SEVERE ACUTE RESPIRATORY INFECTION (SARI)

Severe Acute Respiratory Infections (SARIs) tend to be rapidly progressive respiratory illnesses due to pathogens that have the potential for large scale epidemics. A key factor is the determination of risk based on epidemiologic factors, which in turn is related to exposure in an “area of concern”[10.7].

At the time of writing, MERS CoV & H7N9 (Avian Influenza) are described as SARIs; seasonal influenza, including H1N1 are not SARIs.

Severe acute respiratory symptoms and/or SARI alerts (notifications issued by local Medical Officer of Health MOH / MB Health / Public Health Agency of Canada [PHAC]), should trigger clinicians to “Think, Tell and Test”[10.7].

Think about the possibility of an emerging respiratory infection (e.g., novel influenza A virus)

Tell the local medical officer of health or local public health official

Test for pathogen after appropriate consultation and based on clinical symptoms

1. Cause/Epidemiology
The causative organism of a SARI may not yet be identified or easily established. A heightened index of suspicion for emerging infectious respiratory diseases includes global surveillance/screening and clinical presentation of individuals with the following exposure risk factors:

- Travel to affected areas within suspected incubation period prior to symptom onset;
- Close contact with an ill person who has traveled to affected areas within the suspected incubation period prior to the onset of symptoms;
- Occupational exposure involving direct healthcare, laboratory, or animal exposure.

2. Clinical Presentation
All of the following criteria must be present to be considered a SARI case[10.10]:

- **Respiratory symptoms**: fever* (over 38°C) **AND** new onset of (or exacerbation of chronic) cough or breathing difficulty
  
  *Note: fever may not be prominent in patients under 5 or over 65 years of age, or as well as immunosuppressed individuals receiving anti-pyretic medications such as corticosteroids. Self-reported symptoms of elevated body temperature should be considered as evidence of fever.

**AND**

- **Evidence of illness progression, defined by the following:**
  
  o Radiographic evidence of infiltrates consistent with pneumonia **OR** diagnosis of acute respiratory distress syndrome (ARDS) or severe influenza-like illness (ILI) which may also include complications such as encephalitis, myocarditis or other severe and life-threatening complications
AND
- Admission to the ICU/other area of the hospital where critically ill patients are cared for OR mechanical ventilation

AND
- No alternate diagnosis within the first 72 hours of hospitalization:
  - Results of preliminary clinical and/or laboratory investigations, within first 72 hours of hospitalization cannot ascertain a diagnosis reasonably explaining the illness

AND
- One or more of the following exposures/conditions:
  - Resident of or recent travel (within $\leq 14^{[10.1, 10.5]}$ days of illness onset) to a country where human cases of novel influenza virus or other emerging/re-emerging pathogens have recently been detected or are known to be circulating in animals**
    **Refer to the PHAC Emerging Respiratory Pathogens web page for the most recent information: http://www.phac-aspc.gc.ca/tmp-pmv/notices-avis/index-eng.php
  - Close contact*** with an ill person who has been to an affected area/site within $14^{[10.1, 10.5]}$ days prior to onset of symptoms
    ***Anyone who provided care for the patient, including a health care worker, family member, or anyone who had other similarly close physical contact. “Close physical contact” may also be defined by the context of anyone who stayed at the same place (that is, lived with or visited) as a probable or confirmed case while the case was ill.
  - Exposure to settings in which there have been mass deaths or illness in domestic poultry or swine in the previous six weeks
  - Occupational exposure involving direct health care, laboratory or animal exposure:
    - **Health care exposure**: health care workers who work in an environment where patients with SARI are being cared for, particularly patients requiring intensive care
    - **Laboratory exposure**: a person who works directly with laboratory biological specimens
    - **Animal exposure**: a person employed as one of the following:
      - Poultry/swine farm worker
      - Poultry/swine processing plant worker
      - Poultry/swine culler (catching, bagging, transporting, or disposing of dead birds/swine)
- Worker in live animal market
- Dealer or trader of pet birds, pigs or other potentially infected animals
- Chef working with live or recently killed domestic poultry, swine or other potentially infected animals
- Veterinarian worker, or
- Public health inspector/regulator

