

Appendix B: Provincial Case Definitions for Reportable Diseases

Disease: Q Fever

Q Fever

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 specific antibodies to *Coxiella burnetii*

OR

- Isolation of *C. burnetii* from blood

3.2 Probable Case

Clinically compatible signs and symptoms in a person with:

- An epidemiologic link to a laboratory-confirmed case

OR

- A single complement fixation titre $\geq 1:32$

OR

An asymptomatic individual with positive laboratory evidence and with an epidemiologic link to a confirmed source (i.e., human, animal or environment).

4.0 Laboratory Evidence

4.1 Laboratory Confirmation

The following will constitute a confirmed case of Q Fever:

- Reactive results $\geq 1:256$ for phase I / II Immunoglobulin G (IgG) and/or $\geq 1:16$ for phase I / II Immunoglobulin M (IgM)

4.2 Approved/Validated Tests

- Complement Fixation
- IgG and IgM immunofluorescence assay (IFA) for the detection and semi quantitation to phase I and phase II *C. burnetii* antigens and as an aid in the diagnosis of Q Fever

4.3 Indications and Limitations

- Neither phase of *C. burnetii* antigen has been found to cross-react with either rickettsia or bacteria sufficiently to produce false positive reactions
- Low levels of phase II IgG antibody ($<1:256$) may be considered non-specific
- The results obtained should be used in conjunction with the clinical information available to the physician
- Serologic responses are time dependant. Specimens obtained too early in the infection may not contain detectable antibody levels. If Q fever is suspected, obtain a second specimen 2 to 3 weeks later.

5.0 Clinical Evidence

An acute febrile rickettsial disease; onset may be sudden chills, retrobulbar headache, weakness, malaise and severe sweats.

6.0 ICD Code(s)

ICD 10 Code A78

7.0 Comments

N/A

8.0 References

- Acha PN, Szyfres B. Zoonoses and communicable diseases common to man and animals. 3rd ed. Volume II. Chlamydioses, Rickettsioses, and Viroses. Washington DC: Pan American Health Organization; 2003.
- National Notifiable Diseases Surveillance System. Case Definitions. [Internet]. Q Fever; 2009. Atlanta, GA: Centers for Disease Control and Prevention (CDC); 2009. [cited 2009 Feb 12]. Available from http://www.cdc.gov/ncphi/diss/nndss/casedef/q_fever_2009.htm.
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