Ministry of Health
and Long-Term Care

Ministère de la Santé
et des Soins de longue durée

Ontario

S· A· R· S·

Directive L03-06
December 4, 2003

DIRECTIVE TO ALL ONTARIO NON-ACUTE CARE FACILITIES UNDER OUTBREAK CONDITIONS

This Directive replaces the outbreak sections of the following Directives:

- *Directives to All Ontario Non-Acute Care Facilities – L03-05 July 15, 2003.*
- *Directives to All Ontario Non-Acute Care Facilities – L03-04(R) June 16, 2003.*

This document practices directs non-acute care facilities to undertake the following practices in the event of an outbreak of SARS.

It applies to health care workers and settings that provide direct clinical services to patients or clients in non-acute care facilities. Non-acute care facilities include: Complex Continuing Care Hospitals, Rehabilitation Hospitals, Long-Term Care Facilities, Private Hospitals, Specialty Hospitals, Psychiatric Hospitals, Children's Treatment Centres and independent residential addiction treatment services.

All non-acute care health care providers in facilities should comply with existing and updated recommendations for infection control such as from Health Canada – Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care; (http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/99vol25/25s4/index.html)

Notification about SARS outbreaks will originate from the local public health units.

TABLE OF CONTENTS

2 SYSTEM PRACTICES

2.1 Communication

Local public health units and health care providers in their regions must ensure ongoing effective communication as to the current status of SARS and other communicable diseases in their communities and region.

Public health units and non-acute care facilities must have an ability to access appropriate electronic means (i.e., fax or email) to ensure that they can receive the most current information.

Non-acute care facilities are responsible for notifying their local public health unit in writing of their current contact information, including address, phone, fax and email.

2.2 Hand Hygiene and Healthy Behaviour Promotion

Non-acute care facilities must promote hand hygiene and awareness of healthy behaviours (i.e., if you are feeling unwell, especially with fever, cough or diarrhea, do not come to work or attend public events). This can be accomplished through facility promotional campaigns.

Hand hygiene should be performed using an alcohol-based hand sanitizer or soap and water when entering and leaving the building, moving between floors, units or resident home areas, as well as before and after patient[1] contact.

Reinforce hand hygiene and healthy behaviours using signage at the entrance and throughout the facility in patient care areas. Ensure that the signage is designed to meet the needs of your patients, staff and community.

2.3 Education and Quality Control

Non-acute care facilities should maintain regular and specific educational and quality programs to ensure all who carry out activities in these facilities understand and can comply with these measures.

2.4 Environmental Cleaning

All patient rooms and patient care areas must be cleaned regularly using a hospital-grade disinfectant (See Section 2.13). This includes horizontal surfaces, frequently touched areas (e.g., telephone, door knob, light switch, bed and hand rails), and patient care equipment. Floors do not require the use of a disinfectant.

Facilities must maintain thorough surface cleaning in high-risk public areas as defined by Infection Control, in addition to patient rooms and patient care areas. For further information on Health Canada's Infection Control Guidelines, for infection control in a variety of settings, refer to "Hand washing, cleaning, disinfection and sterilization in health care", published in December 1998, in the Canada Communicable Disease Report, Volume 24S8, pages 1-55. It can also be downloaded from the Health Canada website. See Section 3.2 of this document for how to access the Health Canada website.

[1] In this document the term patient also refers to residents and clients.

3 SARS OUTBREAK CONTROL MEASURES

When the local public health unit has declared a SARS outbreak, non-acute care facilities must comply with the following SARS outbreak control measures. Additional measures may be communicated to providers as required.

3.1 Facility Procedures

3.1.1 Staff

Only staff essential to providing care should be in contact with/in close proximity to patients in the facility.

Hand hygiene should be performed when entering and leaving the building, moving between floors, units and resident home areas, as well as before and after each patient contact.

All staff must be screened using the SARS Risk Factor Screening Tool at the beginning of each shift.

All non-acute care facility staff and service providers are directed to use Respiratory and Contact Precautions (See Glossary of Terms, Appendix 1) when caring for patients with fever or respiratory symptoms or contact history as determined by the SARS Risk Factor Screening Tool (Appendix 2), until SARS has been ruled out by medical assessment.

3.1.2 Facility Entry Control

- Control entry to each site. Restrict access to one entrance for each building, if possible.
- Post appropriate staff at each entrance to apply the SARS Risk Factor Screening Tool.

- All persons having patient contact must perform hand hygiene before and after each patient contact.
- Restrict use and entry to facility by community and professional groups. Use of the facility by outside groups should be reviewed and limited at the facility's discretion.
- Restrict entry via shipping and receiving departments.
- All facilities should develop a mechanism for delivery personnel, couriers, floral shops etc. to deliver items without entering the facility.
- Students and volunteers must follow the practices outlined in section 2.9.

3.1.3 Daily Log

All facilities must maintain a daily log, which records all persons (i.e., all staff, volunteers and visitors) entering the facility. The log must record the printed name, date of visit and contact phone number. At minimum, the log must be kept on record in the facility until the outbreak is declared over by the local public health unit.

