March 16, 2018

Increased reports of parotitis and instructions for collecting Mumps RT-PCR specimens

SUMMARY AND ACTION ITEMS

- Chicago Department of Public Health is receiving increased reports of parotitis
- Parotitis may be caused by influenza or mumps; consider testing for both
- Send parotid gland duct swab for mumps RT-PCR via commercial laboratory testing

Background:
The Chicago Department of Public Health (CDPH) has received an increased number of reports of parotitis over the past two months. Among other viruses, both influenza and mumps can cause parotitis. During flu season, we recommended testing for both viruses. Instructions for how to test for mumps are below.

Mumps RT-PCR by buccal swab is optimal for confirmation of mumps and preferred over IgM. The Illinois Department of Public Health (IDPH) Laboratory is currently not performing mumps PCR testing until further notice. Most commercial laboratories now offer mumps PCR testing; please contact your regular reference laboratory to inquire about the appropriate specimens the laboratory requires.

Specimen Collection Instructions:
1. The preferred specimen is a parotid gland duct swab collected within 9 days (ideally 1-3 days) from parotitis onset.
2. Massage the parotid (salivary) glands for 30 seconds.
3. The swab specimen needs to be collected from the buccal cavity near Stensen’s duct, typically near the upper rear molars, between the cheek and teeth, though anatomy can be distorted with parotid gland swelling. Sweep the swab between the cheek and gum near the upper molar to the lower molar area. Synthetic swabs are preferred, such as a commercial product designed for the collection of throat specimens or a flocked polyester fiber swab.
4. For sending to commercial lab: Call lab to confirm specimen criteria. Local labs that accept specimens for RT-PCR are below. In general, swabs should be placed in 3 ml of standard viral transport medium (VTM) or viral culture medium (VCM) and remain for at least 1 hour at 4°C. The swab can be broken off and left in the tube or discarded.

<table>
<thead>
<tr>
<th>Lab</th>
<th>Test Code</th>
<th>Test Type</th>
<th>Specimen</th>
<th>Material</th>
<th>Shipping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quest Diagnostics</td>
<td>70172</td>
<td>RNA RT-PCR</td>
<td>Oral/Buccal Swab</td>
<td>Polyester Swab VCM Green Cap</td>
<td>In 3ml of media Refrigerated 7 days Frozen 30 Days</td>
</tr>
<tr>
<td>ACL</td>
<td>PCRMUM</td>
<td>RNA RT-PCR</td>
<td>Oral/Buccal Swab</td>
<td>Polyester Swab VTM Red Cap</td>
<td>Refrigerated 7 Days Frozen 30 Days Sent to ARUP for processing (6 days)</td>
</tr>
<tr>
<td>ARUP</td>
<td>2009387</td>
<td>RNA RT-PCR</td>
<td>Oral/Buccal Swab</td>
<td>Polyester Swab VTM Red Cap</td>
<td>In 3ml of media Refrigerated 7 Days Frozen 30 Days</td>
</tr>
</tbody>
</table>

Patient counseling:
If mumps is suspected, patients should be instructed to avoid congregate settings for 5 days from the onset of parotitis. If you have additional questions, please call CDPH VPD program at (312) 746-5911 for consultation.

Additional Resources:
For general healthcare provider information on mumps: [https://www.cdc.gov/mumps/hcp.html](https://www.cdc.gov/mumps/hcp.html)
CDC specimen collection instructions: [https://www.cdc.gov/mumps/lab/specimen-collect.html](https://www.cdc.gov/mumps/lab/specimen-collect.html)