

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

Acha P, Szyfres B. Zoonoses and Communicable Diseases Common to Man and Animals. Vol. 1. 3 ed. Washington, DC: Pan American Health Organization; 2001.

Centers for Disease Control and Prevention. National Notifiable Disease Surveillance System: Brucellosis (*Brucella* spp.) - 2010 Case Definition [Internet]. Atlanta, GA: U.S. Department of Health & Human Services; 2010 [cited May 31, 2018]. Available from: <https://wwwn.cdc.gov/nndss/conditions/brucellosis/case-definition/2010/>

Heymann DL, editor. Control of Communicable Diseases Manual. 20 ed. Washington, D.C: American Public Health Association; 2015.

Public Health Agency of Canada. Brucellosis. In: Case Definitions for Communicable Diseases under National Surveillance. Canada Communicable Disease Report. 2009;35S2.

8.0 Document History

Table 1: History of Revisions

Revision Date	Document Section	Description of Revisions
December 2014	General	New template. Title of Section 8.0 changed from “References” to “Sources”. Section 9.0 Document History added.
December 2014	3.1 Confirmed Case	Second bullet, removed “and testing at the same laboratory”.

Revision Date	Document Section	Description of Revisions
December 2014	3.2 Probable Case	New first bullet added, "Clinically compatible signs and symptoms in a person in whom <i>Brucella</i> 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 "Tbilisi 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

