

Appendix B: Provincial Case Definitions for Reportable Diseases

Disease: Rubella

Rubella

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 in the absence of recent immunization with rubella-containing vaccine:

- Isolation of rubella virus in culture from clinical samples (i.e., throat swabs, nasopharyngeal swabs/aspirates, urine)
OR
- Detection of rubella virus ribonucleic acid (RNA)) by nucleic acid amplification test (NAT)
OR
- Positive serologic test for rubella Immunoglobulin M (IgM) antibody using a recommended assay in a person with an epidemiologic link to a laboratory-confirmed case or has recently travelled to an area of known rubella activity
OR
- A significant (i.e., fourfold or greater) rise in rubella Immunoglobulin G (IgG) antibody level or a seroconversion using a recommended IgG assay in paired acute and convalescent sera

OR

Clinically compatible signs and symptoms with an epidemiologic link to a laboratory-confirmed case

3.2 Probable Case

- Clinically compatible signs and symptoms in a person with recent travel to an area of known rubella activity

4.0 Laboratory Evidence

4.1 Laboratory Confirmation

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

- Positive for rubella IgM antibody (with an epidemiologic link)
- Seroconversion or rise in rubella IgG titre
- Positive rubella virus culture with immunofluorescence (IF)
- Positive for rubella virus by direct NAT

4.2 Approved/Validated Tests

- Commercial tests for rubella IgM and IgG antibodies
- Standard culture for rubella virus
- NAT for rubella virus RNA

- Consult with laboratory about appropriate specimens for each testing methodology

4.3 Indications and Limitations

- IgM serology has the potential for false positive findings. Further confirmation (IgG paired serology or rubella virus detection) is required in cases specifically where there is no established epidemiological link (e.g. recent travel/exposure history).
- Because of the implications of acute rubella infection in a pregnant woman and the potential for a false positive IgM result, avidity testing of Rubella IgG antibodies is recommended for pregnant women with a positive IGM result when there is no change in observed rubella IgG levels. Although in North America most people consider a rubella IgG level of >10 IU/ml to confer immunity against rubella infection, the actual level that correlates with protection has not been fully defined.

5.0 Clinical Evidence

Clinically compatible signs and symptoms are characterized by fever and rash, and at least one of the following:

- arthralgia/arthritis
- lymphadenopathy
- conjunctivitis

6.0 ICD Code(s)

6.1 ICD-10 Code(s)

B06 Rubella

6.2 ICD-9/ICD-9CM Code(s)

056 Rubella

7.0 Comments

N/A

8.0 References

- National Notifiable Diseases Surveillance System. Case Definitions. [Internet]. Rubella (German measles); 2009 Jan 5. [cited 2009 Feb 12]. Atlanta, GA: Centers for Disease Control and Prevention (CDC); 2009..Available from http://www.cdc.gov/ncphi/diss/nndss/casedef/rubella_2009.htm.
- Ministry of Health and Long-Term Care, Public Health Division. iPHIS manual. Toronto, ON: Queen's Printer for Ontario; 2005.
- Nationally Notifiable Diseases Case Definitions with Canadian Public Health Laboratory Network (CPHLN) and Epidemiologic Group Draft Edits. March 2007. Based on case definitions as written in the: Health Canada. Case definitions for diseases under national surveillance. Can Commun Dis Rep. 2000; 26 Suppl 3:i-iv 1-122. Available from <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/00pdf/cdr26s3e.pdf>.

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