3. Incubation Period
This may be prolonged and may vary dependent on the causative organism. [10.6]

4. Transmission
The SARI route of transmission is dependent on the causative organism.
Where the causative organism is emerging and therefore not fully understood, the route is assumed to be Airborne and Droplet/Contact until known to be otherwise [10.3]. Transmission characteristics may vary and evolve. [10.10]

5 Infection Prevention and Control Practices

5.1 In Triage Settings
Patients Presenting with Respiratory Symptoms
Instruct patients presenting with respiratory symptoms to:
- Perform hand hygiene
- Follow Respiratory Etiquette
- Put on a procedure or surgical mask
- Maintain a distance of ideally 2 metres, minimally 1 metre from other individuals. If possible, immediately proceed to a private room.

5.2 Case Management
Implement Airborne and Droplet/Contact Precautions
Notify site IP&C – this includes after-hours notification
If IP&C determines the patient was cared for without the use of appropriate precautions, i.e., if the patient was seen in an outpatient environment without the use of precautions listed in 5.1
OR
The patient was admitted in an inpatient environment and not managed on Airborne, and Droplet/Contact Precautions.
Refer to section 9 Outbreak Management Guidance when potential exposure has occurred
Refer to Airborne Precautions, page 5.3 and Droplet/Contact Precautions, page 5.25 in the Acute Care IP&C Manual.
Reassess daily. After 72 hours, the attending physician shall conduct a thorough review in consultation with Infectious Diseases and site IP&C to determine if the person meets the SARI case definition. Refer to Appendix A.

Maintain IP&C practices until the period of communicability of the disease, if known, is over. If the period of communicability is unknown, consult with IP&C prior to discontinuing precautions.

5.3 Accommodation

Place patient in a single room with negative pressure ventilation in relation to surrounding areas (i.e., an AIIR). Rooms should have dedicated toilet, hand hygiene, and bathing facilities.

- Keep door closed whether or not the patient is in the room. Keep door closed according to the Air Exchange Chart (Page 12.8). or for one hour following the discontinuation of Airborne Precautions
- The Patient must stay in the room
  - When exiting the room for medically essential purposes, the patient shall wear a procedure or surgical mask
  - The patient shall perform hand hygiene before donning, and after removal of the mask
  - When there are exceptional circumstances, the patient may leave the room, only in consultation with Infection Prevention and Control

NOTE: When an AIIR is not available, consult Infection Prevention and Control before patient placement to determine room placement and/or cohorting of patients.

If the AIIR is occupied by a non-SARI patient, transfer the non-SARI patient to a facility with an AIIR available. Coordinate these arrangements in advance with receiving facilities. The following are implemented for the non-SARI patient until he/she can be transferred:

- Single room with door closed
- Physical separation of the patient if a single room is not available
  - Mask the patient with a procedure or surgical mask, and
  - Provide N95 respirators for everyone entering the room
- For facilities without AIIR and where transfer is not feasible, maintain patient in a single room with the door closed. Place these patients on units where there are no immunocompromised patients.
- If numbers of AIIRs are limited, set priority for use according to the impact of potential airborne transmission i.e., SARI, infectious Tuberculosis > Measles > Varicella > disseminated zoster > extensive localized zoster.

Refer to: AIIR location list available at http://home.wrha.mb.ca/prog/ipc/POCKETBEDLIST2012.xls

During an outbreak of a novel respiratory infection, some sites may be required to establish units for those with suspect or confirmed infection. The purpose of dedicated units would be to confine and contain patients who are infected and to make it easier to provide consistent care.
5.4 Hand Hygiene

Hand hygiene shall be performed according to the 4 Moments of Hand Hygiene:

- Before initial patient/patient environment contact
- Before aseptic/clean procedures
- After body fluid exposure risk
- After patient/patient environment contact

5.5 Personal Protective Equipment (PPE)

Put on all PPE before entering the room/bed space. This includes the following in order of application:

