

Preventing Respiratory Illnesses In Community Settings

Guidelines for Infection Control and Surveillance for Febrile
Respiratory Illness (FRI) in Community Settings in Non-Outbreak
Conditions

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Introduction

These guidelines represent a comprehensive evidence-based approach to droplet-spread respiratory illnesses in community (i.e., non-institutional) settings. They:

- reinforce the role of the general public, health care providers, practices and organizations in preventing the spread of respiratory illnesses
- address both public health and occupational health and safety issues
- identify best practices in the areas of surveillance (including screening and reporting) and infection control (including education) in community settings
- recommends steps to help community providers implement these practices effectively.

Context

Ontario supports a move to common national infection control practices and the Health Canada recommendations set out in the document: *Infection Control Precautions for Respiratory Infections Transmitted by Large Droplet/Contact: Infection Control Guidance in a Non-Outbreak Setting, When an Individual Presents With a Respiratory Infection*. (Monitor the Health Canada website at www.hc-sc.gc.ca.) and the Ontario Ministry of Health and Long-Term Care document *Preventing Respiratory Illnesses, Protecting Patients and Staff: Infection Control and Surveillance Standards for Febrile Respiratory Illness (FRI) in Non-Outbreak Conditions in Acute Care Hospitals*.

Community settings and providers will use the Health Canada guidelines as the basis for their infection control practices.

Variations from these guidelines should be based on: new information received from Health Canada or Public Health, and identified in future legislation, directives, protocols, standards, criteria; the province's history and experience with outbreaks of respiratory illness; and on the nature/capacity of community health settings.

Health Canada also plans to develop algorithms for infection control in different settings where health care is delivered. These should be reviewed and adopted for use in Ontario, if appropriate.

Note: Ontario's guidelines are for febrile respiratory illness (FRI), while Health Canada's guidelines are for severe respiratory illness (SRI). FRI and SRI are two different points along the continuum of respiratory illness. SRI is a more severe or advanced FRI.

Relationship with Other Infection Control Guidelines and Standards

These guidelines for the control of respiratory infection in community health settings do not replace infection control guidelines and standards already in place for other illnesses. They should be integrated with other guidelines and standards, and be part of a comprehensive effort to maintain acceptable standards for infection control practices in all community settings.

The Community Care Environment

The Risk of FRI in the Community

Infection control is both a public health and occupational health and safety issue. While most of the health care workers infected during the SARS outbreaks were hospital staff caring for extremely ill patients, five were community providers working in physician practices. The only physician death associated with SARS was a family physician. Community providers – particularly primary care providers – are on the front lines in dealing with FRI. They will likely be the first to see patients with respiratory symptoms, and will play a key role in identifying possible FRI and in preventing its spread.

Risk of exposure to respiratory illness in the community is highest in those settings where sick people actively seek care for acute episodic illnesses including respiratory infections, such as physician offices and community health centres, and lower in settings where people receive care for chronic illnesses and where women seek care during pregnancy (i.e., midwifery clinics).

Implementing a Consistent Approach in Diverse Settings

Because the risk to community health providers is significant, the settings where care is delivered must develop consistent processes and procedures for managing patients with FRI, and protecting the safety of both staff and other patients. While all health organizations are required by professional standards to implement infection control practices and by legislation to implement occupational health programs (i.e., the Occupational Health and Safety Act)¹, the way in which organizations implement these programs is influenced by:

- their **size**. They range in size from sole practitioner practices to agencies that employ hundreds of staff, including nurses, personal support workers, therapists and volunteers. Most agencies and practices are small.
- **capacity, the type of services they provide and the mix of service providers**. Health care workers who provide services in the community include: regulated health professionals (e.g., physicians, midwives, nurse practitioners, nurses, physiotherapists, occupational therapists, respiratory therapists, dentists, medical technologists, speech and language pathologists, dietitians, social workers); non-regulated workers who have training in certain aspects of care (e.g., personal support workers, health care aids); workers who provide practical support services (e.g., people who clear sidewalks or do house maintenance, trades people who install equipment, drivers who deliver oxygen and other supplies); and volunteers who deliver services, such as Meals on Wheels or friendly visiting. A health care provider's ability to implement infection control practice often depends on clinical and professional judgment, as well as training. Any program for infection control in the community must take into account the differing levels of skills and knowledge. and the settings where care is delivered.
- their **setting**. Community health care settings can be divided into two main groups: formal settings, where patients go to receive care, such as physician offices, community health centres, walk-in clinics, midwifery clinics, independent health facilities, public health units, dental offices, medical laboratories, physiotherapy clinics and schools; and informal settings, where health care providers go to deliver care, including people's homes, group homes, retirement homes, and supportive housing units. Infection control practices that are practical in formal settings may not be workable in informal settings, and vice versa.

Roles and Responsibilities

With regard to infection control in non-outbreak conditions in community settings:

- the federal government establishes national guidelines for infection control.
- the MOHLTC establishes provincial expectations for infection control in the community
- services providers and their employers and regulatory bodies (in consultation with the local public health unit as appropriate) develop the policies, protocols, standards and implementation plans required to meet the expectations.
NOTE: Health Canada's guidelines are for severe respiratory infection (SRI), while Ontario's guidelines are for febrile respiratory illness (FRI). FRI and SRI are two different points along the continuum of respiratory illness. SRI is a more severe or advanced FRI (see definitions).

Criteria for FRI

- fever >38° C **and** new or worsening cough or shortness of breath not otherwise explained.

Criteria for SRI

- fever >38° C **and** new or worsening cough or shortness of breath not otherwise explained
- admitted to hospital
- abnormal chest radiograph consistent with severe pneumonia or ARDS
- no alternative diagnosis after 72 hours
- and**
- living in or traveling to a potential zone of re-emergence within the past 30 days
- or**
- being in close contact with a symptomatic person who has been in a potential zone of re-emergence within the past 30 days.