3.1.4 Posting of SARS Notices

Post SARS notices, (Appendix 5), at all entrances and prominent locations in the building with the key messages of restricted visiting or access and SARS screening in effect.

3.2 Screening

When a SARS outbreak is declared by the local Medical Officer of Health, all persons entering non-acute care facilities, including health care workers, visitors, volunteers and students must be screened using the SARS Risk Factor Screening Tool (Appendix 2).

3.2.1 Screen Positive

When a patient has a positive response to the SARS Risk Factor Screening Tool (i.e., answers yes to any of Sections A or B or C), the health care provider may continue to provide the care for which the visit was initiated and take appropriate Respiratory and Contact Precautions (See Appendix 1, Glossary of Terms). These patients must also have a medical assessment for SARS.

3.2.2 Screen Negative

If a patient screens negative on the SARS Risk Factor Screening Tool (i.e., does not have symptoms, fever, or contact history), use Routine Practices, (Appendix 1, Glossary of Terms).

3.2.3 Screening Patients

Health care workers must maintain a high index of suspicion when assessing any patients for new onset of fever or respiratory symptoms. During an outbreak, fever alone must be considered as a sign of potential SARS infection even in the absence of other signs or SARS contact history. Therefore, any patient developing the following symptoms or signs on or after admission – fever, unexplained cough, unexplained hypoxia, shortness of breath or difficulty breathing – must be evaluated immediately.

Patients with fever or respiratory symptoms or contact history must be managed in Respiratory and Contact Precautions, (See Appendix 1, Glossary of Terms) until SARS is ruled out. (See Appendix 3, SARS Risk Management Algorithm for Community and Outpatient Settings Under SARS Outbreak Conditions, and Appendix 4, Case Definitions for Probable and Suspect SARS).

Process for Respiratory and Contact Precautions:

During a SARS outbreak, any patient with a fever or respiratory illness or a contact history, requires the following precautions:

- Isolate the patient immediately from other patients and staff.
- If tolerated the patient must wear a surgical mask when he/she is in a public setting or when other persons are in the same room.
- While with the patient, use Respiratory and Contact Precautions (gown, gloves, protective eyewear and N95 mask or equivalent).
- Assess the patient or arrange for physician assessment.

- Contact the local public health unit.
- If SARS is possible or if hospitalization is required arrange for the patient to be taken to an Emergency Department for evaluation (call ahead).
- Transportation for medical examination must be by private vehicle[2] or by medical transport service with the patient wearing a surgical mask during transport.
- After there is no further contact with the patient, remove personal protective equipment (PPE) in the following order:
  - Remove gloves, clean hands, remove gown, clean hands, remove eye protection and finally the N95 mask.
  - Wash hands carefully after removing the final PPE.
  - Avoid touching other objects or people until after removing PPE and washing hands.
  - Avoid touching your own eyes, nose or mouth until after removing PPE and washing hands.

3.2.4 Screening Health Care Providers and Direct Service Staff

Staff who know they will screen positive on the SARS Risk Factor Screening Tool must not come to work and must contact the local public health unit and their facility's Occupational Health and Safety staff or their supervisor.

Staff who screen positive on the SARS Risk Factor Screening Tool when arriving at work must be directed to take action as per the SARS Risk Management Algorithm, (Appendix 3). If they need to travel to a SARS assessment clinic (if available) or Emergency Department to obtain this evaluation, then other staff will arrange for this transfer, and will advise the receiving facility. The health care provider must use a private vehicle or medical transport with the provider wearing a surgical mask during transport. The local public health unit and the employer's joint health and safety committee must also be advised.

Staff who develop a fever or respiratory symptoms while at work should immediately stop work, put on a surgical mask, and notify their supervisor. Occupational Health and Safety or other designated staff at the facility should arrange for the staff member's transfer to a SARS assessment clinic, if available or Emergency Department for medical assessment. Occupational Health and Safety or other designated staff at the facility must advise the receiving facility and the local public health unit. Staff must use a private vehicle or medical transport with the staff member continuing to wear the surgical mask during transport.

Staff who work in other facilities will be limited by the category level of the respective facilities (Appendix 6). Staff working in a Category 0, 1 or 2 facility may work at other Category 0 or 1 health care facilities or Category 2 facilities in areas of the facility that were not affected by unprotected exposure to SARS. Staff are to be reminded to change uniform and shoes between locations.

[2] Private vehicle refers to the patient's vehicle. Patients directed to a SARS Assessment Clinic or Emergency Department for a medical assessment must travel unaccompanied in the private vehicle. If the patient is unable to operate a vehicle, then arrange for medical transport.

3.2.5 Screener Protection

The person screening during a SARS outbreak must wear an N95 or equivalent mask, protective eyewear, gloves and gown. The screener must have hand hygiene facilities or supplies immediately available for his/her use.

If there is any further contact with a person who screens positive on the SARS Risk Factor Screening Tool, then take appropriate Respiratory and Contact Precautions.

3.3 Personal Protective Equipment (PPE)

Health care providers must wear an N95 or equivalent mask and protective eyewear when assessing and caring for persons with fever or respiratory symptoms (unexplained new or worsening fever, cough, and shortness of breath or difficulty breathing) or contact history.

