

Severe Respiratory Illness (SRI) Rule-Out – Laboratory Testing

Respiratory Virus Test Kits – Materials for collecting nasopharyngeal or throat swab for respiratory virus tests include: flock swab, rayon swab and universal transport media (UTM) which is a pink liquid media and ProvLab requisition, are available through the Provincial Public Health Laboratory.

To facilitate timely result tracking it is necessary that:

- Testing be coordinated in consultation with the local Medical Officer of Health.
- **ProvLab MOC/VOC must be notified of all STATs in advance** (ProvLab MOC/VOC will notify and coordinate testing with respective local laboratories). **Phone: 403-944-1200 ProvLab Calgary 780-407-7121 ProvLab Edmonton**
- *SRI Rule Out (STAT)* – If requesting STAT testing, send samples destined for Provincial Laboratory via local courier arrangements for STATs.
- *SRI Rule Out (non-STAT)* - samples destined for Provincial Laboratory, considered urgent but not STAT, must be sent to Provincial Laboratory within 24 hours via local courier arrangements.
- Label all requisitions with “**SRI-Rule Out**” and if applicable indicate “**EI number**”.

Sample Type & Test	Requisitions	Comments
<p style="text-align: center;"><u>Nasopharyngeal (NP) Swab or Aspirate, Throat Swab</u></p> <ul style="list-style-type: none"> • Respiratory Virus - DFA & Nucleic Acid Amplification Testing by Respiratory Virus Panel (RVP). 	Provincial Laboratory requisition	<ul style="list-style-type: none"> ✓ NP swab (<i>use flock swab for better sample collection</i>) or aspirate and throat swab (<i>use rayon swab</i>) for respiratory virus needs to be submitted in Universal Transport Medium (UTM) stored at room temperature – ensure the cap on the UTM is screwed tight. Check expiry date before use. ✓ DFA is performed on NP swab or aspirate only. ✓ Put ONLY one NP sample per Biosafety bag to prevent contamination of other samples in case of sample leakage.
<p style="text-align: center;"><u>Sputum</u></p> <ul style="list-style-type: none"> • Gram stain • Aerobic culture • AFB (if indicated) • Fungal culture (if indicated) 	<u>See comments</u>	<ul style="list-style-type: none"> ✓ Use sterile sputum containers. More than one aliquot might be needed based on tests ordered and which laboratory does the testing. Not suitable for respiratory virus testing. ✓ Sputum collected for AFB testing should be submitted with a ProvLab requisition and will be tested at ProvLab. ✓ Follow directions for collection and transportation according to your designated laboratory for bacterial and fungal cultures where they will be tested.
<p style="text-align: center;"><u>Urine</u></p> <ul style="list-style-type: none"> • <u>Legionella antigen (if indicated / if available)</u> 	<u>See comments</u>	<ul style="list-style-type: none"> ✓ Use sterile urine containers. ✓ Follow directions for collection and transportation according to your designated laboratory (offered only by certain regional laboratories, e.g., Calgary Laboratory Services).
<p style="text-align: center;"><u>Blood (serology)</u></p> <ul style="list-style-type: none"> • Mycoplasma IgM 	Provincial Laboratory requisition	<ul style="list-style-type: none"> ✓ Use local supplies for blood collection. ✓ Collect one 3 or 5 mL Vacutainer with serum separator (SST) and send directly to Provincial Laboratory without centrifugation or aliquoting.
<p style="text-align: center;"><u>Blood Culture</u></p> <ul style="list-style-type: none"> • Aerobic/anaerobic culture 	Local laboratory requisition	<ul style="list-style-type: none"> ✓ Use local blood culture kits. ✓ Follow directions for blood culture collection and transportation according to your designated laboratory where they will be tested.
<p style="text-align: center;"><u>BAL (if clinically indicated)</u></p> <ul style="list-style-type: none"> • Gram stain • Aerobic culture • Respiratory Virus Panel (RVP only) • AFB (if indicated) • Legionella culture (if indicated) • Fungal culture (if indicated) • CMV and HSV (if indicated) 	<u>See comments</u>	<ul style="list-style-type: none"> ✓ BAL sample may require more than one aliquot depending upon the tests ordered and which laboratory does the testing. Not suitable for DFA for respiratory virus. ✓ For ALL Provincial Laboratory tests (respiratory virus, AFB +/- Legionella depending on regional laboratory test manual) send one sample which will be aliquoted at the Provincial Laboratory as required. ✓ If the sample volume is limited clarify the order of priority for each of the tests requested.

Transportation

All samples should individually bagged and sent to the appropriate laboratory as “diagnostic samples”. For suspected TB cases, samples should be sent as “infectious”.

Laboratory Reports

ALL “SRI Rule-Out” results on these patients **MUST** be copied to the Medical Officer of Health by FAX. Future changes related to laboratory testing will be updated and circulated as required.