¹ Any community health provider or agency that employs or contracts for the services of one or more workers must meet the requirements of occupational health and safety legislation.

Definitions²

Aerosolization:

The process of creating very small droplets of moisture (droplet nuclei) that may carry microorganisms. The aerosolized droplets can be light enough to remain suspended in the air for short periods of time and facilitate inhalation of the microorganisms.

Airborne transmission:

Occurs by dissemination of either airborne droplet nuclei or evaporated droplets (sub micron particles) containing microorganisms that remain suspended in the air for long periods of time. These microorganisms can be widely dispersed by air currents and may be inhaled by persons even when standing a distance away from the source patient.

Cluster:

A grouping of cases of a disease within a specific time frame and geographic location suggesting a possible association between the cases with respect to transmission.

Droplet Precautions: (see also Routine Practices)

The type of precautions used to protect health care workers when caring for patients with respiratory infections. These infections are transmissible principally by large respiratory droplet, particularly when the health care worker is within 1 metre of the ill patient. They are spread more effectively when the patient is coughing or sneezing. The precautions consist of a water resistant surgical or procedure mask and eye protection or face shield for the health care worker. Droplet precautions are also used to protect the mucous membranes of the eyes, nose and mouth of the health care worker during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions (e.g., airway suctioning).

Febrile Respiratory Illness (FRI):

During non-outbreak conditions, this includes a fever of greater than 38°C **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 than 38°C **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.

Formal community care settings:

Settings where patients go to receive care, such as physician offices, community health centres, walk-in clinics, midwifery clinics, independent health facilities, public health units, dental offices, medical laboratories, physiotherapy clinics, and schools. These settings usually have common areas where patients wait to be seen by providers.

Health care worker:

The intent of this is to capture all those who may be in contact with patients/residents or clients in their work. This would include those who work in doctors' offices, midwifery clinics, laboratories, community care access centres, service provider agencies, physiotherapy clinics, community health centres, independent health facilities, and public health units.

² Source: Directive to All Ontario Acute Care Facilities Under Outbreak Conditions. ACO-03-05, October 22, 2003. Appendix 1, Glossary.

High risk procedures:

With droplet-spread respiratory illness, high risk procedures are defined as those activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions, particularly those procedures that create aerosols.

Informal community care settings:

Settings where health care providers go to deliver care, including people's homes, group homes, retirement homes, and supportive housing units. They are usually patients' homes and there are no other patients present.

Non-Outbreak:

Refers to the condition when there are no reported cases of SARS anywhere in the world.

Outbreak:

For the purposes of SARS activity, an *outbreak* is defined as local transmission of SARS. This represents Level IV of the Regional Response Levels Outbreak definition which describes seven levels of outbreak. 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.

Reference: Regional SARS Response Levels and Paradigm (see Appendix 2).

Primary Care Provider:

For purposes of this document, primary care provider is defined as a health care professional who has the skills, training and scope of practice to diagnose a condition such as FRI (i.e., physician, nurse practitioner) and who has responsibilities under the Health Protection and Promotion Act to notify public health upon diagnosing a reportable disease.

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.
- The wearing of surgical 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.
- 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 during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions that could contaminate uniform or clothing.

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-dgsp/dpg_e.html#infection).

Severe Respiratory Illness (SRI):

Temperature greater than 38° C and cough or difficulty breathing not otherwise explained, admitted to hospital, chest x-ray consistent with severe pneumonia or ARDS and no alternative diagnosis after 72 hours; **and** living in or traveling to a potential zone of SARS re-emergence within the past 30 days **or** being in close contact with a symptomatic person who has been in a potential zone of SARS re-emergence within the past 30 days.

I. Guidelines for Comprehensive Infection Control Programs for Respiratory Illnesses in Community Health Settings

Surveillance

Surveillance in the community is designed to help the agency/service provider/practice recognize possible symptoms of febrile respiratory illness (FRI) so the organization can take appropriate precautions. Surveillance in community settings differs from surveillance in acute care settings because community health providers are a heterogeneous group. Some (e.g., physicians, nurse practitioners) are able to diagnose FRI, but others are not. Therefore the focus of surveillance in community health settings is less on confirming a diagnosis of FRI, and more on raising health care workers' awareness of possible risk, screening patients for respiratory symptoms, protecting health care workers and other patients in the setting, and counselling and referring people who have symptoms. Because only some community providers diagnose disease and/or have a legal responsibility to report, there is also less emphasis on reporting.

1. Screening

Screening is designed to help health care workers and organizations identify individuals with potential FRI who may pose a risk to other patients and/or to health care providers. The goals are to:

- identify any patient who visits a formal community care setting or who receives services in informal settings in the community who has symptoms of an otherwise unexplained respiratory infection (i.e., cough or shortness of breath)
- minimize that patient's contact with and/or droplet spread to other patients or to health care workers.

Guidelines:

1.1 All patients who present at a formal health setting in the community for care, and all patients who are scheduled to receive services in an informal community setting should be assessed for symptoms of FRI/ SRI using a simplified approach to the screening process which reflects:

- the scope of practice of the health care worker doing the screening
- the risks in the setting where the screening is done.