Health care providers expected to wear N95 or equivalent masks in outbreak settings should be qualitatively fit tested to ensure maximum effectiveness. (See NIOSH website at http://www.cdc.gov/niosh/99-143.html and CSA Standard Z94.4, October 2002) (Appendix 7, Guidelines for Safe and Proper N95 Mask Use).

Personal protective equipment must be properly used and maintained consistent with the *Occupational Health and Safety Act* Reg. 67/93 s.10.

3.3.1 Removal of PPE

After there is no further contact with the patient, remove PPE in the following order:

- Remove gloves, wash hands, remove gown, wash hands, remove eye protection and finally the N95 mask.
- Wash or disinfect hands carefully after removing the final PPE.
- Avoid touching other objects or people until after removing PPE and washing hands.
- Avoid touching your own eyes, nose or mouth until after removing PPE and washing hands.

3.3.2 Maintenance of Personal Protective Equipment

All personal protective equipment must be properly used and maintained consistent with the Regulation for Health Canada and Residential Facilities (O. Reg 67/93. S.10) under *The Occupational Health and Safety Act.* Persons expected to wear N95 or equivalent masks should be qualitatively fit tested (See NIOSH website at http://www.cdc.gov/niosh/99-143.html, and CSA Standard Z94.4, October 2002).

3.4 Cleaning

Facilities must maintain thorough surface cleaning in high-risk public areas as defined by Infection Control, in addition to patient rooms and patient care areas.

The person cleaning patient rooms and patient care areas must wear gloves, protective eyewear and an N95 or equivalent mask.

All patient rooms and patient care areas must be cleaned regularly using a hospital-grade disinfectant. This includes horizontal surfaces, frequently touched areas (e.g., door knob, light switch, bed and hand rails) and patient care equipment. Floors do not have to be cleaned with a disinfectant.

Hospital grade disinfectants that may be used include stabilized accelerated hydrogen peroxide products, phenolics, quaternary ammonium compounds, or freshly mixed 1/100 dilution of household bleach.

Rooms used by patients with febrile respiratory illnesses who have been transferred out of the facility must not be used again until all surfaces in the room, including equipment, are thoroughly cleaned.

Discard all unused supplies and disposable equipment after use as routine waste.

Disinfect non-disposable equipment which has touched patients and anything the patient used or touched, before these pieces of equipment are used for other patients.

Remove the PPE from the patient's room and discard with routine waste.

If reusable protective eyewear is worn, it can be washed with soap and hot water, or cleaned with disposable disinfectant wipes and then rinsed.

3.5 Patient Admissions and Transfers

The current transfer directive for inter-facility transfers, *Provincial Inter-Facility Patient Transfer Directive During Outbreak Conditions,* Directive PIPT 03-03, October 22, 2003, must be followed. To view this Directive visit the Ministry of Health and Long-Term Care web site at http://www.health.gov.on.ca.

For transport of any patient with fever or respiratory illness to an acute care facility, the patient must be transferred by medical transport, and wear a surgical mask. Notify the Provincial Transfer Authorization Centre (PTAC) and the receiving facility of the patient's status prior to transfer.

3.6 Patient and Resident Practices

On admission or transfer, document the names of all other health care facilities the patient has been admitted to, or treated at, during the preceding 10 days. An up-to-date list of patient and health care facility contacts will facilitate reporting to local public health unit authorities if this becomes necessary.

If a patient screens positive on the SARS Risk Factor Screening Tool, staff must use Respiratory and Contact Precautions to assess and manage the patient. If SARS is still suspected after an on-site medical assessment, the patient must be transferred to an appropriate facility.

There is no restriction for patients leaving the facility to go on casual or vacation leave provided they are not under quarantine. Patients and families should be counseled to take appropriate precautions such as monitoring for signs of SARS or any other illness, not visiting hospitals and notifying the facility when the patient will be returning. The SARS Risk Factor Screening Tool must be applied prior to and on return from leave.

Infection control measures must include hand hygiene accessible in patient rooms and common areas such as dining facilities. Patients should be instructed on the use of these agents before and after eating, after using the washroom, and when hands are obviously dirty.

3.7 Managing Patients with a Fever or Respiratory Illness During a SARS Outbreak

Until diagnosed, such patients must be isolated in a single room when possible. Patients with like illnesses may share a room only if necessary for operational reasons.

All staff entering the room of these patients must use Respiratory and Contact Precautions until a medical assessment has been done. This includes an N95 mask or equivalent, eye protection, gown and gloves.

Protective equipment should be removed as per Section 2.3.1

These patients should wear a surgical mask where feasible and tolerated when outside of their room or when inside their room if the room is shared with another, until a medical assessment has been done. A mask may not be feasible if the patient is cognitively impaired or is in respiratory distress.

An urgent on-site medical assessment is required of all patients with a fever or respiratory illness during a SARS outbreak. If the medical assessment determines that the patient's symptoms are consistent with SARS and that SARS risk factors are present, the patient should be transferred to an acute care facility.

