

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

Disease: Tularemia

Effective: February 2019

Tularemia

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 *Francisella tularensis* (*F. tularensis*) from an appropriate clinical specimen (e.g., blood, sputum)

OR

- A significant (*i.e.*, fourfold or greater) rise in serum antibody titre to *F. tularensis* antigen

3.2 Probable Case

Laboratory support of infection with clinically compatible signs and symptoms, and

- Detection of *F. tularensis* by nucleic acid amplification testing (NAAT)

OR

- Detection of *F. tularensis* in a clinical specimen (e.g., lymph node aspirates, ulcer exudate) by fluorescent assay

OR

- $\geq 1:128$ microagglutination titre or $\geq 1:160$ tube agglutination in a single serum specimen

4.0 Laboratory Evidence

4.1 Laboratory Confirmation

Any of the following will constitute a confirmed case of tularemia:

- A significant (*i.e.*, fourfold or greater) rise in *F. tularensis* antibody titre
- Positive *F. tularensis* culture (See Section 4.2)

4.2 Approved/Validated Tests

- *F. tularensis* serology

- Standard culture for *F. tularensis*
- Direct fluorescent antibody (DFA) for *F. tularensis* cellular antigens
- *F. tularensis* NAAT
- Slide agglutination for *F. tularensis*

4.3 Indications and Limitations

N/A

5.0 Clinical Evidence

- Clinically compatible signs and symptoms are characterized by several distinct syndromes, including the following:
 - Ulcero-glandular – cutaneous ulcer with regional lymphadenopathy;
 - Glandular – regional lymphadenopathy with no ulcer;
 - Oculoglandular – purulent conjunctivitis and palpebral ulcers with preauricular lymphadenopathy;
 - Oropharyngeal – stomatitis or pharyngitis, or tonsillitis and cervical lymphadenopathy;
 - Pneumonic – primary pleuropulmonary disease; and
 - Typhoidal – febrile illness without early localizing signs and symptoms.
- Clinical diagnosis is supported by evidence or history of a tick or deerfly bite, exposure to the tissues of a mammalian host of *F. tularensis*, or exposure to potentially contaminated food or water.

6.0 ICD 10 Code(s)

A21 Tularaemia

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: Tularemia (*Francisella tularensis*) - 2017 Case Definition [Internet]. Atlanta, GA: U.S. Department of Health & Human Services; 2017 [cited July 31, 2018]. Available from: <https://wwwn.cdc.gov/nndss/conditions/tularemia/case-definition/2017/>

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

Public Health Agency of Canada. Tularemia. 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	3.2 Probable Case	Entire section revised.
December 2014	4.1 Laboratory confirmation	“Tularemia” changed to lower case “tularemia”. Removal of “with confirmation” from second bullet.
December 2014	4.2 Approved/Validated Tests	“NAT” changed to “NAAT”. Removal of last bullet “Confirmatory methods include DFA...”
December 2014	4.3 Indications and Limitations	Removal of “Additional tests may include...”
December 2014	5.0 Clinical Evidence	Format changed into bulleted form. “ <i>Francisella tularensis</i> ” changed to “ <i>F.tularensis</i> ”.
December 2014	8.0 Sources	Updated.
February 2019	General	Minor revisions were made to support the regulation change to Diseases of Public Health Significance.