- Gown
- N95 respirator****
  - N95 respirators shall be
    - Fit-tested for healthcare workers, as directed by OESH
    - Seal-checked by healthcare workers prior to each use. Seal checking procedure is as follows:
      - Cover respirator with both hands
      - Perform one of the following:
        - Inhalation Test: If respirator collapses slightly there is an adequate seal
        - Exhalation Test: If no air escapes respirator, there is an adequate seal
    - Worn once
    - Changed:
      - When wet
      - If the front of the N95 respirator has been touched, and/or
      - When contaminated with patient secretions
    - Removed in a manner preventing contamination
    - Removed after exit of the isolation room/cubicle
  - ****Certified by the National Institute of Occupational Safety and Health (NIOSH) with an N95 efficiency rating or better
  - N95 respirators shall never dangle around the neck
- Face shield, safety glasses, or goggles
- Gloves

Refer to Putting it On / Taking it Off available online, in this manual or for order through HSC Print Shop at HSC Print Shop for additional information.

**If you believe your hands have become contaminated during any stage of PPE removal, hand hygiene must be performed before proceeding further**

Powered Air Purified Respirator Systems (PAPRS): There is no evidence to support the need for enhanced respiratory PPE such as the PAPRS during the care of patients with a SARI. These devices, which may increase the risk of self-contamination during their removal, disposal, cleaning and decontamination, are not recommended. [10.10]
5.6 Patient Transport

Transport patient out of the isolation room for **medically essential purposes only**.

Notify **Patient Transport Services** and the receiving department regarding the need for **Airborne and Droplet/Contact Precautions** *in advance* of the transport.

- Two individuals should be available to transport the patient if necessary
- Determine how traffic pathways will be controlled and secured prior to transport (e.g., dedicate corridors and elevators). Hallways may require clearing in advance depending on the pathogen
- During transport, the ‘clean’ person (no patient contact) shall open doors and push elevator buttons
- The chart shall be carried by the ‘clean’ person or placed in a protective cover (e.g., plastic bag) and transported on the bed

**NOTE – the outside of the protective cover is contaminated**

- If the patient is being transported in his/her own bed, clean and disinfect the siderails, footboard, and headboard prior to transport
- Cover transport chair or stretcher with a sheet prior to transport
- Clean and disinfect transport chair or stretcher after use
- Healthcare workers involved in transport shall
  - Wear an N95 Respirator
  - Perform hand hygiene and put on clean gown and gloves upon leaving the patient room
  - **NOTE: transport staff do not require gloves or gown if they do not anticipate contact with the patient or bed/stretcher/isolette/transport chair**
  - Remove gloves and perform hand hygiene immediately if gloves become soiled during transport

- Patient
  - Cover open patient wounds
  - Perform hand hygiene when leaving the room and wear clean clothes, housecoat, or cover gown. Do not place the patient in isolation gown

- **Transporting the patient (No artificial airway):**
  - Put on a procedure or surgical mask on the patient if tolerated

- **Transporting the patient (with an artificial airway):**
  - Ideally, transport infants in an incubator
  - Resolve any air leaks prior to transport
  - Inflate/maintain inflation of endotracheal tube (ETT) cuff, (if present) for the duration of the transport; to minimize contamination
  - If an air leak occurs during transport and is not readily resolved, consider extubation and a tube exchange
  - Exhaled gases must be N100 filtered
  - For special circumstances consult Respiratory Therapy for guidance regarding airway management during the transport, as well as the site Infection Control Professional
5.7 Equipment and Environment

Dedicate patient care equipment (e.g., thermometers, blood pressure cuffs, lifts/slings, stethoscopes, otolaryngoscopes) to one patient. If this is not possible, appropriately clean and disinfect using facility-approved disinfectant before reuse with another patient.

Discard disposable patient care equipment and supplies.

Do not share toys and personal effects with other patients.

Clean all horizontal and frequently touched surfaces twice daily and when soiled.

Special cleaning procedures may be required in an outbreak situation. This will be determined in consultation with IP&C.

