June 11, 2019

Dear Colleagues,

**RE: Respiratory Pathogen Testing – Summer Algorithm**

Typically, the BCCDC Public Health Laboratory (BCCDC PHL) screens clinical samples submitted for respiratory virus detection for Influenza A/B/RSV by an in-house developed RT-PCR assay. Samples are tested for a broader array of viruses using the Luminex NxTAG Respiratory Pathogen Panel (RPP) if the Influenza A/B/RSV PCR is negative and the patient meets one or more of the following criteria: (i) <5 years old, (ii) part of an outbreak, or (iii) hospitalized (by request). Samples with requests for atypical bacterial agents are automatically tested by the NxTAG RPP.

**From June 9 to Sept 29, 2019* all respiratory virus/bacterial requests will be tested by the NxTAG RPP assay only (the screening Influenza A/B/RSV assay will not be used). This panel assay detects a full range of respiratory viruses, excluding MERS, as well as atypical bacteria (Table 1). Respiratory testing will occur every Tuesday, Wednesday, Thursday, Friday, and Sunday, except Tuesdays after Monday holidays. This testing algorithm change reflects low influenza and RSV infection rates in the summer months.

*Date may change if an early influenza/respiratory season is observed.

**Table 1. Luminex MAGPIX NxTAG RPP assay targets**

<table>
<thead>
<tr>
<th>Viral targets</th>
<th>Respiratory Syncytial Virus A</th>
<th>Parainfluenza 1</th>
<th>Coronavirus HKU1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza A H1</td>
<td>Respiratory Syncytial Virus B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza A H3</td>
<td>Adenovirus</td>
<td>Parainfluenza 2</td>
<td>Coronavirus NL63</td>
</tr>
<tr>
<td>Influenza A 2009 H1N1</td>
<td>Rhinovirus/Enterovirus</td>
<td>Parainfluenza 4</td>
<td>Coronavirus 229E</td>
</tr>
<tr>
<td>Influenza B</td>
<td>Human Metapneumovirus</td>
<td></td>
<td>Human Bocavirus</td>
</tr>
</tbody>
</table>

**Bacterial targets**

- *Chlamydophila pneumoniae*
- *Legionella pneumophila*
- *Mycoplasma pneumoniae*

For other testing details please refer to the BCCDC Public Health Lab test menu: [http://www.elabhandbook.info/phsa/](http://www.elabhandbook.info/phsa/)

Sincerely,

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