

Severe Respiratory Illness (SRI) Advisory

Date: April 21, 2009

From the office of the Medical Officer of Health

SRI Context:

The Public Health Agency of Canada (PHAC) has advised us of two recent situations of severe respiratory illness that remind us of the need for ongoing SRI surveillance and response. The first is in south and central Mexico where clusters of severe respiratory illness are occurring, with a high case fatality rate. Individuals primarily affected are healthy young adults 25-44 years of age, including some HCWs. Some cases have tested positive for influenza A and B. The second situation involves the detection of two unrelated cases of swine influenza A (H1N1) in children in California – the cases have recovered and did not require hospitalization. Human cases of avian H5N1 influenza continue to occur in Egypt, China and Vietnam (25 to date in 2009).

We are being asked by PHAC and Alberta Health & Wellness to continue to carry out surveillance for SRI as outlined below.

Phase Level:

No Change

Pandemic Phase 3, SRI Phase 0

SRI Case Definition:

- Respiratory symptoms including history of **fever >38°C** and **new onset of cough** or **breathing difficulty**, with **severe illness progression** (pneumonia, acute respiratory distress syndrome (ARDS), encephalitis or other severe and life-threatening complications) and no alternate diagnosis within the first 72 hours of hospitalization;

AND

- A positive response to one of the following questions:
 - “Did you travel outside of Canada in the past 10 days?” **OR**
 - “Do you live with or were you in close contact with someone who has a similar illness and who traveled outside of Canada in the 10 days before he/she became sick?”

Reporting Requirements:

No Change

Emergency Departments, acute care facilities, urgent care centres – Please report all suspect SRI cases to the Medical Officer of Health on Call at (403)264-5615 for further investigation and management.

Laboratory Rule-Out/Rule-In Tests:

No Change

Notify receiving laboratory and arrange urgent transport of specimens, marking them as high priority with positive travel history. Copy all results to the Medical Officer of Health by fax (403)955-6755.

- **NP Swab (Aspirate):** Order **Respiratory Virus Panel** (DFA, NAT) on ProvLab requisition. Send in M5 Viral Transport medium (pink) that is stored at room temperature.
- **Blood:** Order Aerobic/Anaerobic Culture on CLS requisition. Order Mycoplasma IgM (collected in SST tube) on ProvLab requisition.
- **Sputum:** Order Gram Stain, Aerobic Culture on CLS requisition; order AFB (if indicated), Legionella on ProvLab requisition.
- **BAL (if clinically indicated):** Order Gram stain, micro C&S on CLS requisition; order AFB (if indicated), Legionella culture, Respiratory Virus Panel (DFA, NAT), CMV and HSV culture on ProvLab requisition.

Severe Respiratory Illness (SRI) Advisory

Date: April 21, 2009

From the office of the Medical Officer of Health

Infection Control Recommendations:

No Change

EMS Setting: Droplet and Contact Precautions

Acute Care Facility Setting: Droplet and Contact Precautions

For patients presenting with fever and cough:

- Advise to: cover mouth and nose when coughing or sneezing; do frequent hand hygiene; stay 1 metre distant from others in waiting room (or isolate in private room); wear surgical/procedure mask if isolation not possible

For patients with fever/cough and more severe respiratory symptoms (e.g., shortness of breath), ask about:

- travel outside Canada within the last 10 days, or
- contact within last 10 days with a person with a similar illness who had traveled outside of Canada in the 10 days before they became ill.

If Yes to either question:

- Isolate immediately - negative pressure isolation is not required. If unable to isolate immediately, ask patient to wear a procedure/surgical mask and to minimize contact with others by staying 1 metre (3 feet) away from them.
- In addition to standard practice, staff in direct contact with the patient should don appropriate Personal Protective Equipment (PPE) for organisms spread by droplet and contact:
 - **Gloves, gowns, mask.** [Procedure/surgical masks are considered adequate for routine care. N95 respirators should be used by staff for aerosol-producing procedures (e.g., intubation, bronchoscopy)].
 - **Hand hygiene** must be done before and after use of gloves.
 - **Eye protection** should be worn as standard practice to prevent exposure to respiratory droplets.

Additional References:

- Public Health Agency of Canada Travel Advisories: <http://www.phac-aspc.gc.ca/tmp-pmv/pub-eng.php>
- Nasopharyngeal Swab Collection: (videos on how to collect these specimens are available at <http://www.provlab.ab.ca/education.htm>). Information sheet is at http://www.calgaryhealthregion.ca/moh/pdf/throatswab_collection_instructions_version2.pdf