5.8 Health Record Documents, Other Papers and Personal Electronic Devices

5.8.1 Health documents such as vital sign sheets, Medication Records:

- Do not take documents or papers or mobile computer into the patient’s isolation room.
- If the MAR will enter the isolation room, cover it with a disposable folder or wipeable cover. Remove gloves & clean hands prior to recording/charting in the MAR/vital signs. Clean hands and don new gloves when charting is complete. Upon removing the cover from the room wipe with facility-approved disinfectant and allow to air dry completely before further use. If a disposable cover was used, discard it inside the isolation room.

5.8.2 To remove the paper from the room, staff inside the isolation room open the folder/cover. Then, staff outside the isolation room pick up and place the paper into the plastic protective sheet, perform hand hygiene and wipe the outside of the plastic protective sheet with facility approved disinfectant and allow to air dry completely. Other papers that must be brought into the isolation room for the patient to touch (e.g., legal):

- Assist patient to perform hand hygiene
- Place the document into a disposable folder and wipe the surface/table the folder will be placed on with facility-approved disinfectant. Allow to air dry completely before placing items on the surface/table
- Prior to removing pen from the isolation room, wipe with facility approved disinfectant.
- To remove the paper from the room, staff inside the isolation room open the folder. Then staff outside the isolation room pick up and place the paper into a plastic protective sheet, perform hand hygiene and wipe the outside plastic protective sheet with facility approved disinfectant and allow to air dry completely.

5.8.3 Personal Electronic Devices

- Do not take personal electronic devices into the patient’s isolation room
5.9 Patient/Family/Visitor

5.9.1 Patient:
Unit staff shall educate the patient and/or family caregiver about:

- Hand hygiene
- The nature of their disease
- Precautions to follow
- The length of time the precautions are anticipated to be in place
- Visitor restrictions
- How to prevent transmission of the infectious disease to family/friends during their hospital stay, and on return to the community.

5.9.2 Family/Visitors:
Follow facility visiting policies.

Refer Individuals with symptoms of an acute respiratory infection for medical assessment and restrict from visiting except for compassionate reasons.

Instruct those who do visit to perform hand hygiene, respiratory hygiene, to use PPE, and to limit their movement within the facility by visiting the patient directly and exiting the facility immediately after the visit.[10.2]

Instruct visitors to speak with a nurse before entering the room of a patient on **Airborne and Droplet/Contact Precautions** to evaluate the risk to the health of the visitor and the ability of the visitor to comply with precautions, including PPE and hand hygiene.

Visitors are offered and encouraged to use the same PPE as staff.

Minimize the number of visitors for a patient on precautions to essential visitors only (e.g., immediate family member/parent, guardian or primary caretaker).

Restrict visitors to visiting only one patient on precautions. If the visitor must visit more than one patient, the visitor is required to use the same PPE as healthcare workers and perform hand hygiene and change PPE before going to the next patient’s room.

When asymptomatic parents/guardians visit their symptomatic child/children, they should be informed of the need for appropriate hand hygiene, choice to use PPE while in the patient’s room, and potential inability to visit other patients if the parent/guardian chooses not to wear Personal Protective Equipment.

**Unit staff shall educate the family caregiver about information provided to the patient in 5.9.1 above if appropriate.**
6 Discharge to Home/Community:

Patients with the novel respiratory infection who are to be discharged from a hospital should be assessed for their stage of exposure or disease.

Plans for discharge home should be made in consultation with Public Health for those requiring Additional Precautions or monitoring. The need for isolation, quarantine and follow-up of exposed/infected people will be determined at the provincial level based on the characteristics of the novel infection.

Additional measures such as self-monitoring may be put into place.

If the patient has been ill but is well enough to go home, and is still within the period of communicability, instruct him/her in appropriate precautions to avoid transmitting the novel agent to others. Advise persons who provide care in the home or in the community of the appropriate precautions to take and instruct in the use of any PPE. Maintain precautions during discharge and at home until the period of communicability, if known, has passed or until symptoms are resolved.