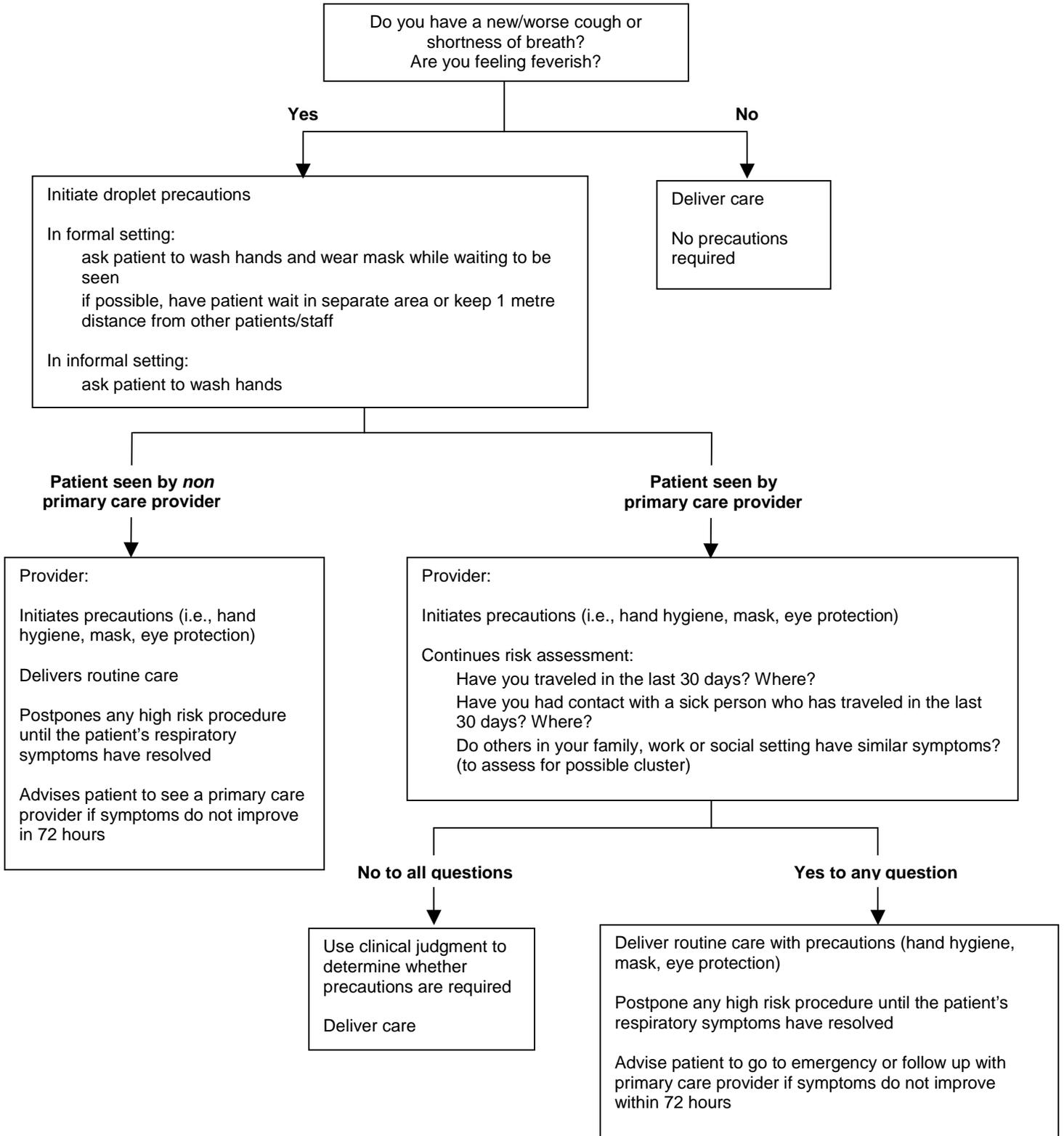
Screening in the acute care setting involves five questions and a series of actions triggered by the answers to those questions. It also involves taking the temperature of every person who presents at emergency or is admitted to the hospital (see Appendix 1). Because not all community settings will have the capacity to complete this level of screening (i.e., take temperatures, diagnose FRI), they should use the screening algorithm on the next page which:

- is based on the knowledge of the providers and the type of setting (i.e., formal or informal)

- encourages all community settings to err on the side of caution and take precautions (including using appropriate protective equipment) with any patient who has respiratory symptoms (i.e., cough, shortness of breath) unless they know the individual has a chronic condition characterized by coughing and shortness of breath, such as chronic obstructive pulmonary disease (COPD).

This screening/assessment may be done by a receptionist or health care worker, or through a process of self-screening. The assessment can also be done in person or by phone. See recommendation 1.2.

Surveillance/Screening Protocol for Febrile Respiratory Illness in Community Settings



1.2 All agencies, practices and service providers should develop a screening process/protocol which is workable in their setting and consistent with these guidelines. All screening should be done when a person first enters a formal setting or within 24 hours prior to the service being delivered in an informal setting.

Applying the screening guideline in formal settings. Physician offices, community health centres, midwifery clinics, independent health facilities and medical laboratories may opt for a program of reinforced self-screening. Before they enter the office, patients/visitors would see a sign asking anyone who has a cough or shortness of breath to wash their hands and to put on a mask when possible/practical (alcohol hand washing liquid and masks would be provided). In formal settings, the role of the receptionist or first person to have contact with the patient is to confirm that they have read and understood the sign (self screened). If literacy or language is a barrier, that person will help the patient complete the screen. Some formal settings may also attempt to do some screening by phone (i.e., asking people when they make an appointment the reason for their visit, and scheduling people who report respiratory symptoms at a time when there are fewer people in the waiting room.).

In formal settings, the patient may be seen by either a non-primary care provider or a primary care provider. If the patient is being seen by a non-primary care provider, the health care provider would initiate precautions (i.e., hand hygiene, water resistant surgical mask, eye protection), deliver the service and recommend that the patient see his or her primary care provider if the symptoms worsen after 72 hours. If the patient is being seen by a primary care provider, that provider would initiate precautions (i.e., hand hygiene, water resistant mask, eye protection), continue the FRI screening (i.e., assess for fever, travel history, possible clusters), determine whether the patient's condition warrants precautions (i.e., is it FRI or can the symptoms be explained by another condition?), and deliver services using the appropriate level of precautions.