3.8 High-Risk Respiratory Procedures

When treating ventilated patients or performing high-risk respiratory procedures, staff in non-acute facilities are directed to follow the *Directive to All Ontario Acute Care Facilities for High-Risk Respiratory Procedures (Includes Both Non-Outbreak and Outbreak Conditions), Directive HR03-12, October 22, 2003.* To view this Directive visit the Ministry of Health and Long-Term Care web site at http://www.health.gov.on.ca. For a definition of high-risk respiratory procedures see Appendix 1.

3.9 Volunteer/Student Practices

Only volunteers/students essential to patient care should be allowed entrance to the facility.

All volunteers/students at the facility must be screened on entry using the SARS Risk Factor Screening Tool. A log of their visit must be maintained (see Section 2.1.3).

Reinforce hand hygiene using signage at the entrance and throughout the facility in patient care areas. Hand hygiene should be performed when entering and leaving the building, and moving between floors, units or resident home areas.

Volunteers/students must wash their hands using alcohol-based hand sanitizer or soap and water before and after each patient contact.

Volunteers/students who may come in contact with patients with suspected infectious febrile respiratory illnesses must adhere to Respiratory and Contact Precautions.

Any volunteer/student who develops fever or respiratory symptoms while in the facility must notify the office or program supervisor and prepare to leave the facility immediately. The office or program supervisor must direct the volunteer/student to a SARS assessment clinic, if available or Emergency Department for a medical assessment and ask the volunteer/student to wear a surgical mask. The office or program supervisor will arrange for the individual's transport, will advise the receiving facility and contact the local public health unit. The volunteer/student must continue to wear the surgical mask during transport and must use a private vehicle or medical transport service.

3.10 Visitor Practices

Facilities should introduce a restricted Visitors Policy, ideally restricting the number of visitors to one (1) per resident at a time except for compassionate reasons.

All visitors to the facility must be screened on entry using the SARS Risk Factor Screening Tool. A log of their visit must be maintained (Section 2.1.3).

Reinforce hand hygiene using signage at the entrance and throughout the facility in patient care areas. Hand hygiene should be performed when entering and leaving the building, and moving between floors, units or resident home areas.

Visitors must wash their hands using alcohol-based hand sanitizer or soap and water before and after each patient contact.

Visitors who may come in contact with patients with suspected infectious febrile respiratory illnesses must adhere to Respiratory and Contact Precautions.

Any visitor who develops fever or respiratory symptoms while in the facility must be directed to leave the facility and asked to put on a surgical mask immediately. The office or program supervisor must direct the visitor to a SARS assessment clinic, if available or Emergency Department for a medical assessment. The office or program supervisor will arrange for the individual's transport, will advise the receiving facility and contact the local public health unit. The visitor must continue to wear the surgical mask during transport and must use a private vehicle or medical transport service.

3.11 Infection Control Coverage

Non-acute care facilities are not required to provide 24-hour infection control coverage; however, a process needs to be in place to ensure ongoing continuity of infection control practices and consultation during off hours through an assigned designate.

3.12 Duration of SARS Outbreak Control Measures

SARS outbreak control measures will remain in effect until the local public health unit lifts the outbreak. This will normally happen after two full incubation periods have elapsed since the last identified case in the community or health care facility.

4 RESOURCES

4.1 SARS Information

- Ontario – http://www.health.gov.on.ca
- Health Canada – http://www.sars.gc.ca
- U.S. Centers for Disease Control - http://www.cdc.gov/
- World Health Organization - http://www.who.int/csr/sars/en/

4.2 Infection Control

- Health Canada – Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care; Recommendations for Ambulatory Care – http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/99vol25/25s4/index.html
- College of Physicians and Surgeons of Ontario – *Infection Control in the Physician's Office* – http://www.cpso.on.ca/Publications/infect.htm

4.3 Situation Reports

A list of areas with recent local transmission of SARS is available from:

- World Health Organization at http://www.who.int/csr/sars/areas/en/
- Health Canada at http://www.sars.gc.ca
- Ontario Ministry of Health and Long-Term Care at: http://www.health.gov.on.ca/english/providers/program/pubhealth/sars/sars_mn.html

5 LIST OF APPENDICES

Appendix 1: Glossary of Terms
Appendix 2: SARS Risk Factor Screening Tool
Appendix 3: SARS Risk Management Algorithm for Community and Outpatient Settings Under SARS Outbreak Conditions
Appendix 4: Case Definitions for Probable and Suspect SARS
Appendix 5: Sample SARS Notice
Appendix 6: Health Care Facility SARS Category
Appendix 7: Guidelines for Safe and Proper N95 Mask Use

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and Chief Medical Officer of Health

APPENDIX 1
GLOSSARY OF TERMS

Active Surveillance Program: a term to describe surveillance activities for SARS within an acute care facility. The intent of such a program is the early detection of clusters of potential SARS cases requiring investigation.

ARDS: Adult Respiratory Distress Syndrome is the rapid onset of progressive malfunction of the lungs usually associated with the malfunction of other organs due to the inability to take up oxygen. The condition is associated with extensive lung inflammation and small blood vessel injury in all affected organs.