All patients coming from a unit where exposure or transmission of the novel agent has occurred must be managed using appropriate precautions until the diagnosis is excluded and the incubation period has passed.

7 Education, Training, and Supervision

Facilities should have plans in place for delivering just-in-time education for the novel respiratory agent, should it appear.

8 Occupational and Environmental Safety and Health (OESH)

Workers who become ill while at work must notify their supervisor and Occupational and Environmental Safety and Health (OESH), and leave work.

Contact OESH for staff assessment and/or concerns. OESH will notify Infection Prevention and Control of any case or cluster of respiratory infections in staff.

9 Outbreak Management Guidance

Exposure Risk: For the purposes of this document, there are two levels of exposure risk:

i. Directly Exposed Persons: Persons who were within two metres of a symptomatic patient without use of an N95 respirator and Droplet/Contact Precautions

ii. Not Directly Exposed Persons: Persons on the same unit as a symptomatic patient before Airborne and Droplet/Contact Precautions were implemented.

If a potential exposure occurs, the Hospital Incident Command System (HICS) Committee must establish an outbreak committee and determine roles and responsibility for the following:

9.1 Emergency Department (ED) or Other Ambulatory Setting

1. Implement daily surveillance of all exposed staff (see definition above) for the incubation period of the novel agent, if known.

2. Assess any exposed person who develops symptoms consistent with the novel respiratory infection during the incubation period:
   - Admitted patients are assessed by their health care providers
Staff are assessed by Occupational and Environmental Safety and Health (OESH)

3. Send staff members home for the incubation period of the novel agent (if known), if they were directly exposed (as defined above). Notify OESH and Public Health.

4. Cohort staff members who worked on the patient’s unit, but were not directly exposed, to the unit.
   Actively assess (daily) cohorted staff members for signs/symptoms of infection. These staff must not work on other units or in other health care settings.

5. Notify Public Health to follow exposed patients who have been discharged home.

6. Notify receiving health care settings if exposed patients were transferred to their facility.

9.2 In-Patient Unit

1. If transfer is medically necessary, notify the receiving unit/health care setting about required Airborne and Droplet/Contact Precautions.

2. Immediately assess all patients on the unit for symptoms consistent with the novel respiratory infection.

3. Implement Airborne and Droplet/Contact Precautions for patients who have symptoms consistent with the novel respiratory infection.
   Keep these patients accommodated on the affected unit. If sufficient AIIRs are not available, see ‘Inpatient Accommodation’, for alternate accommodation strategies.

4. Consider all patients on the unit, while the patient was symptomatic and not on precautions, to be potentially exposed. Use an Airborne and Droplet/Contact precautions for all patients on the unit.

5. Send staff members home for the incubation period of the novel agent (if known), if they were directly exposed (as defined above). Notify OESH and Public Health.

6. Cohort exposed patients and ill patients, within the closed unit, in geographically separated areas; if possible, together with their respective care givers.

7. Cohort staff members who worked on the patient’s unit, but were not directly exposed to the patient, to the unit.
   Actively assess (daily) cohorted staff members for signs/symptoms of infection. These staff must not work on other units or in other health care settings.

8. Determine if there were exposed patients who have been transferred to another unit or health care setting. Notify the receiving unit or health care setting about the patient’s exposure to the novel respiratory agent. Implement surveillance and Airborne and Droplet/Contact Precautions for exposed patients. Notify Public Health to follow any exposed patients on the unit who were discharged home.

9. Notify Public Health to follow-up if there were any visitors to the patient.

10. Implement daily surveillance on the unit. Surveillance is to continue for the duration of the incubation period, if known. For screening tool, refer to Appendix C.

11. Implement Airborne and Droplet/Contact Precautions immediately for patients who have symptoms consistent with the novel respiratory infection.

12. Notify other area health care settings about the novel agent so they will be prepared if cases present to their facility.

