

Date: January 14, 2019
To: South Zone Physicians
From: Provincial Laboratory for Public Health (ProvLab) & CLS
Re: Influenza/RSV PCR Testing in South Zone

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Key Messages:

- Flu/RSV PCR:* Effective Jan. 14, 2019, PCR for influenza A/B and RSV is being piloted in the Medicine Hat and Lethbridge hospitals to improve turnaround times of respiratory virus testing.
- Hospital patients (emergency and inpatients) are eligible for testing.
- RPP:* The respiratory pathogen panel (RPP) performed at the Provincial Laboratory for Public Health (ProvLab) will continue to be available for hospital patients, but only in specific clinical circumstances.
- Community Flu:* Community patients will continue to have influenza tested by ProvLab.

Background:

- RPP:* The RPP is a viral panel with 20 targets performed by ProvLab, currently representing most of the respiratory virus testing in the province.
- It is performed for hospital patients, with a turnaround time of 48-72 hours.
- Flu/RSV PCR:* The Influenza/RSV PCR detects influenza A, B, and RSV with a sensitivity of 95% and a specificity of 98% for all three pathogens.
- Turnaround times will be 4 to 6 hours once the specimen is received at the laboratory.
 - Rapid RSV antigen testing was previously available at regional hospitals, but sensitivity was poor (75%) and required confirmation by RPP.
 - The Influenza/RSV PCR will replace the previous RSV antigen test, and most of the RPP testing currently being performed.
- Community Flu:* Community patients will continue to be tested for influenza only by PCR at ProvLab.

Action Required:

- Indications:* Not all patients with viral respiratory symptoms require viral testing.
- Only order testing in situations where results will impact clinical management, e.g. appropriate use of antimicrobials (antivirals/antibiotics).
 - For bed utilization, including isolation duration and cohorting, viral etiology may be helpful in select circumstances, but if viral testing is planned for these indications alone, consult infection prevention & control (IPC) and/or the Medical Officer of Health (MOH). Additional precautions are indicated based on respiratory symptoms and risk assessment, not solely on confirmed viral etiology.
- Testing:* Acceptable specimens for testing remain the same: nasopharyngeal swabs or aspirates (in universal transport media), and bronchoscopic specimens.
- Hospital patients must have their orders submitted through Meditech.

Flu/RSV PCR: In most situations, influenza and RSV testing will be sufficient.

- Influenza/RSV PCR can be ordered specifically (e.g. "NP swab for flu", "flu/RSV testing") or generically (e.g. "NP swab for viruses", "respiratory virus testing").
- This test will only be performed once every 48 hours on a single patient.
- Testing submitted overnight will be performed the next morning except if the test is ordered stat. (In most cases, stat testing will not be required.)

RPP: Clearly indicate "RPP" or "respiratory pathogen panel" when ordering if the test is needed. Orders not specified for RPP will be tested for Influenza/RSV only.

- RPP orders must include a history of specified clinical criteria, including:
 - hypoxic respiratory failure, e.g. intubated, persistently high O₂ requirements
 - severe immunocompromise, e.g. transplant recipient, immunosuppressive medications
 - outbreaks, where IPC or public health are investigating
- If the RPP is needed in other situations, page the virologist/microbiologist-on-call for ProVLab South at 403-944-1200, or through FMC switchboard (403-944-1110).

Community Flu: Continue to send specimens with the ProVLab requisition.

Inquiries and feedback may be directed to:

Michele Claypool, Microbiology Medicine Hat Regional Hospital (403) 502-8648 ext. 1202

Deb Sweeney, Microbiology Chinook Regional Hospital (403) 388-6108

This bulletin has been reviewed and approved by:

Dr. Graham Tipples, Medical/Scientific Director, ProVLab

Dr. Julio Silva, Medical/Scientific Director, Medicine Hat Regional Hospital Laboratory

Dr. Michael Greeff, Medical/Scientific Director, Chinook Regional Hospital Laboratory