Cluster: a grouping of cases of a disease (e.g., respiratory illness indicative of SARS) within a specific time frame and geographic location suggesting a possible association between the cases with respect to transmission.

CXR: Chest x-ray (roentgenogram).

Droplet Precautions: (see also Routine Practices) The use of surgical or procedure masks and eye protection or face shields for patients who have respiratory infections especially if associated with coughing, sneezing, felt to be transmissible principally by large respiratory droplets particularly when within 1 meter of such a patient. Also used where appropriate to protect the mucous membranes of the eyes, nose and mouth during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions (e.g., air way suctioning).

Febrile Respiratory Illness (FRI): temperature greater than 38^0 C and new or worsening cough or shortness of breath. During non-outbreak conditions this includes a fever of greater than38^0C **and** new or worsening cough or shortness of breath to increase the specificity of this designation. During outbreak conditions, to maximize the sensitivity to potential SARS infection, this includes a fever of greater than38^0C **or** new or worsening cough or shortness of breath. The context in which FRI is determined must take the outbreak vs. non-outbreak conditions into account.

Hand Hygiene: hand washing with soap and running water or alcohol-based hand sanitizers.

Health Care Facility: a location where ill people are examined and assessed by health care workers and/or provided with direct health care services. Locations may range from private physician offices, ambulatory clinics or diagnostic facilities, to hospitals.

Health Care Facilities SARS Categories: a categorization system established by the Ministry of Health and Long-Term Care to determine precautionary measures to be taken during a SARS outbreak. The levels are as follows:

> **SARS Category 0**: Health care facility has no known cases of SARS (suspect or probable).

SARS Category 1: No unprotected SARS exposure – staff and/or patients. Health care facility has one or more cases of SARS (suspect or probable).
SARS Category 2: Any unprotected SARS exposure within the last 10 days but without transmission to staff or patients. The health care facility may or may not currently have one or more cases of SARS (suspect or probable).

SARS Category 3: Unprotected SARS exposure with transmission to health care workers and/or patients. The health care facility may or may not currently have one or more case of SARS (suspect or probable).

High-Risk Respiratory Procedure: any procedure with the potential to generate respiratory droplets, including, but not limited to nebulized therapy, endotracheal intubation, bronchoscopy, bag-valve mask ventilation, non-invasive ventilation (CPAP, BiPAP), and ventilation using high frequency oscillation.

Home Quarantine: To prevent potential transmission of SARS virus by persons who have been in contact with a known, probable or suspected case of SARS and may be in the incubation period of illness.

Measures include but are not limited to the following:

1) Remain home during the period of quarantine

2) No visitors during the period of quarantine

3) A surgical or procedure mask to worn when in the presence of other persons. Masks should be changed approximately every 4 hours if worn for extended periods of time

4) Meals are to be taken away from other household members

5) Persons under quarantine should sleep alone in a separate room

6) Frequent handwashing is emphasized to all household members

7) Body temperature is to be taken twice daily. Any temperature reading 38 degrees Celsius is to be reported to the local public health unit right away

8) Any new onset of cough or shortness of breath is to be reported to the local public health unit right away

Non-Outbreak: *Non-outbreak* refers to the conditions once a SARS Outbreak is declared over by the local Medical Officer of Health (MOH) or in a region where no SARS outbreak has occurred. Facilities within the region may have one or more SARS patient(s), either local cases or those imported through travel activity, provided there has been no transmission within the hospital population.

Outbreak: For the purposes of SARS activity, an *outbreak* is defined as local transmission of SARS. The local Medical Officer of Health is responsible for declaring a SARS outbreak. An outbreak may be setting-specific (e.g., a hospital with transmission) or health unit wide (e.g. transmission in more than one setting or significant community exposure). In declaring an outbreak the local Medical Officer of Health takes into account global and neighbouring jurisdiction conditions and the potential impact of those conditions.

Personal Protective System (PPS): a full body suit or equivalent protective apparatus consisting of head, face and neck protection with or without enclosed body protection; or a powered air purifying respirator (PAPR). PPS is to be used for any health care worker involved in a high-risk respiratory procedure.

Respiratory and Contact Precautions (RCP): infection control procedures for institutional and community-based settings with the intent of protecting the health care worker from SARS.

1. Common Elements for both institutional and community-based settings:

A. Personal protective equipment, (PPE):

- Staff to use an N95 or equivalent mask, eye protection, gown, and gloves.
- Remove PPE after there is no further contact with the patient/client in the following order: Remove gloves, clean hands, remove gown, clean hands, remove eye protection and finally the N95 or equivalent mask. Wash hands carefully after removing the final PPE. Avoid touching other objects or people until after removing PPE and washing hands.
- Disinfect non-disposable equipment (e.g.: stethoscope, testing items) and anything the client used or touched before it is used for others.
- When the patient leaves the examining room it should be cleaned with a hospital grade disinfectant.

