

## ANNEX I: INFECTION CONTROL GUIDELINES FOR PANDEMIC INFLUENZA MANAGEMENT

During an influenza pandemic, adherence to infection control practices is extremely important to prevent transmission of influenza. These guidelines for the management of pandemic influenza in traditional and non-traditional health care settings are based on published guidelines from the Population and Public Health Branch of the Public Health Agency of Canada and the Canadian Pandemic Influenza Committee. The web sites and ordering instructions for these resources are at the end of this annex.

### I.1. Mode of Transmission

Influenza is transmitted by:

- Droplet contact of the oral, nasal or possibly conjunctival mucous membranes with the oropharyngeal secretions of an infected individual.
- Indirect contact from hands and articles freshly soiled with discharges of the nose and throat of an acutely ill individual.
- Droplet transmission from the respiratory tract of an infected individual.
- Possibly by the airborne route (controversial) during aerosolizing procedures.

Incubation and Period of Communicability:

- Incubation period of 1-3 days.
- Influenza is communicable for 24 hours before onset of symptoms and 3-5 days after onset of symptoms (may be longer in children and some adults).

**Note:** Influenza A and B can survive on hard surfaces for 24-48 hours, on softer (porous) surfaces for 8-12 hours, and on the hands for up to 5 minutes.

### I.2. Basic Guidelines/Strategies

Most health care settings use similar systems of Infection Control Precautions, but may call them different names, e.g., body substance precautions, universal precautions or standard precautions. These systems may vary slightly from area to area but the guiding principles are the same. The term Routine Practices will be used in this document when referring to Infection Control Precautions.

To assist with communication and consistency in applying the evidence based precautions, it is recommended that each region/area attempt to develop a standard system of Infection Control Precautions that can be used through all phases of the pandemic influenza planning.

The Public Health Agency of Canada provides two guidelines: (to obtain copies, see resources at end of this section):

1. *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care* has current infection control recommendations for acute care; long term care and ambulatory care facilities and home care. It also provides tools to assist in the implementation of these practices.
2. *Infection Control Guidelines for Hand Washing, Cleaning, Disinfection and Sterilization in Health Care* has recommendations for hand washing, gloves, cleaning and processing of patient care equipment, housekeeping, laundry and waste management.

### **I.3. Routine Practices and Additional Precautions to Prevent the Transmission of Influenza**

#### **Pre-Pandemic Phase**

During the inter-pandemic years, Public Health Agency of Canada guidelines recommend routine practices for the care of all patients with the addition of droplet and contact precautions for adults presenting with acute respiratory illness and pediatric patients. Children and adults, who have the physical and cognitive abilities, should be encouraged to practice good hand hygiene and good personal hygiene.

#### *Routine Practices:*

Routine practices are the infection prevention and control practices used in the routine care of all patients at all times in all health care settings. Routine practices emphasize the importance of hand washing; the need to use gloves, masks/eye protection/face shields, and gowns when splashes or sprays of blood, body fluids, secretions or excretions are possible. These same precautions should be taken when cleaning patient-care equipment, the environment, soiled linen, waste disposal, and during patient placement. These routine practices reduce the possibility of HCW exposure to blood borne pathogens and other infectious pathogens.

Additional precautions are required when routine practices are not sufficient to prevent transmission.

#### *Droplet precautions:*

Droplet precautions include the use of personal protective equipment, such as mask, goggles/face shield when providing care, placing the patient in a private room or cohorting the patient with another patient with influenza. Droplet precautions should be practiced during any procedure that may result in aerosolization, e.g., respiratory intubations, bronchoscopy, cardio-pulmonary arrest management.

### *Contact Precautions*

Contact precautions include: wearing gloves and gowns when providing care to the patient and when in contact with frequently touched environmental surfaces or objects that may be contaminated, placing the patient in a private room or cohorting the patient with another patient with influenza.

Droplet and contact precautions are described in Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care for each of the health care settings.