13. If there are no new cases after the incubation period, in consultation with IP&C and Public Health, re-open the unit. Continue surveillance for acute respiratory infections.
10 References


Appendix A

Critical Care Severe Acute Respiratory Infection (SARI)¹ Notification Form

This form is not intended for use for patients for whom SARI is not suspected. Use of this form does not replace personal communication with the site Infection Control Professional(s)

**COMPLETE ALL SECTIONS OF THIS FORM**

Mandatory completion of this form is required AT OR PRIOR TO 72 hours* from time of clinical suspicion for all Critical Care admissions with Severe Acute Respiratory Infections (SARI) or Suspect SARI

Seasonal Influenza / H1N1 is not considered a SARI case

1. Date of ICU Admission (DD/MM/YYYY): _______________________

   CAUSE OF FEBRILE SEVERE ACUTE RESPIRATORY INFECTION NOT KNOWN AT THIS TIME

2. Patient meets ALL SARI criteria:
   a. □ Respiratory symptoms – fever with new onset of cough or breathing difficulty
   b. □ Severe illness progression
   c. □ Admission to a Critical Care Unit or mechanical ventilation
   d. □ No alternative diagnosis ascertained within the first 72 hours of hospitalization that reasonably explains the illness

3. Patient meets AT LEAST ONE SARI exposure criteria (below):
   a. Travel to a country with novel influenza (e.g., H5N1) or emerging pathogens
      □ No                  □ Yes, specify country: _______________________
   b. Close contact with a person who has travelled to a country with a novel influenza or emerging pathogens.
      □ No                  □ Yes, specify country: _______________________
   c. Exposure to a setting with mass die off of poultry or swine
      □ No                  □ Yes
   d. Occupational exposure
      □ No                  □ Yes, specify: □ Healthcare □ Lab □ Animal

4. Further Comments (specify disease suspected, if possible):
   □ MERS CoV   □ H7N9   □ Other, specify: _______________________

5. Additional instructions for any case that meets all 5 SARI criteria in Questions 2 & 3:
   □ Consult Infectious Diseases: Adults or Peds as needed (HSC Paging; 204-787-2071; SBH paging: 204-237-2053)
   □ Consult Cadham physician on call regarding appropriate specimen collection and selection of necessary tests
     (all hours: 204-787-2071)
   □ Send specimens to Cadham labeled “Critical Care - SARI Suspect: _______________ (specify if possible)”
   □ Place on Airborne and Droplet/Contact Precautions – refer to Acute Care IP&C Manual
   □ Fax completed form to site IP&C and personally notify site IP&C

   Reported by: _______________________
   Signature: _______________________
   Date: _______________________
   Phone #: _______________________

Please fax to Site Infection Control Professional at: (204)-site specific fax

¹ Public Health Act (C.C.S.M. c. P210) Reporting of Diseases and Conditions Regulation

