

Agency for Health <u>Protection and Promotion</u> Agence de protection et de promotion de la santé

OAHPP Public Health Laboratories Diagnostic Test Recommendations for Mumps April 2010

On suspect mumps cases, please order both virus isolation and serologic testing to confirm mumps infection:

1) Virus Isolation and RT-PCR testing

- a) Buccal swab for all suspect mumps cases (may be collected up to 9 days from date of symptom onset) :
 - Using the Viral Transport Media (VTM) collection kit (Item # N-0081), collect a buccal swab. If provided by the OAHPP Public Health Laboratories (PHL), these swab kits contain pink medium.
 - ii) Massage the parotid gland area (the space between the cheek and teeth just below the ear) for about 30 seconds prior to collection of the buccal secretions. The parotid duct (Stensen's duct) drains in this space near the upper rear molars. Put the swab into that space.
 - iii) Once the specimen has been collected, the swab is inserted into the pink medium and broken at the scored line.
 - iv) Ensure that the lab requisition indicates that this is a **buccal swab** and that you are requesting **mumps testing**. Mark the symptoms, dates of onset of parotitis, exposure history, and vaccination history on the requisition.
 - v) Store specimens in the refrigerator until sent to the laboratory. Specimens must be stored and shipped cold.
- b) Throat swab (can be taken in addition to a buccal swab and urine sample, up to 9 days from symptom onset) :
 - i) Using the Viral Transport Media (VTM) collection kit (Item # N-0081), take a throat swab. If provided by the PHL, these swab kits contain pink medium.
 - ii) Once the specimen has been collected, the swab is inserted into the pink medium and broken at the scored line.
 - iii) Ensure that the lab requisition indicates this is a throat swab and that you are requesting mumps testing. Mark the symptoms, dates of onset of parotitis, exposure history and vaccination history on the requisition.
 - iv) Store specimens in the refrigerator until sent to the laboratory. Specimens must be stored and shipped cold.

- c) Urine (can be collected up to 14 days following symptom onset) :
 - i) Collect clean catch urine and store in a screw top sterile container. Mumps is stable at 4 degrees Celsius for several days
 - ii) Ensure that the lab requisition indicates that this is a **urine specimen** and that you are requesting **mumps testing**. Mark the symptoms, dates of onset of orchitis and/or parotitis, exposure history and vaccination history on the requisition.
 - iii) Store specimens in the refrigerator until sent to the laboratory. Specimens must be stored and shipped cold.

2) Blood

- a) Acute serum: IgM and IgG for mumps within 5 days of symptom onset.
- b) Convalescent serum: If initial IgM is indeterminate or negative and mumps is considered likely, repeat IgM and IgG for mumps approximately 2 weeks after symptom onset.

Both acute and convalescent sera are recommended for the diagnosis of mumps. On the lab requisition, mark the symptoms, date of symptom onset, exposure history and vaccination history. Indicate that this is for the **diagnosis of mumps**.

Note: Please ensure that your local <u>public health unit</u> is aware of all individuals who are being tested for mumps.

Expected Time to Receive Results:

- Within 5 days for blood (serology) test results.
- Within 5 days for RT-PCR results
- Within 14 days for virus culture results

Supplies and Requisition Forms:

- Download a General Test Requisition Form
- To order VTM Collection Kits (Item # N-0081), download a <u>Requisition for Specimen</u> <u>Containers and Supplies - October 2009</u>

Additional laboratory testing information can be found in the <u>Specimen Collection Guide: Testing</u> <u>Guidelines</u>.

For more information, please contact the PHL helpline at 1-800-640-7221 or view <u>OAHPP</u> <u>Public Health Laboratory locations and contact information</u>