Appendix B: Provincial Case Definitions for Reportable Diseases

Disease: Rubella

Revised January, 2013
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 immunization with rubella-containing vaccine in the last 7 - 42 days:

- 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

- Provinces provide active, weekly case-by-case notification (including zero-notification) by provincial and territorial ministries of health to the Canadian Measles/ Rubella Surveillance System (CMRSS).
- Weekly reporting to the Pan-American Health Organization, in accordance with the goal of eliminating rubella and congenital rubella syndrome in the Western Hemisphere.

8.0 References


9.0 Document History

Table 1: History of Revisions

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<td>January 2013</td>
<td>General</td>
<td>New template.</td>
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<td>Section 9.0 Document History added.</td>
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