Applying the screening guideline in informal settings. Home care, the agency or organization responsible for managing the client's care (i.e., case manager) would call the client within 24 hours prior to the scheduled visit to conduct the initial screen over the phone. If clients report respiratory symptoms, the agency can then arrange for visiting health care workers to have appropriate personal protective equipment. If, for some reason, the agency is not able to reach the client by phone, the worker will screen the client before providing services. Agencies should also encourage clients to notify them in advance of any visit if they develop respiratory symptoms. This approach ensures that screening is consistent and is done by someone with appropriate knowledge and skills. It also reduces the burden of screening on personal support workers and volunteers who may not have the appropriate skills or clinical judgment.

Masking Patients in Formal Community Health Settings

The purpose of having the patient mask is to protect other patients/staff in the common waiting area. However, not all patients will be able to tolerate masks (e.g., children, people with chronic breathing problems, people with dementia, dental patients). In these cases, the setting should, if possible, have the patient wait in a separate area or keep at least a one metre distance from other patients. The ability of different settings to comply with these Guidelines will largely depend on the physical space available.

1.3 Health care workers should initiate appropriate infection control precautions with anyone with respiratory symptoms based on Health Canada infection control guidelines:

- Formal settings should follow Health Canada infection control guidelines for patient reception areas (e.g., hand washing liquid and water resistant surgical masks at the entrance, requiring coughing patients to wear masks, having patients with suspected FRI wait in a separate area away from other patients until the etiology of the infection is known, maintaining a metre distance from a coughing patient, and wearing appropriate protective equipment when providing care). Please see Health Canada – Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care, website: <http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/99pdf/cdr25s4e.pdf>
- In informal settings, where the worker has less control and the risk of transmission to other patients is much lower, the focus is on protecting the worker. The worker should observe proper hand hygiene and wear appropriate protection (i.e., water resistant surgical mask and eye protection).

In informal settings, where there is little risk to others and where the patient is less likely to tolerate a mask (i.e., because of age, higher rates of serious chronic health problems including breathing problems and higher rates of dementia) the provider wears the mask, rather than the patient.

1.4 When care is being provided by a primary care provider (i.e., someone with the knowledge, skills and scope of practice to do a complete assessment and diagnose FRI), the primary care provider should initiate precautions (i.e., hand hygiene, water resistant surgical mask, eye protection) and continue the clinical assessment of a patient who has respiratory symptoms, including taking a temperature and asking travel and contact questions, to determine whether the patient has a possible FRI that should be investigated further.

1.5 Any procedures that are considered high risk (i.e., create aerosols) should be postponed until the patients' respiratory symptoms have resolved.

High risk procedures that may be delivered in community settings include administering nebulized therapy and non-invasive ventilation.

2. Counselling and Referral

Counselling and referral is designed to ensure that those who do have respiratory symptoms are aware of the steps they should take to avoid transmission to others and seek appropriate medical care if their symptoms are severe or become worse. Because of their ongoing contact and relationship with patients, community health providers are uniquely able to help educate people to prevent the spread of respiratory illnesses and to direct them to appropriate care.

Guidelines:

2.1 Health care providers should counsel patients or clients with symptoms of a respiratory illness (new/worse cough, shortness of breath) on ways to avoid passing the illness to others, and advise them to see their primary care provider or go to a hospital if their symptoms do not improve or worsen after 72 hours.

2.2 Primary care providers who are concerned that patients may have severe FRI (i.e., SRI) should refer them to a hospital for further investigation.

2.3 If patients with respiratory symptoms require a high risk procedure that cannot be postponed (i.e., in an emergency), the care provider should take appropriate precautions.

This guideline applies primarily to dentists and their assistants who may be involved in procedures that create aerosols. Precautions will be determined by the risk involved:

- If the provider suspects that the patient has a droplet-spread infection, the dentist and assistant should wear eye protection and N95 equivalent masks
- If the provider suspects an airborne infection (e.g., tuberculosis), he or she should refer the patient to a setting where the procedure can be done in a negative pressure room by providers using appropriate personal protective equipment for airborne infections. NOTE: the use of a negative pressure room is to protect other patients.

2.4 Staff or employees of community health agencies or practices who are absent for more than 72 hours with respiratory symptoms should be advised to see a primary care provider to have their condition assessed.

3. Reporting

Reporting is designed to ensure that information required by health care agencies or public health to identify or follow potential cases of FRI is communicated and shared appropriately, while still safeguarding people's right to confidentiality. The goals are to:

- identify patients who screen positive for FRI or SRI
- ensure appropriate infection control practices are used for patients who have FRI
- involve occupational health and safety in a timely way to ensure workers are protected
- identify and manage clusters of cases quickly and effectively
- give public health the information it requires to prevent/contain/manage community spread.

Because only some community health care workers (e.g., family physicians) will be able to definitively establish FRI, the focus should be less on external case reporting to public health and more on internal reporting to promote effective infection control and on efforts to identify clusters that may be of concern to public health.

Guidelines:

Internal Reporting

Infectious disease is an occupational health and safety issue, as well as a public health issue. To protect the workers' health and prevent the spread of disease in the workplace, it is critical that community agencies and practices

develop collaborative relationships among occupational health, infection control services (where they exist) and public health, and ensure roles and responsibilities are understood.

Part 2, sections 8 and 9 of the *Occupational Health and Safety Act* describe some of the functions and powers of the Joint Health and Safety Committee and the Health and Safety Representative. Sections 8 and 9 of Regulation 67/93 (the Regulation for Health Care and Residential Facilities) set out the committee's or representative's consultative role in establishing measures and procedures dealing with infection control at health care and residential facilities, and in training (see web site: http://www.e-laws.gov.on.ca/DBLaws/Statutes/English/90o01_e.htm). In small practices that do not have a health and safety representative, the practitioners themselves are responsible for fulfilling all the requirements of health and safety legislation.

Agencies and practices have a responsibility to ensure that workers have the knowledge, skills, equipment and support to protect themselves in the workplace. The focus of internal reporting is to protect workers.

3.1 Agencies who are sending one or more workers to provide services to a client with respiratory symptoms should note the need for appropriate precautions on the file and ensure all workers are informed and have the appropriate protective equipment.

