



**CLINICAL CASE DEFINITION OF MUMPS:** An illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary glands lasting 2 or more days, and without other apparent cause. Because clinical diagnosis is unreliable, all suspect cases should be laboratory confirmed.

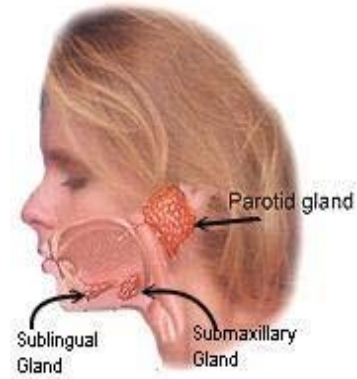
**GUIDE TO SPECIMEN COLLECTION FOR MUMPS TESTING\***

	What to collect and how to handle	When to collect	Where to send for testing
<p><b>Viral detection</b></p> <p>PCR, Culture</p>	<p><u>Specimen type:</u></p> <ul style="list-style-type: none"> <li>A <b>buccal swab</b> is the preferred specimen. See back of this page for information on how to perform a buccal swab. One swab will suffice for both PCR and viral culture</li> <li>Minimum volume of 50mL of <b>urine</b> in a sterile cup</li> </ul> <p><u>Specimen handling:</u></p> <ul style="list-style-type: none"> <li>Keep specimen cold (4°C or 39°F)</li> <li>Do not freeze</li> <li>Ship specimen using ice packs</li> </ul>	<p><b>Buccal Swab</b></p> <ul style="list-style-type: none"> <li>Collect within <i>5 days</i> of onset of parotitis</li> <li>1 to 3 days after onset of parotitis is optimal</li> </ul> <p><b>Urine</b></p> <ul style="list-style-type: none"> <li>Collect on day 4-10 after onset of parotitis</li> </ul>	<p>If patient meets clinical case definition, call Public Health - Seattle &amp; King County (206-296-4774) for permission to submit to the Washington Public Health Laboratory (WA PHL).</p> <p>If results are positive the specimen will be sent to CDC for confirmatory testing.</p>
<p><b>Serology</b></p> <p>IgM, IgG</p>	<p><u>Specimen type:</u></p> <ul style="list-style-type: none"> <li>7 to 10 ml of <b>blood</b></li> <li>Red or tiger top tube or SST tube</li> </ul> <p><u>Specimen handling:</u></p> <ul style="list-style-type: none"> <li>Store and ship specimen cold (using ice packs)</li> </ul>	<ul style="list-style-type: none"> <li>Collect acute serum within <i>5 days</i> of symptom onset (ideally at time of diagnosis)</li> <li>Collect convalescent serum <i>2 to 3 weeks</i> after symptom onset</li> </ul>	<p>Send serum specimen to your commercial lab for serologic testing for mumps.</p> <p>If IgM is positive, Public Health will work with you to retrieve the serum for confirmatory testing at WA PHL and CDC.</p>

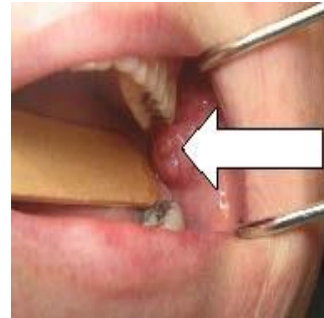
\*Items in **bold font** should always be collected when a patient meets the clinical case definition for mumps and the index of suspicion is high. Encourage collection of a throat swab for bacterial culture if there is any clinical indication that a bacterial infection is in the differential diagnosis.

## HOW TO COLLECT A BUCCAL SWAB FOR VIRAL TESTING

**Step 1:** Massage the parotid gland (area between the cheek and teeth below the ear) for 30 seconds prior to the collection of the buccal secretions. The parotid duct drains into this space near the upper rear molars.



**Step 2:** Swab the buccal cavity near the upper rear molars between the cheek and the teeth. Use a sterile Dacron or polyester swab with a metal or plastic shaft only\*. Place swab between rear molars and cheek and leave in place 10 to 15 seconds.



**Step 3:** Place the swab immediately into a sterile vial containing 2mL of viral transport media (pink liquid). Break or cut shaft & seal vial. Label the vial with patient's name, specimen source and date collected. Keep sample cold. If there is more than 1 day delay in shipping, use ice packs. Do NOT freeze.



**Step 4:** Contact the Public Health - Seattle & King County Communicable Disease Epidemiology and Immunization Section at **206-296-4774** for information on where to submit specimens, how to ship them, and to obtain the Washington Public Health Laboratory requisition form. Please do not ship buccal specimens to a commercial laboratory for testing. Send only serum specimens to your commercial lab.

\*Synthetic swabs with metal or plastic shafts MUST BE USED. Cotton swabs with wood shafts may contain substances that inhibit the enzymes used in PCR. Calcium alginate swabs cannot be processed at the Washington Public Health Laboratory (WA PHL).

Revised March 26, 2009

Reference: <http://www.cdc.gov/vaccines/vpd-vac/mumps/outbreak/faqs-lab-spec-collect.htm>