### *Hand Hygiene*

Hand hygiene is an important step in preventing the spread of infectious diseases, including influenza. Hand hygiene procedures using soap/water or alcohol based hand rubs are outlined in Appendix 3 of Annex F (<http://www.phac-aspc.gc.ca/cpip-pclcpi/pdf-cpip-03/cpip-appendix-f.pdf>) in the *Canadian Pandemic Influenza Plan*

***Strict adherence to hand washing/hand antisepsis recommendations is the cornerstone of infection prevention and control and may be the only preventive measure available during a pandemic.***

Note: The influenza virus is readily inactivated by hospital germicides, household cleaning products, soap, hand wash or hand hygiene products. Therefore, neither antiseptic hand hygiene products in health care settings nor antibacterial hand hygiene products in home settings are required because regular products, when used correctly will inactivate the influenza virus.

### *Patient Placement*

If possible, patients with influenza or influenza-like symptoms should be separated from patients without symptoms. In order of preference ill patients should be:

- Placed in a single room.
- Cohorted in a semi-private room.
- Cohorted in a ward room.
- Separated by at least one meter in other locations (avoid crowding).

### *Other Activities to Limit Spread of Influenza*

Staff working with symptomatic patients should avoid working with patients who are not symptomatic, as much as possible (staff cohort). This can be accomplished as follows:

- Attempt to rearrange staffing assignments to accommodate as many of the same staff as possible working with symptomatic residents
- Keep symptomatic patients in room until symptoms cease
- Limit movement/activities of patients including transfers within the facility
- Avoid group activities

### Pandemic Phase

Routine practices and additional precautions to prevent the transmission of infection during a pandemic are important. Some infection control strategies may be achievable only in the early phases of the pandemic and other recommendations may not be achievable as the pandemic spreads and resources (equipment, supplies, private rooms, and workers) become scarce.

The complexity of management of high-risk patients will be greatest in acute care hospitals where patients with other respiratory communicable diseases will also continue to be admitted. Therefore, infection control resources may need to be prioritized to the acute care settings.

#### *Mask Use During an Influenza Pandemic\**

(\*Refers to surgical masks, not special masks or respirators)

There is a lack of evidence that the use of masks has prevented the transmission of influenza during previous pandemics.

Masks may be useful in the early phase in the acute care hospital during face-to-face contact with coughing individuals, especially when immunization and antivirals are not yet available. The use of masks is not practical or helpful when transmission has entered the community. However, masks should be worn by health care workers for other known or suspected respiratory communicable diseases.

Masks should be worn by HCWs as outlined in routine practices when splashes or sprays of blood, body fluids, secretions or excretions to the mucous membranes of the mouth are possible or as described under contact droplet precautions. A particulate respirator (N95 mask) is required for organisms spread by the airborne route, e.g. TB, measles, chickenpox, and during aerosolizing procedures with patients suspected or known to have organisms spread by droplet transmission.

#### *Public Health Restrictions and Public Gatherings*

The Medical Health Officer has the authority under the Communicable Disease Regulations of the *Public Health Act* to institute community-based infection control measures such as:

- Closure of community facilities (e.g. schools, community centers)
- Cancellation of group events

Medical Health Officers should work together to develop a predetermined strategy for closing public gatherings. If public gatherings are restricted, they should be restricted early enough to affect disease transmission. The strategy should include (but is not limited to):

- The definition of what constitutes a public gathering.
- Specifying the time period within the pandemic strategy to implement the strategy.
- Applicability and consistency across jurisdictions.
- Availability and priority use of vaccine and antivirals.

- ❑ Considerations as to whether school aged children are included in the high priority for immunization or antivirals in the early phase of the pandemic.

### *Resources*

- ❑ Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care:  
<http://www.hc-sc.gc.ca/hpb/lcdc/publicat/ccdr/99vol25/25s4/index.html>
- ❑ Infection Control Guidelines for Hand Washing, Cleaning, Disinfection and Sterilization in Health Care: <http://www.hc-sc.gc.ca/hpb/lcdc/publicat/ccdr/98pdf/cdr24s8e.pdf>

To obtain additional copies or subscribe to the Canada Communicable Disease Report, please contact the Member Service Centre, Canadian Medical Association, 1867 Alta Vista Drive, Ottawa, Ontario Canada, K1G 3Y6. Telephone 613-731-8610, ext 2307 or 888-855-2555 or by fax 613-236-8864 or visit their web page:

<http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/04vol30/index.html>