3.2 Workers who are unsure whether to use precautions with a patient with respiratory symptoms should contact their supervisor, the practitioner in charge of the practice, or employer for guidance.

3.3 In agencies that have an occupational health service, occupational health should:

- be notified by the manager/department/unit head of all employees/contract workers who stay home due to illness
- contact all employees / contract workers who stay home due to illness after 72 hours and confirm that they do not have FRI. The notes from the review will be kept confidential in the occupational health record.
- notify infection control about clusters of employees / contract workers who are home ill after 72 hours due to FRI. This reporting should be done in a non-nominal manner to protect the workers' right to confidentiality.

3.4. In practices or agencies that do not have an occupational health service, the employer or practitioner is responsible for:

contacting employees who stay home due to illness after 72 hours to confirm that they do not have FRI.

3.5 All agencies, service providers and practices must comply with relevant occupational health and safety legislation.

See sections 8, 9, 51 and 52 of the *Occupational Health and Safety Act* and section 5 of the Regulation for Health Care and Residential Facilities, or section 5 of the Regulation for Industrial Establishments as appropriate.

External Reporting: to Public Health

3.6 Primary care providers should only report possible clusters of FRI (not individual clients with possible FRI) to their local public health unit.

Primary care providers have a legal obligation to report a number of communicable diseases to public health. Because respiratory symptoms during non-outbreak conditions can have many causes and will not all require investigation, primary care providers should report only those situations that may be cause for concern (e.g., clusters of FRI).

3.7 Other agencies that do not have formal reporting obligations should contact public health only when they see a situation that is a potential cause of concern (e.g., a cluster of FRI in a retirement home or group living situation).

3.8 Local public health units should work with community care providers to establish clear expectations/procedures for reporting during non-outbreak conditions.

External Reporting: to the Ministry of Labour

3.9 Agencies/practices that have a staff member or employee with a probable or confirmed occupational infection are expected to notify the Ministry of Labour in accordance with existing occupational health and safety legislation.

Sections 51 and 52 of the *Occupational Health and Safety Act* set out when reports relating to critical injuries or occupational illnesses must be made to the Ministry of Labour, and details required for the reports are listed in section 5 of the Regulation for Health Care and Residential Facilities, or section 5 of the Regulation for Industrial Establishments, as appropriate.

Infection Control

Infection control includes a constellation of practices and precautions used to prevent disease transmission, and includes the knowledge and skills required to choose and maintain appropriate precautions. Infection control for FRI is part of broader infection control practices.

4. Infection Control Practices

Infection control practices are intended to protect patients, health care providers and the public from exposure to infectious diseases. In community settings where care is provided for people with infectious diseases, there is no such thing as “total protection” or “zero risk” for patients, visitors or health care workers, but there are steps that agencies, practices and service providers can take to significantly reduce the risk. The goals of the recommended infection control practices in the community are to:

- ensure a consistent, high standard of infection control in all settings in the community where care is delivered
- ensure community health settings are implementing evidence-based infection control practices
- encourage community health settings and providers to continually work to reduce the risk to health care workers and patients, including appropriate immunizations.

Guidelines:

4.1 All agencies, practices and service providers in the community should use the *Health Canada Infection Control Precautions for Respiratory Infections Transmitted by Large Droplet/Contact: Infection Control Guidance in a Non-Outbreak Setting, When an Individual Presents With a Respiratory Infection* as the basis for establishing infection control standards and practices for FRI.

4.2 Agencies, practices and providers should ensure that all infection control processes and procedures implemented to prevent the spread of FRI comply with existing occupational health and safety legislation.

These are set out in the *Occupational Health and Safety Act* and regulations.

4.3 When there is disagreement about appropriate infection control practices among those caring for a patient with a possible FRI, staff should follow the practice of using the higher level of precautions until consensus can be reached. Unregulated providers should be encouraged to consult with a supervisor if uncertain about appropriate practices. If supervisors do not have the expertise to answer the question, they should contact their infection control service or the local public health department.

Each agency or practice should develop a process for resolving conflicts about the need for precautions.

4.4 The appropriate level of precaution should be driven by the procedure being undertaken and the patient’s presenting symptoms. Community health providers providing direct patient care should implement precautions appropriate to the risk:

- hand hygiene as the first line of defense
- the use of water resistant surgical masks by people providing direct care and, in formal settings, patients presenting with respiratory symptoms (where possible)
- the use of eye protection by health care workers providing direct care
- gloves only when the provider is likely to have contact with body fluids
- gowns only during procedures when clothing might be contaminated.

Based on the knowledge now available about the spread of respiratory illnesses, the Health Canada recommendations for routine droplet precautions are the appropriate response during significant patient contact in non-outbreak conditions. This means that hand hygiene, water resistant surgical masks and eye protection will provide an appropriate barrier. (When dealing with an airborne illness, see Health Canada recommendations for airborne disease spread. Please see [Health Canada – Routine Practices](#), Section 1.2.)

4.5 Community health care providers who conduct high risk procedures (e.g., nebulized therapies, aerosol humidification) should follow the *Directive to All Ontario Acute Care Facilities for High-Risk Respiratory Procedures – Outbreak and Non-Outbreak Conditions*, MOHLTC, February 2004.

4.6 Formal community settings should make every effort to maintain a clean working environment, and to disinfect areas that may have been contaminated after each patient visit. These settings

should follow the *Health Canada Infection Control Guidelines on Washing, Cleaning, Disinfection and Sterilization in Health Care.*

Maintaining a clean office environment involves wiping down any areas that a patient with a respiratory illness may have touched during the visit (e.g., arms of the chair in the waiting room, the examination table, the edge of the desk, the stethoscope, anything within arm's reach of where the patient was sitting).

4.7 Agencies, practices and service providers providing care in formal and informal settings should have procedures for managing and disposing of protective equipment (e.g., masks), based on Health Canada guidelines.

