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

Disease: Brucellosis

Effective: February 2019
Brucellosis

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:
- Isolation of *Brucella* spp. from an appropriate clinical specimen (e.g., blood, tissue)
  OR
- A significant (i.e., fourfold or greater) rise in *Brucella* agglutination titre between acute and convalescent serum specimens obtained 2 or more weeks apart
  OR
- Detection of *Brucella* spp. deoxyribonucleic acid (DNA) from an appropriate clinical specimen

3.2 Probable Case
- Clinically compatible signs and symptoms with supportive serology (i.e., *Brucella* agglutination test titre of 1:160 or higher in one or more serum specimens obtained after onset of symptoms)
  OR
- Clinically compatible signs and symptoms in a person with an epidemiologic link to a confirmed case or suspected source

4.0 Laboratory Evidence

4.1 Laboratory Confirmation
Any of the following will constitute a confirmed case of brucellosis:
- Positive *Brucella* sp. culture with confirmation (See Section 4.2)
- A significant (i.e., fourfold or greater) rise in *Brucella* sp. antibody titre
- Detection of *Brucella* spp. DNA

4.2 Approved/Validated Tests
- Standard culture for *Brucella* sp. with confirmation
- *Brucella* serology
- Confirmatory methods include traditional phenotypic and biochemical testing and/or nucleic acid amplification test (NAAT)
4.3 Indications and Limitations

- Additional tests may include NAAT for *Brucella* sp. based on availability.

5.0 Clinical Evidence

Clinically compatible signs and symptoms are characterized by acute or insidious onset of fever, night sweats, undue fatigue, anorexia, weight loss, headache, and arthralgia.

6.0 ICD 10 Code(s)

A23 Brucellosis

7.0 Sources


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>
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<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>
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<tr>
<td></td>
<td>3.1 Confirmed Case</td>
<td>Second bullet, removed “and testing at the same laboratory”.</td>
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<tr>
<td>Revision Date</td>
<td>Document Section</td>
<td>Description of Revisions</td>
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</table>
| December 2014 | 3.2 Probable Case                        | New first bullet added, “Clinically compatible signs and symptoms in a person in whom *Brucella* spp. deoxyribonucleic acid (DNA) is detected from an appropriate clinical specimen”.  
  Bullet one moved to bullet three.  
  Addition of “or suspected source”.  
  Addition of “OR” in front of bullet three. |
| December 2014 | 4.2 Approved/Validated Tests             | Bullet three, changed from “Tbilsi phage susceptibility, dye tolerance testing…” to “traditional phenotypic and biochemical testing and/or nucleic acid amplification test (NAAT)”. |
| December 2014 | 4.3 Indications and Limitations          | Bullet one, “NAT” replaced with “NAAT”.                                                                                                                                 |
| February 2019 | General                                  | Minor revisions were made to support the regulation change to Diseases of Public Health Significance as well as the confirmed and probable case definitions |