B. Patient Management:

- Isolate the patient/client immediately from other patients/clients and staff.
- Whenever the patient/client is in a public setting (e.g., in the hallway, or waiting room), in the same room with others, and during transport, the patient/client must wear a surgical mask, unless medically contraindicated.
- Limit visitation to the symptomatic patient/client except for essential or compassionate reasons. Visitors should wear PPE.

2. For Institutional Settings:

Patient Accommodation for Hospitals: Patients are to be placed as follows (in order of decreasing preference):

1. Single room with negative pressure ventilation, with at least 6 air exchanges per hour or 12 air exchanges if the building is a new facility, as per Canadian Standards Association, Sept 2001 (highest preference)
2. single room with HEPA filtration unit which achieves at least 9 air exchanges per hour
3. single room, with no special air handling
4. semi-private room, cohorted with patients with similar SARS risk factors and/or symptoms or diagnosis

3. For Community-Based Settings:

Includes physician's offices, community health practice settings, non-acute care facilities, and home and community care:

- Physician, or nurse practitioner, if present, to assess the patient
- If SARS is possible, or if hospitalization is required, arrange for the patient/client to be taken to an Emergency Department for evaluation (call ahead)
- Transportation for medical examination must be by private vehicle or medical transport with the patient/client wearing a surgical mask during transport.
- Contact the local public health unit, as appropriate

Respiratory and Contact Precautions (Enhanced) (RCP[E]): an enhanced form of infection control procedures, which require the following in addition to procedures under Respiratory and Contact Precautions:

A. Personal Protective Equipment: also includes a full face shield and hair covering

B. Patient accommodation in hospitals: patients assessed to be at risk for having SARS, based on the SARS Risk Management Algorithms, have priority for the highest level of accommodation

Respiratory Symptoms: new or worse cough (onset within 7 days) OR new or worse shortness of breath (worse than what is normal for the patient).

Routine Practices (See also "Droplet precautions"): The Health Canada term to describe the system of infection prevention recommended in Canada to prevent transmission of infections in health care settings. These practices describe prevention strategies to be used with all patients during all patient care, and include:

- Hand washing or cleansing with an alcohol-based sanitizer before and after any direct contact with a patient.
- The use of additional barrier precautions to prevent health care worker contact with a patient's blood and body fluids, non intact skin or mucous membranes.
    - Gloves are to be worn when there is a risk of body fluid contact with hands; gloves should be used as an additional measure, not as a substitute for hand washing.
    - Gowns are to be worn if contamination of uniform or clothing is anticipated.
    - The wearing of masks and eye protection or face shields where appropriate to protect the mucous membranes of the eyes, nose and mouth during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions.

The full description of routine practices to prevent transmission of nosocomial pathogens can be found on the Health Canada website (http://www.hc-sc.gc.ca/pphb-dgspsp/dpg_e.html#infection).

RSV: respiratory syncytial virus, a common respiratory virus especially common in winter months and recognized as a common cause of symptomatic respiratory infection in children, the elderly and individuals who are immunocompromised.

SARS Contact History: SARS contact history in a patient with febrile and/or respiratory illness is defined as any one of:

- Unprotected contact with a person with SARS in the last 10 days prior to the onset of this illness
- Were present in a health care facility closed due to SARS before the onset of symptoms, 10 days prior to the onset of this illness
- Instructed by the local public health unit to be in quarantine or isolation.
- Travel to a SARS affected area in the 10 days prior to the onset of illness

SARS Risk Management Algorithm: a tool to be used by health care workers to assist in the management of a patient based on information derived from the SARS Risk Factor Screening Tool. There are various algorithms to reflect patient care in different settings.

SARS Risk Factor Screening Tool: a tool to be used by health care workers during triage, admitting, and outpatient /ambulatory settings. This tool gathers information from the patient regarding temperature, respiratory illness, contact history and SARS risk factors.

SARS Risk Factors: SARS risk factors in a patient with febrile and/or respiratory illness are defined as:

- Travel (patient or household/close family) to a former or current SARS affected area in the last 30 days.
- Admission to a hospital* or long-term care facility* in the 10 days prior to the onset of this illness.
- Household members or other close contacts with fever or pneumonia.
- Health care worker with direct patient contact in a healthcare facility.

(*Only facilities in Toronto, York, Durham regions of Ontario or Taiwan, China, Singapore or Hong Kong are considered as positive risk factors.)

Working Quarantine: To prevent the potential transmission of SARS virus by persons who have been in contact with a known probable or suspected case of SARS and may be in the incubation period of illness and those who work in an area where exposures to SARS may have occurred. The precautionary measures are to be applied to those who meet the above criteria and whose work has been identified as essential (e.g., health care workers during a SARS outbreak).