## Appendix B

### Preparation and Management Plan Checklist for a Patient with Novel Severe Acute Respiratory Infection (SARI)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Checklist items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surveillance</strong></td>
<td>□ Critical Care staff to know where notification forms for SARI cases are stored (Refer to Appendix C)</td>
</tr>
<tr>
<td></td>
<td>□ IP&amp;C, Critical Care and ED Programs establish WRHA regional responsibility for tracking information about emerging respiratory and other pathogens</td>
</tr>
<tr>
<td><strong>Lab Readiness</strong></td>
<td>□ DSM and Cadham to develop a safety protocol for lab staff who will be handling specimens</td>
</tr>
<tr>
<td><strong>Accommodation</strong></td>
<td>□ All Facility EDs to identify appropriate Airborne Infection Isolation Room[s] (AIIR) in ED for patients being investigated for disease, when possible</td>
</tr>
<tr>
<td></td>
<td>□ Establish timeline for movement of patient out of ED if admission is required</td>
</tr>
<tr>
<td><strong>Additional Precautions</strong></td>
<td>□ FM to ensure measures and procedures are in place to maintain proper functioning of AIIRs</td>
</tr>
<tr>
<td></td>
<td>□ All staff providing care to maintain Airborne and Droplet/Contact Precautions</td>
</tr>
<tr>
<td></td>
<td>□ Patients wear a procedure or surgical mask during transport, if tolerated</td>
</tr>
<tr>
<td></td>
<td>□ <strong>Initiate Airborne &amp; Droplet/Contact Precautions whenever a SARI case is suspected</strong></td>
</tr>
<tr>
<td></td>
<td>□ Discontinuation of precautions through IP&amp;C when the case is cleared</td>
</tr>
<tr>
<td><strong>Diagnosis</strong></td>
<td>□ Critical Care to document process for confirming patient meets case definition and requires testing uses the SARI notification form</td>
</tr>
<tr>
<td></td>
<td>□ Critical Care staff uses notification form to document process and communications required for rapid transport and testing of relevant specimens.</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>□ Critical Care to complete Critical Care Severe Acute Respiratory Infection (SARI) notification form</td>
</tr>
<tr>
<td></td>
<td>□ Critical Care to contact IP&amp;C Program Medical Director/designate, who will coordinate communication</td>
</tr>
<tr>
<td></td>
<td>□ IP&amp;C Program Medical Director/designate to notify internal stakeholders (e.g., Senior Management team, IP&amp;C site and Corporate teams, Microbiology lab, others as appropriate) about situational updates, results of laboratory testing, patient specifics, as required</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>□ Each site to define which hospital departments may be providing care and/or provide diagnostic services for the patient and require information (e.g., nursing areas, Respiratory Therapy, Physiotherapy, Occupational Therapy, Nutrition Services, Diagnostic Imaging, Pastoral Care, laboratories, Pharmacy, and Security). Limit this to essential staff</td>
</tr>
<tr>
<td></td>
<td>□ WRHA to define external agencies whose employees may be exposed (e.g., EMS, first responders, Community Services). Provide education to these agencies as required</td>
</tr>
<tr>
<td><strong>Follow-up for Identification of Transmission</strong></td>
<td>□ IP&amp;C and OESH to develop plan to follow-up and manage hospital exposures</td>
</tr>
<tr>
<td></td>
<td>□ Unit staff and IP&amp;C to advise OESH of staff exposures so they may follow up</td>
</tr>
<tr>
<td><strong>Review / Evaluation</strong></td>
<td>□ Review patient care on a daily basis, looking for status change</td>
</tr>
</tbody>
</table>
Appendix C: Screening and Patient Management Algorithm for Novel Severe Acute Respiratory Infection (SARI)

Patient has Severe Acute Respiratory Infection (SARI) like illness with or without lower respiratory tract involvement (e.g., pneumonia or ARDS)?

No

ROUTINE PRACTICES

Yes

Is patient a close contact of a person with a SARI, who has travelled to, or resided in, an area under a PHAC travel health notice in the 14 days prior to onset of illness?

No

Yes

Initiate DROPLET/CONTACT PRECAUTIONS

Test for routine respiratory pathogens

Has patient travelled to, or resided in, an area under a PHAC travel health notice in the 14 days prior to the onset of illness?

No

Yes

Initiate AIRBORNE AND DROPLET/CONTACT PRECAUTIONS

Complete Critical Care SARI IP&C Notification Form & send to site IP&C office
- Notify ID on call
- Consult Cadham Lab (CPL) physician on call
- Collect appropriate specimens as directed by CPL physician on call
- Send specimens as directed on Critical Care SARI form to Cadham Lab
- Notify site IP&C office of the case

Has etiology been determined?

No

Yes

Known SARI (e.g., MERS-CoV, H7N9): Continue AIRBORNE AND DROPLET/CONTACT PRECAUTIONS
Report to IP&C IP&C initiate investigation and exposure follow-up

Is organism a known SARI?

No

Yes

Use precautions specific to the respiratory pathogen

Unknown SARI: Continue AIRBORNE AND DROPLET/CONTACT PRECAUTIONS
Report to IP&C; IP&C initiate investigation and exposure follow-up

Notes:
1. The algorithm is intended to be applied to individual cases presenting to EDs and Urgent Care and should not be used to identify clusters.
2. Elderly people who are immunocompromised may not have a febrile response to a respiratory infection.