

Appendix B: Provincial Case Definitions for Reportable Diseases

Disease: Mumps

Mumps

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

- Isolation of mumps virus from an appropriate clinical specimen (e.g., buccal swab or collection of saliva from the oral cavity and urine sample)
- OR**
- Detection of mumps virus ribonucleic acid (RNA) by a validated nucleic acid amplification test (NAT) from an appropriate clinical specimen (e.g., buccal swab and urine sample; buccal swab is preferred)
- OR**
- Demonstration of seroconversion or a significant (e.g., fourfold or greater) rise in mumps IgG antibody level between the acute and convalescent sera
- OR**
- Positive serologic test for mumps Immunoglobulin M (IgM) antibody using a recommended assay in a person who is either epidemiologically linked to a laboratory-confirmed case or has recently travelled to an area of known mumps activity

OR

Clinically compatible signs and symptoms in a person with an epidemiologic link (i.e., close contact - See Section 7.0) to a laboratory-confirmed case

3.2 Probable Case

- Clinically compatible signs and symptoms in the absence of appropriate laboratory tests and in the absence of an epidemiologic link to a laboratory-confirmed case
- OR**
- Clinically compatible signs and symptoms in a person with recent travel to an area of known mumps activity

4.0 Laboratory Evidence

4.1 Laboratory Confirmation

The following will constitute a confirmed case of Mumps:

- Positive mumps virus culture
- Positive (NAT) for mumps virus
- Positive for mumps IgM antibody (with an epidemiologic link)
- Seroconversion or a significant (i.e., fourfold or greater) rise in mumps Immunoglobulin G (IgG) titre

4.2 Approved/Validated Tests

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

4.3 Indications and Limitations

- Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) is the new gold-standard for mumps detection
- A buccal swab is the preferred specimen
- IgM serology for mumps is most useful in cases of primary infection and may be of limited clinical use in an individual who has a history of mumps vaccination

5.0 Clinical Evidence

Clinically compatible signs and symptoms are characterized by acute onset of unilateral or bilateral tenderness and/or self-limited swelling of the parotid or other salivary gland, lasting > 2 days, and without other apparent cause.

6.0 ICD Code(s)

6.1 ICD-10 Code(s)

B26 Mumps

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

072 Mumps

7.0 Comments

Close contacts are persons who had direct contact with the oral/nasal secretions of a mumps case within the period of communicability (e.g., household contact)

Optimal recovery of mumps virus or detection of mumps RNA is achieved if specimens are obtained three to five days or within nine (9) days of symptom onset

8.0 References

- National Notifiable Diseases Surveillance System. Case Definitions. [Internet]. Mumps; 2008. Atlanta, GA: Centers for Disease Control and Prevention (CDC); 2008. [cited 2009 Feb 12]. Available from http://www.cdc.gov/ncphi/diss/nndss/casedef/mumps_2008.htm.
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