For example, they should ensure that providers only take the equipment they need into the care setting, and that reusable equipment is cleaned and disinfected according to Health Canada guidelines. Whenever possible, providers should use disposable equipment. That equipment can be safely discarded with household garbage and should be disposed of on exiting the room where the assessment is done or care is delivered. Providers should also have an adequate supply of alcohol-based hand wash to ensure appropriate hand hygiene.

4.8 All community service providers should be given time and education to become comfortable with any new infection control practice that represents a different level of precaution from that currently in use in their work setting.

Because some infection control recommendations represent a change from practices used during outbreak conditions (e.g., water resistant surgical masks instead of N95 masks), it may take time for staff to understand the basis for the change, become comfortable with the new infection control precautions, and adopt new practices (see section on education). Staff should have the option of continuing to use higher level precautions until they are confident in the new practice, but they should be discouraged from using any precautions that are not supported by science – particularly those that, if misused, increase the risk of exposure to FRI.

4.9 Agencies, practices and services providers should ensure that the protective equipment required to care for people with respiratory illness is available when needed.

4.10 All agencies, practices and service providers should encourage staff to be immunized, and actively promote the annual influenza immunization to their patients.

Immunization is the first line of defense against the spread of influenza, and should be encouraged.

5. Education and Communication

Education and communication programs are designed to ensure that both the public and health care workers understand the reason for infection control practices for droplet-spread respiratory illness and their responsibilities in preventing disease spread. The goals of education and communication programs are to:

- provide clear, accessible information
- explain the science that forms the basis for the recommended infection control practices
- ensure health care providers have the support and opportunity to develop the skills required to implement appropriate infection control practices
- describe the roles and responsibilities of the public/patients, health care providers, occupational health/infection control practitioners, Joint Health and Safety Committees/Health and Safety Representatives (where applicable), and public health
- encourage the kind of open communication and collaboration that help prevent infectious diseases.

To support best practices, agencies, practices and professions should provide active teaching programs with significant input from infection control practitioners and Joint Health and Safety Committees/Health and Safety Representatives (where applicable).

Guidelines:

5.1 All community health agencies, practices and service providers should develop active, formal orientation and ongoing education programs for all staff to ensure they have the knowledge, skills and confidence to maintain infection control standards for FRI.

Education programs should emphasize:

- hand hygiene (including hand washing and use of alcohol based sanitizers)
- components of Routine Practices and Transmission-based precautions such as masks, eye protection, and the appropriate use of gloves and gowns
- appropriate cleaning and/or disinfection of care equipment, supplies and surfaces or items in the care environment (e.g., beds, desks, chairs)
- safe application and removal of personal protective equipment

- the principles behind transmission-based precautions.
- 5.2 Community health agencies, practices and service providers, in conjunction with public health and the MOHLTC, should help educate the public and patients about their personal responsibility in disease prevention and about the steps they can take to minimize the spread of FRI including:**

- having an annual influenza immunization
- staying home when they are sick
- covering their mouth when coughing
- washing their hands frequently.

5.3 Community health agencies, practices and services providers should educate individual health care providers about their personal responsibility in disease prevention and the steps they can take to minimize the spread of FRI including:

- having an annual influenza immunization
- not working when ill
- reporting any symptoms of an FRI to their managers, departments, or occupational health service in accordance with workplace policies.
- covering their mouth when coughing
- washing their hands frequently.

See also the Centres for Disease Control cough etiquette.

5.4 Community health agencies, practices and service providers should, as part of their ongoing quality assurance programs, routinely assess the effectiveness of their education programs and their impact on practices, and identify any barriers in the community setting.

6. Implementation in Community Health Settings

These guidelines establish the provincial expectations for surveillance and infection control practices to prevent droplet-spread respiratory illness. It is up to community services providers and their employers and regulatory bodies to develop the policies, protocols, standards and implementation plans required to meet the expectations. Because of the diversity of settings, providers, training and type of care delivered in community settings, policies and protocols may vary from setting to setting. However, the goal is to protect patients and care providers, to achieve a consistent high level of infection control in the community, and to reinforce existing infection control programs and standards.

Guidelines:

6.1 Each community agency, practice and service provider should develop internal policies to implement a common approach to screening and surveillance for FRI. When agencies are providing services to the same clients (i.e., on contract to the Community Care Access Centres), every effort should be made to ensure that their surveillance and infection control policies and procedures are consistent.

These policies should address the following issues as they apply to each agency's practices:

- who completes the screening assessments
- who reviews the results
- expectations for regulated and non-regulated providers
- where the information is kept (i.e., are results recorded on the patient's chart)
- the process for resolving conflicting opinions on the need for precautions
- any changes required to the recommended screening protocol to meet the setting's needs
- how the agency/practice/service provider will monitor the implementation of infection control standards, and assess compliance
- how the agency/practice/service provider will evaluate the effectiveness/impact of education programs.

6.2 Community agencies, practices or service providers that have an infection control service, occupational health representative or a Joint Health and Safety Committee should establish their roles and responsibilities in implementing a comprehensive infection control program. All

agencies, practices and service providers (even those not large enough to have a representative or committee under the Act) must ensure that their infection control practices comply with occupational health and safety legislation.

See sections 8 and 9 of the *Occupational Health and Safety Act*.

Appendix 1: Regional SARS Response Levels and Paradigm

SARS Response Levels

A series of SARS Response Levels has been developed to describe the appropriate responses required for each level of risk of SARS in a given geographic area. The risk assessment takes into account the provincial, national and international geographic and epidemiologic contexts. These SARS Response Levels are based on the *proximity* to the area(s) in the world where SARS transmission is occurring, the *likelihood* of local transmission, and the *ability to epi-link* cases.

Within this document SARS cases are those that meet current accepted SARS case definitions.

These guidelines are written to assist local public health units in determining the SARS Response Level for each jurisdiction.

