

Severe Respiratory Illness (SRI) Rule-Out – Laboratory Testing – Updated April 27 2009

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 your local laboratory and 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 <u>flock</u> swab or aspirate and throat <u>rayon</u> swab 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</u> (if indicated) 	<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; or CLS offers this test, and samples received by ProvLab will be forwarded to CLS for testing in the short-term.
<p style="text-align: center;"><u>Blood (serology)</u></p> <ul style="list-style-type: none"> • Mycoplasma IgM • Serum sample for archival for future studies as required 	Provincial Laboratory requisition	<ul style="list-style-type: none"> ✓ Use local supplies for blood collection. ✓ Collect TWO 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"> • Respiratory Virus Panel (RVP) • Gram stain / Aerobic culture • 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 (minimum volume 5 ml). ✓ If the sample volume is limited, RVP testing will take priority over aerobic culture. Clarify the order of priority for each of the other tests requested.

Sample Type & Test	Requisitions	Comments
<p><u>Lung Tissue / Biopsy</u></p> <ul style="list-style-type: none"> Respiratory Virus Panel Bacterial / Fungal / AFB / Legionella (if indicated) 	<p><u>See comments</u></p>	<ul style="list-style-type: none"> ✓ Please send in sterile container. ✓ For ALL Provincial Laboratory tests (respiratory virus, AFB +/- Legionella depending on regional laboratory test manual) use Provincial Laboratory requisition. ✓ Follow directions for collection and transportation according to your designated laboratory for bacterial and fungal cultures where they will be tested.
<p><u>STOOL</u></p> <ul style="list-style-type: none"> Stool specimen (if indicated) 	<p><u>See comments</u></p>	<p>If patient has diarrhea:</p> <ul style="list-style-type: none"> ✓ Send stool for routine enteric pathogens and O&P as clinically indicated according to your designated laboratory. ✓ Send a stool sample without preservative to ProvLab for storage in the event it may be required for future testing.

Transportation: All samples should individually bagged and clearly labeled as “SRI-Rule-Out” and EI number when available, and sent to the appropriate laboratory as “diagnostic samples”.

Future changes related to laboratory testing will be updated and circulated as required.