Measures include but are not limited to the following:

1) Arrive at the workplace wearing a mask
2) Go directly to the quarantine workplace area
3) Take breaks and meals in the designated quarantine area
4) Use Respiratory and Contact Precautions, which include gown, gloves, N95 mask or equivalent, and eye protection, while working in the quarantined area
5) Leave work wearing a clean procedure mask

6) Avoid public transit

7) For persons who were exposed to SARS virus and considered contacts, follow home quarantine measures

APPENDIX 2
SARS RISK FACTOR SCREENING TOOL

Patient Name/Information

Date _____ Unit _____

SECTION A: SARS Symptoms			
Are you experiencing any of the following symptoms?			
• New / worse cough (onset within 7 days) **OR**	NO	YES	
• New / worse shortness of breath (worse than what is normal for you)	NO	YES	

SECTION B: Temperature				
Are you feeling feverish, had shakes or chills in the last 24 hours?		NO	YES	*If yes to symptoms in **Sections A or B** record temperature*
RECORD TEMPERATURE	*Is the temperature above 38°C?*	NO	YES	

SECTION C: SARS Contact History				
1.	Have you had contact with a person with SARS while not wearing protection against SARS in the 10 days prior to onset of this illness?	NO	YES	
2.	Have you been in a healthcare facility designated as Category 2 or 3 in the last 10 days prior to onset of this illness? (insert facility)	NO	YES	
3.	Has Public Health asked you to be in home quarantine or isolation in the 10 days prior to onset of this illness?	NO	YES	
4.	Have you been to any of the following SARS affected areas in the last 10 days? (facility to insert areas)	NO	YES	If yes, identify area?

SECTION D: SARS Risk Factors				
1.	Have you, or a member of your household or someone you have had close contact with, traveled within the last 30 days to China?	NO	YES	If yes, identify area? Who?
2.	Have you been admitted to a hospital* in the 10 days prior to the onset of this illness?	NO	YES	If yes, name facility:
3.	Does anyone in your household, or a close contact, have fever or pneumonia?	NO	YES	If yes, who?
4.	Are you a healthcare worker with direct patient contact in a healthcare facility?	NO	YES	If yes, where?
5.	Do you live in a nursing home* that has had a respiratory infection outbreak in the 10 days prior to the onset of your illness?	NO	YES	If yes, name facility:

Apply the appropriate Assessment Algorithm to data

_____ _____

Patient Signature Interviewer Signature

_____

Nurse Signature (required if admitted)

*Only facilities in Toronto, York, Durham regions of Ontario or Taiwan, Singapore or Hong Kong are considered as positive Risk Factors

APPENDIX 3

SARS RISK MANAGEMENT ALGORITHM FOR COMMUNITY AND OUTPATIENT SETTINGS UNDER SARS OUTBREAK CONDITIONS

For responses on the SARS Risk Factor Screening Tool:

If "Yes" to any question in Section A or B (symptoms or fever)

AND

"Yes" to any question in Section C (Contact History)

- Surgical mask on patient
- Isolate as soon as feasible
- Use N95 or equivalent mask, eye protection, gloves and gown when in contact with the patient
- Arrange for ED or SARS Clinical assessment (call ahead)
- Notify local public health unit

If "Yes" to any question in Section A or B (symptoms or fever)

AND

"No" to all questions in Section C (Contact History)

AND

Irrespective of "Yes" or "No" to any question in Section D (Risk Factors):

- Surgical mask on patient
- Isolate as soon as feasible
- Use N95 or equivalent mask, eye protection, gloves and gown when in contact with the patient
- Arrange medical assessment
- Notify local public health unit

If Yes to any question in Section C (Contact History):

- Quarantine applies
- Surgical mask on patient
- Isolate as soon as feasible
- Use N95 or equivalent mask, eye protection, gloves and gown when in contact with the patient
- Assess for health care problem, including symptoms of SARS
- If symptoms, arrange ED or SARS Clinical assessment
- Notify local public health unit
- If not requiring admission, follow up in 72 hours
  - If worsening, consider Emergency Department or SARS Clinical assessment

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If "No" to all questions in Sections A, B & C

- Routine practices

APPENDIX 4
SUSPECT SEVERE ACUTE RESPIRATORY SYNDROME (SARS) CASE DEFINITIONS (HEALTH CANADA)

Suspect Severe Acute Respiratory Syndrome (SARS)
Case Definitions (Health Canada)

Revised 8 July 2003

Case:

A person presenting with:

- Fever (over 38 degrees Celsius)

AND

- Cough or breathing difficulty

AND

One or more of the following exposures during the 10 days prior to the onset of symptoms:

- Close contact[3] with a person who is a suspect or probable case
- Recent travel to an "Area with recent local transmission" of SARS **outside of Canada**[4]
- Recent travel or visit to an identified setting in Canada where exposure to SARS may have occurred (e.g., hospital [including any hospital with an occupied SARS unit], household, workplace, school, etc.).[5] This includes inpatients, employees or visitors to an institution if the exposure setting is an institution.

OR

A person with unexplained acute respiratory illness resulting in death after 1 November 2002, but on whom no autopsy has been performed

AND

One or more of the following exposures during the 10 days prior to the onset of symptoms:

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[3] Close contact means having cared for, lived with or had face-to-face (within 1 metre) contact with, or having had direct contact with respiratory secretions and/or body fluids of a person with SARS.
[4] This excludes airport transit through these areas
[5] The list of potential SARS exposure sites in the province of Ontario can be obtained at the following address:http://www.health.gov.on.ca/english/public/updates/archives/hu_03/hu_sars.html

- Close contact[3] with a person who is a suspect or probable case
- Recent travel to an "Area with recent local transmission" of SARS **outside of Canada**[4]
- Recent travel or visit to an identified setting in Canada where exposure to SARS may have occurred (e.g., hospital [including any hospital with an occupied SARS unit], household, workplace, school, etc.)[5] This includes inpatients, employees or visitors to an institution if the exposure setting is an institution.