The two most important factors that determine a local jurisdiction's recommended SARS Response Level are:

- the local SARS activity level (based on local communicable disease and hospital surveillance reports), and
- the SARS activity level of jurisdictions that are *related* to or *connected* to the local jurisdiction by virtue of admixing of populations and patient transfers (based on the reported SARS activity level).

Paradigm

Following the description of the SARS Response Levels is a chart outlining the possible scenarios that could occur in a community under each Response Level. The scenarios overlay the description of Response Levels with that of the conditions of SARS Health Care Facility Categories. For example, a community at SARS Response Level 2 (no local cases but cases in other parts of the province) can only have health Care facilities that are at a SARS Health Care Facility Category 0 (no active SARS cases; no unprotected exposure or transmission). Also provided are specific instructions for acute care facilities and pre-hospital care providers at each Response Level.

Response Levels

Level 0 – NO ACTIVITY

- *No detected SARS activity anywhere in the world*

Level 1 – ALERT

- *No detected cases in the local jurisdiction, in Ontario, or in neighbouring / connected jurisdiction(s), but cases identified elsewhere in the world*

Level 2 – ONTARIO (PROXIMAL) PRESENCE

- *No detected cases in the local jurisdiction, but one or more case(s) reported in Ontario or a neighbouring / connected jurisdiction(s)*

Level 3 – LOCAL PRESENCE

- *Case(s) detected in the local jurisdiction and no evidence of local transmission*

Level 4 – LOCAL TRANSMISSION IN DEFINED SETTINGS

- *Transmission* in the local jurisdiction, *within defined healthcare, household, or community settings* (e.g. hospital, clinic, classroom, workplace, funeral gathering, faith group, recreational settings), but without documented community spread

Level 5 – LIMITED COMMUNITY SPREAD

- *Limited unlinked cases* in the community; identification of cases beyond defined institutional or household settings, unrelated to travel

Level 6 – WIDESPREAD COMMUNITY SPREAD

- *Widespread unlinked cases* in the community, with multiple communities affected.

The local Medical Officer of Health (MOH) will assess the information available and determine the response level for the jurisdiction. The local MOH will advise the Public Health Branch of the Ministry of Health and Long-Term Care of any assessment of Response Level 3 or above. The Public Health Branch, as per internal protocols, will alert the provincial ³SARS Executive Committee (which will have the MOH of the affected public health unit as a participant) for determination of appropriate next steps for the institution, the community and the province. When more than one health unit is affected, coordination and communication of Response Levels will be the responsibility of the Public Health Branch.

Some considerations are as follows:

- An appropriate response by a local health unit may be more aggressive depending on the context of SARS activity in the local and surrounding areas. For example, a jurisdiction may judge itself to be at increased SARS risk because of *risk connections* (significant population admixing, patient transfers, commuting, travel etc.) to an area experiencing a higher level of SARS activity, and may choose a more aggressive level of response (i.e., may “upgrade” its response). The related/connected area could be another Ontario health unit jurisdiction, another province or U.S. jurisdiction, or an international destination with significant travel to the local jurisdiction.
- *When a jurisdiction is severely affected (e.g., at a Response Level 4, 5, or 6), all other jurisdictions (rather than just neighbouring / connected jurisdictions) should consider increasing their response to a level closer to that of the more severely affected jurisdiction, even if they have no known cases in their local jurisdiction (increase from Response Level 1 or 2 to a higher level).*
- A *range of risk* exists within individual regional Response Levels, and the response should be tailored to the estimated risk (e.g., the particular interventions adopted and/or the settings to which they would apply). Particularly within Response Level 4, there may be instances of minimal transmission for which the declaration of an *outbreak* and the related responses are not required. Examples include: a single imported case with limited transmission in the case’s household, or limited well-recognized transmission in a delineated setting.

- *For the purposes of this classification scheme, an outbreak is defined as local transmission of SARS (Response Levels 4, 5, and 6), rather than as a single case or several imported cases. The local health unit region's SARS Response Committee is responsible for declaring a SARS outbreak, and may be setting-specific (e.g., a hospital with transmission) or health unit region-wide (e.g., transmission in more than one setting or significant community exposure).*
- *Any health unit region with a Health Care Facility SARS Category 1 or 2 hospital will be at Response Level 3 or above.*
- *Any health unit region with a Health Care Facility SARS Category 3 hospital will be at Response Level 4, or above.*
- *As health unit regions generally have more than one hospital, and occasionally, hospital corporations overlap health units, an individual hospital's category will not always align with the health unit regions Response Level. Refer to the Ontario SARS Response Levels Paradigm below for how the regional levels, healthcare facility SARS categories and other providers' precautions interact.*

Appendix 2

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Activities	Patient Transfer and Pre-Hospital Care Activities
<p>0 No activity anywhere in the world.</p>	<p>0 No active SARS cases. No unprotected exposures or transmission.</p>	<p>FRI surveillance using Risk Factor Screening Tool.</p>	<p>Self screening of staff, outpatients and visitors</p>	<p>Non-outbreak practices. Have SARS non-outbreak and outbreak procedures prepared and in place.</p>	<p>Non-outbreak transfer process and non-outbreak practices.</p>

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Activities	Patient Transfer and Pre-Hospital Care Activities
<p>1 Activity elsewhere in world</p> <hr/> <p>2 No local cases but cases exist in <u>other</u> areas of Ontario or other nearby jurisdictions</p>	<p>0 No active SARS cases. No unprotected exposures or transmission.</p>	<p>FRI surveillance using Risk Factor Screening Tool.</p> <p>Ensure ED and admitting are aware of affected areas in Ontario or other nearby jurisdictions.</p>	<p>Self screening of staff, outpatients and visitors.</p> <p>Post names of affected areas in Ontario or other nearby jurisdictions on signage.</p>	<p>Non-outbreak practices.</p> <p>Review information from MOHLTC and local health unit.</p> <p>Have preparatory meetings with local SARS management committee to ensure a state of readiness</p>	<p>Non-outbreak transfer process and non-outbreak practices.</p> <p>Base to review information from MOHLTC and local health unit including names of affected areas in Ontario or other nearby jurisdictions.</p> <p>Ensure paramedics receive in-service on procedures.</p>

