

# S · A · R · S ·

December 4, 2003

## Communication Regarding Laboratory Tests for SARS in Ontario

### **Who offers laboratory tests for SARS in Ontario?**

Laboratory tests (RT-PCR, serology) for detection of the SARS-associated coronavirus (SARS-CoV) are available in Ontario from the Ontario Laboratory Working Group for the Rapid Diagnosis of Emerging Infections. This Working Group includes the Central Public Health Laboratory (CPHL) and the microbiology laboratories at The Hospital for Sick Children, Sunnybrook and Women's College Health Science Centre, Toronto Medical Laboratories & Mount Sinai Hospital and St. Joseph's Hospital, Hamilton. Other laboratories in Ontario may also offer this type of testing in the near future. Specimens can be sent to any of these laboratories.

### **What specimens should I send?**

Please refer to the Health Canada (HC) guidelines (<http://www.hc-sc.gc.ca/pphb-dgsp/sars-sras/sri.html>) for recommendations regarding testing for causes of severe respiratory illness, including SARS-CoV. It is important in the non-outbreak period that testing for SARS-CoV be restricted to cases with a high clinical index of suspicion. These include the following:

- *SARS-CoV Laboratory Investigation Protocol for the SARS Post-Outbreak Period* (In Ontario use the Clinical Information Form for Ontario that is appended to this document. **Do not use the HC tracking form**).
- *The Canadian Public Health Laboratory Network (CPHLN) Laboratory Testing for Patients with Severe Respiratory Illness (SRI) Not Yet Diagnosed (NYD)*.
- *The Canadian Public Health Laboratory Network (CPHLN) Recommended Specimens for the Diagnosis of SARS-CoV*.

In addition to the Health Canada guidelines, it is also recommended that:

- Stool should always be sent for RT-PCR for SARS-CoV. Rectal swab should only be sent if a stool specimen cannot be obtained.
- Nasopharyngeal swabs are recommended for RT-PCR. However, if a patient has a productive cough, sputum should also be sent.

**Which requisition should I use?**

A clinical information form should be used for all requests for testing for SARS-CoV. This form should be filled out completely and sent in with the usual requisition (also fully completed) required for the laboratory performing the testing. It is necessary to fill out a form for every case that fits the case definition, so that public health can be involved in the management of suspect or proven cases. **Testing will not be performed if forms are not filled out with all pertinent information.**

Please note that all clinical cases of severe respiratory illness fitting the case definition in document 1 are ***reportable to public health as a communicable disease***. In addition, all positive laboratory tests for SARS-CoV should be reported to the health unit in question, even before confirmatory testing is finalized. Management of the case in question will be guided by laboratory testing, public health and the attending physician.

# Clinical Information Form for SARS-CoV Testing In the SARS Post-Outbreak Period

Please complete and attach this slip to the laboratory requisition.  
Testing will not be performed if this form is not completed.

<b>Last name:</b> _____	<b>First Name:</b> _____
<b>Date of Birth (yyyy/mm/dd):</b> _____	<b>Health Ins #:</b> _____
<b>Referring Institution:</b> _____	
<b>SRI Case Status:</b> [Please check one]	
<input type="checkbox"/> <b>Hospitalized SRI (severe respiratory illness) patient</b> <input type="checkbox"/> <b>Deceased SRI</b> <b>With at least one of the following:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>travel history to China</b> (or other zone of emergence / re-emergence if applicable – specify travel history below)</li> <li><input type="checkbox"/> <b>close contact</b> (including health care providers) of a symptomatic person who has been to a potential zone of emergence/re-emergence</li> <li><input type="checkbox"/> <b>laboratory worker who has been in direct contact with live SARS-CoV</b></li> </ul>	<input type="checkbox"/> <b>Outbreak investigation by Public Health</b>
<b>Date of onset of symptoms:</b>  ____/____/____ <b>dd/mm/yyyy</b>	<b>COMMENTS:</b>
<input type="checkbox"/> <b>travel history, please specify location:</b> _____	

**Important :**

Please notify the testing laboratory if STAT testing for SARS-CoV PCR is required. When SARS-CoV testing does not exist in your institution/geographic area, please send specimens to your local public health laboratory.

**Recommended SARS-CoV Laboratory Investigation of SRI**

- 1. Serology:**
  - **Acute and convalescent serum** (if no seroconversion after 14 or 21 days, collect a third specimen after 28 days) in a red tube (**10mL**, minimum).
- 2. PCR:**
  - **Stool** - fresh or in a sterile container. If stool is not available, a rectal swab is a second (less preferred) choice.
  - **Nasopharyngeal swab or aspirate** in viral transport medium (**2mL**).
  - **Lower respiratory tract specimens**, including sputum, BAL or lung biopsy if collected.
- 3. Autopsy for PCR:**
  - Lung, bowel, spleen, lymph nodes. FRESH FROZEN: DO NOT place autopsy specimens for SARS CoV PCR in formalin.