Case
Clinically compatible signs and symptoms in a person with:

- An epidemiologic link to a known source (i.e., human, animal or environment)
  - OR
- Supportive serology (e.g., *C. psittaci* titre of ≥ 32) with one or more serum specimens obtained after onset of symptoms

4.0 Laboratory Evidence

4.1 Laboratory Confirmation
Any of the following will constitute a confirmed case of psittacosis/ornithosis:

- Isolation of infectious agent from clinical specimen [This should be done in a Containment level 3 facility, *C. psittaci* being a risk level 3 agent in Canada.]
- A significant (i.e., fourfold or greater) rise in antibody response towards *C. psittaci* with specimen collection ≥ 2-3 weeks apart.
- Positive for NAAT for *C. psittaci* specific targets
4.2 Approved/Validated Tests

- Microimmunofluorescence (MIF) assay for serologic response to *C. psittaci*, with positive and negative control sera used with each run and other quality indices as described by Dowell *et al.*
- NAAT for *C. psittaci* specific targets

4.3 Indications and Limitations

- Chronic *C. psittaci* human infection has been found to be associated with ocular adnexal mucosa-associated lymphoid tissue [MALT]-type lymphoma in some instances
- A commercial kit for MIF testing (Cypress Ca) contains antigens for *C. pneumoniae*, *C. psittaci* and *C. trachomatis*. However, cross reactivity among closely related agents using MIF test procedures have been observed; the sensitivity and specificity of the MIF for diagnosis of psittacosis specifically is not well evaluated and so interpretation of titre must be linked with symptoms and/or linkage with definitive cases (see also recent publication by Verminnen *et al.*).
- In-house NAAT testing should be done using standard controls

5.0 Clinical Evidence

Mild forms may be mistaken for common respiratory illnesses. The disease can have a sudden onset with fever, chills, sweating, myalgia, loss of appetite, upper or lower respiratory tract symptoms, non-productive cough, and headaches. Human disease can be severe, especially in untreated elderly persons.

6.0 ICD 10 Code(s)

A70 Chlamydia psittaci infection

7.0 Sources


Everett KD, Bush RM, Andersen AA. Emended description of the order Chlamydiales, proposal of Parachlamydiaceae fam. nov. and Simkaniaceae fam. nov., each containing one monotypic genus, revised taxonomy of the family Chlamydiaceae, including a new


8.0 Document History

Table 1: History of Revisions

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>Document Section</th>
<th>Description of Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2014</td>
<td>General</td>
<td>New template. Title of Section 8.0 changed from “References” to “Sources”. Section 9.0 Document History added.</td>
</tr>
<tr>
<td>December 2014</td>
<td>3.1 Confirmed Case</td>
<td>Addition of third bullet “OR Positive for nucleic acid amplification testing (NAAT) for C.psittaci specific targets”.</td>
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<tr>
<td>December 2014</td>
<td>3.2 Probable Case</td>
<td>Removal of third bullet “Positive nucleic acid amplification testing (NAT) for C.psittaci specific targets”.</td>
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<tr>
<td>December 2014</td>
<td>4.1 Laboratory Confirmation</td>
<td>Lower case “psittacosis/ornithosis”. Addition of “with specimen collection ≥ 2-3 weeks apart.” To second bullet. Addition of third bullet “Positive for nucleic amplification testing (NAAT) for C.psittaci specific targets”.</td>
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<tr>
<td>December 2014</td>
<td>4.2 Approved/Validated Tests</td>
<td>Removal of “(e.g., 16SrRNA and 23SrRNA gene targets)”.</td>
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<tr>
<td>December 2014</td>
<td>4.3 Indications and Limitations</td>
<td>Entire section revised.</td>
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<tr>
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<tr>
<td>December 2014</td>
<td>8.0 Sources</td>
<td>Updated.</td>
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<tr>
<td>February 2019</td>
<td>General</td>
<td>Minor revisions were made to support the regulation change to Diseases of Public Health Significance</td>
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