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Activities	Patient Transfer and Pre-Hospital Care Activities
<p>3 Local cases without transmission in your region</p>	<p>0 No active SARS cases. No unprotected exposures or transmission.</p> <p>1 Active SARS cases. No unprotected exposures or transmission.</p>	<p>FRI surveillance using Risk Factor Screening Tool.</p> <p>Ensure ED and admitting are aware of affected facilities in your region and other regions in Ontario.</p>	<p>Self screening of staff, outpatients and visitors.</p> <p>Post names of affected facilities in your region and other regions in Ontario on signage.</p>	<p>Non-outbreak practices.</p> <p>Survey for any admitted patients who may have been transferred in from an affected facility.</p> <p>Inform all staff to declare to Occupational Health if they have worked at any of the affected facilities.</p>	<p>Non-outbreak transfer process and non-outbreak practices.</p> <p>Base to review information from MOHLTC and local health unit including names of affected areas in Ontario or other nearby jurisdictions.</p> <p>Ensure paramedics receive in-service on procedures.</p>

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Directive to Follow and Other actions	Patient Transfer and Pre-Hospital Care Directives to Follow
<p style="text-align: center;">3</p> <p>Local cases without transmission in your region</p>	<p style="text-align: center;">2</p> <p>Active SARS cases, with unprotected exposures, but no transmission.</p>	<p>Intensive Hospital surveillance using SARS Risk Factor Screening Tool.</p>	<p>Self screening of staff, outpatients and visitors.</p> <p>Post names of affected facilities in your region and other regions in Ontario on signage.</p>	<p>Non-outbreak practices.</p>	<p>Non-outbreak practices.</p> <p>If associated with a SARS Category 2 or 3 hospital, then use outbreak practices.</p>
	<p style="text-align: center;">3</p> <p>Active SARS cases, with transmission</p>	<p>This scenario is not possible by definition. When transmission has occurred within the hospital, then the entire region moves up to Level 4</p>			

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Directive to Follow and Other actions	Patient Transfer and Pre-Hospital Care Directives to Follow
<p style="text-align: center;">4</p> <p>Local cases with transmission in “defined” settings (i.e., for the sake of this application this means transmission in hospitals)</p>	<p style="text-align: center;">0</p> <p>No active SARS cases. No unprotected exposures or transmission</p> <p style="text-align: center;">1</p> <p>Active SARS cases. No unprotected exposures or transmission</p>	<p>FRI surveillance using Risk Factor Screening Tool with Outbreak Management Algorithm.</p> <p>Ensure ED and admitting are aware of affected facilities in your region and other regions in Ontario.</p>	<p>Active screening of staff, outpatients and visitors using the SARS Risk Factor Screening Tool.</p> <p>Staff self screen at home and do not come to work if they are ill.</p>	<p>Outbreak directive.</p> <p>Survey for any admitted patients who may have been transferred in from an affected facility.</p> <p>Inform all staff to declare to Occupational Health if they have worked at any of the affected facilities.</p>	<p>Outbreak transfer process and outbreak practices.</p>

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Activities	Patient Transfer and Pre-Hospital Care Activities
<p>4 Local cases with transmission in “defined” settings (i.e., for the sake of this application this means transmission in hospitals)</p>	<p>2 Active SARS cases, with unprotected exposures, but no transmission.</p>	<p>IH surveillance.</p>	<p>Active screening of staff, outpatients and visitors using the SARS Risk Factor Screening Tool.</p> <p>Staff self screen at home and do not come to work if they are ill.</p>	<p>Follow Outbreak directive.</p> <p>Survey for any admitted patients who may have been transferred in from an affected facility.</p> <p>Inform all staff to declare to Occupational Health if they have worked at any of the affected facilities.</p>	<p>Outbreak transfer process and outbreak practices.</p>

Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients & Staff	Screening Procedures	Acute Care Directive to Activities	Patient Transfer and Pre-Hospital Care Activities

<p>4 Local cases with transmission in “defined” settings (i.e., for the sake of this application this means transmission in hospitals)</p>	<p>3 Active SARS cases, with unprotected exposures or transmission</p>	<p>IH surveillance.</p>	<p>Active screening of staff, outpatients and visitors using the SARS Risk Factor Screening Tool. Staff self screen at home and do not come to work if ill.</p>	<p>Outbreak directive. Survey for any admitted patients who may have been transferred in from an affected facility. Inform all staff to declare to Occupational Health if they have worked at any of the affected facilities. Hospital may have some or all programs closed depending on individual circumstances as decided by MOHLTC, local health unit and hospital.</p>	<p>Outbreak transfer process and outbreak practices.</p>
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Ontario SARS Response Levels Paradigm

Regional SARS Response Level	SARS Health Care Facility Category	Surveillance within Health Care Facility of Patients and Staff	Screening Procedures	Acute Care Directive to Activities	Patient Transfer and Pre-Hospital Care Activities
5 Limited community spread	Respond as per Community SARS Response Level 4 or lower depending upon extent of SARS with or without transmission in healthcare facilities.			Outbreak transfer process and outbreak practices.	
6 Wide community spread					

The health care facility SARS category is more likely than not to determine the regional SARS level above Response Level 2.

It is possible that there might be local SARS cases in a region without cases in any or some regional hospitals.

Only the hospitals with SARS cases will be designated as SARS Category 1 or higher.

Where a region is at Response Level 3 or higher due to community cases with or without transmission, all of the healthcare facilities and providers in that region should:

- maintain a high level of awareness of the local SARS epidemiology,
- communicate with the local health unit; and,
- have plans in place for managing their facility, clinic or practice if they see SARS patients or are designated a Hospital SARS Category 1 facility or higher.