Probable Case:

A suspect case with radiographic evidence of infiltrates consistent with pneumonia or respiratory distress syndrome (RDS) on chest x-ray (CXR).

OR

A suspect case with autopsy findings consistent with the pathology of RDS without an identifiable cause.

Exclusion Criteria

A suspect or probable case should be excluded if an alternate diagnosis can fully explain their illness.

Comments:

- In addition to fever and cough or breathing difficulty, SARS may be associated with other symptoms including: headache, myalgia, loss of appetite, malaise, confusion, rash and diarrhea.

APPENDIX 5
SAMPLE SARS NOTICE

STOP

Read Carefully Before Entering

Have you been in unprotected contact with a patient with SARS in the past 10 days? **OR**

In the past 10 days, have you been to a health care facility that is closed due to SARS?

If the answer to **EITHER** of these questions is **YES**, please contact your local Public Health Unit.

AND

If you have any of the following: unexplained muscle aches, severe fatigue, severe headache, a cough that started in the last week, shortness of breath worse than usual, or any fever, you should not enter the office and please go to the Emergency Department or SARS clinic.

(contact phone numbers)

Have you returned from [AFFECTED AREAS] in the past 10 days?

AND

Do you have any of the following: unexplained muscle aches, severe fatigue, severe headache, a cough that started in the last week, shortness of breath worse than usual, or any fever?

If the answer to **BOTH** of these questions is **YES**, you should not enter the office. You should go to the nearest Emergency Department or SARS Clinic immediately.

APPENDIX 6
HEALTH CARE FACILITIES SARS CATEGORIES

Health Care Facilities SARS Categories - a categorization system established by the Ministry of Health and Long-Term Care to determine precautionary measures to be taken during a SARS outbreak.

The levels are as follows:

SARS Category 0: Health care facility has no known cases of SARS (suspect or probable).

SARS Category 1: No unprotected SARS exposure – staff and/or patients. Health care facility has one or more cases of SARS (suspect or probable).

SARS Category 2: Any unprotected SARS exposure within the last 10 days but without transmission to staff or patients. The health care facility may or may not currently have one or more cases of SARS (suspect or probable).

SARS Category 3: Unprotected SARS exposure with transmission to health care workers and/or patients. The health care facility may or may not currently have one or more case of SARS (suspect or probable).

APPENDIX 7
GUIDELINES FOR SAFE AND PROPER N95 MASK USE

Routine Practice

- Masks should be used and maintained according to manufacturers recommendations.
- Inspect the mask to determine that it is not moist, soiled or damaged.
- Check that the mask straps hold the mask tightly against the face. If not, discard the mask. Do not attempt to alter the fit of the mask by knotting or cutting the straps.
- Perform a seal test to assess whether air escapes around the borders of the mask.[6]. There must be a tight facial seal to effectively wear the mask. Facial hair (e.g. beards and sideburns) presents a higher risk of disease transmission as hair may interfere with the sealing surface of the mask and the face. The best solution is to remove all hair that may interfere with the mask and face seal.
- Always ensure that the mask is maintained in proper position when being worn; i.e. do not leave mask hanging around neck, to be re-applied when use is desired.
- Usual duration of use is approximately eight to twelve hours. Masks may be re-used on a single day, providing it is stored clean and dry in a labelled paper bag in between uses. Do not use the mask on multiple days. Do not store in a sealed plastic bag, as this traps moisture onto the mask surface. Humidity, dirt and crushing affect the efficiency of the mask.

For use concerning suspect or probable SARS patients

- If the wearer is entering a room with a SARS patient, a new mask must be used with each encounter.
- Masks must be discarded after there is no further contact with the patient, and before contact with other people. Wash hands after removing PPE.
- If the wearer is NOT in a room with a SARS patient, a mask need not be changed during the shift duration (up to twelve hours)

Eyewear

- Ensure that eyewear is worn in a manner that does not interfere with the face and mask seal.

Changes in Physical Condition of the Wearer

- Changes in the wearer's physical condition could affect mask fit (e.g. facial scarring, dental changes, cosmetic surgery, and obvious change in body weight). The user may have to change the size or make of the N95 mask as a result

Facial Structure

- Variations in facial structure may require the provision of more than one size, make or model to ensure that a properly fitting mask is available for all users. Masks may vary in size from manufacturer to manufacturer and users may be able to get a better fit by trying a mask made by another manufacturer.

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[6] Example method for cup face masks – Always follow manufacturers recommendations

- Place both hands completely over the mask, being careful not to disturb the mask's position, and exhale sharply
- If air leaks around your nose, adjust the nosepiece as required to ensure a closed fit.
- If air leaks at mask edges adjust the straps back along the sides of your head.