

# SEASONAL INFLUENZA

## INFECTION PREVENTION AND CONTROL GUIDANCE FOR MANAGEMENT IN HOME CARE SETTINGS

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Infection Prevention and Control Guidance for Management in Home Care Settings

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# FOREWORD

## SEASONAL INFLUENZA

### INFECTION PREVENTION AND CONTROL GUIDANCE FOR MANAGEMENT IN HOME CARE SETTINGS

The Public Health Agency of Canada (PHAC) has developed this document to provide infection prevention and control guidance to home care organizations and healthcare workers<sup>a</sup> (HCWs) for the management of clients/patients with suspected or confirmed seasonal influenza, including the H1N1 influenza virus, receiving care in the home. This document does not provide recommendations for novel pandemic influenza strains that may emerge in the future. This guidance is to be used for home care<sup>b</sup> settings where care or service is provided by regulated and unregulated HCWs including home care organization volunteers. While it is expected that this document will provide helpful information to all HCWs, its primary audience is those individuals who are responsible for infection prevention and control in home care settings where health care and support services are delivered.

The content of this guidance has been informed by technical advice provided by members of PHAC's Steering Committee on Infection Prevention and Control Guidelines and the Working Group for the development of the revised *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings* guideline.<sup>1</sup>

This guidance is meant to be used in conjunction with relevant provincial/territorial and local legislation, regulations, and organizational policies. This guidance is based on current scientific evidence and best practices and is subject to review and change as new information becomes available.

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<sup>a</sup> Healthcare workers - Individuals who provide health care or support services such as nurses, physicians, dentists, nurse practitioners, paramedics and sometimes emergency first responders, allied health professionals, unregulated healthcare providers, clinical instructors and students, housekeeping staff, and volunteers. Volunteers are individuals who work without pay and are part of an organization's program delivery team. Healthcare workers have varying degrees of responsibility related to the health care they provide, depending on their level of education and their specific job/responsibilities.

<sup>b</sup> Home care - The delivery of a wide range of health care and support services to clients/patients for health restoration, health promotion, health maintenance, respite, palliation, and for prevention/delay in admission to long-term residential care. Home care is delivered where clients/patients reside (e.g., homes, retirement homes, group homes and hospices).



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## DESCRIPTION

Seasonal influenza is a respiratory infection caused by the influenza virus. It is a significant cause of morbidity and mortality, especially in individuals who are at the extremes of age, pregnant, immunocompromised, or have chronic underlying disease.<sup>2-4</sup> An estimated 5% to 10% of the Canadian population becomes infected with influenza each year, with the highest rate occurring in children. Serious illness and death related to influenza occur more frequently in older persons (> 65 years) and persons with underlying medical conditions.<sup>2,3</sup>

As with most acute viral respiratory infections, seasonal influenza occurs annually in the fall and winter months with community outbreaks, characterized by abrupt onset of symptoms and rapid transmission, lasting six to eight weeks.

Infected individuals are the most important reservoirs of the influenza virus with a period of communicability generally three to seven days from clinical onset.<sup>1</sup> Transmission of the influenza virus is by large droplet, and direct and indirect contact.<sup>1</sup> The influenza virus can survive for several hours on environmental surfaces,<sup>4</sup> and prolonged shedding of the virus may occur in immunocompromised individuals.<sup>5</sup>

## RECOMMENDED INFECTION PREVENTION AND CONTROL MEASURES

The following guidance is based primarily on recommendations in PHAC's *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings* guideline<sup>1</sup> and the *Infection Prevention and Control Guideline for the Prevention of Healthcare-associated Pneumonia*.<sup>4</sup>

In addition to routine practices, HCWs should follow **Droplet and Contact Precautions** for clients/patients with suspected or confirmed seasonal influenza in home care settings. A point-of-care risk assessment approach (Appendix A) should be used to guide decisions regarding when to apply droplet and contact precautions.

A major role of all home care organizations is to minimize the risk of exposure to and transmission of infections while providing care/services in home care settings. This includes staff education (including **importance of annual influenza vaccination**, self-assessing for symptoms of influenza, and appropriate infection prevention and control measures for seasonal influenza), and staff access to adequate hand hygiene products and sufficient personal protective equipment (i.e., masks<sup>c</sup> and eye protection, gowns, gloves).

The following topics are addressed in more detail in this document and apply to home care settings:

1. Immunization
2. Assessment
3. Respiratory Hygiene
4. Spatial Separation
5. Hand Hygiene
6. Droplet and Contact Precautions
7. Personal Protective Equipment
8. Client/Patient Care Equipment
9. Environmental Cleaning
10. Laundry, Waste, Dishes, Cutlery
11. Discontinuing Droplet and Contact Precautions

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<sup>c</sup> Masks refer to surgical or procedure masks

## 1. IMMUNIZATION<sup>2,3</sup>

One of the most effective primary measures to prevent and control seasonal influenza is through annual immunization of HCWs, clients/patients, household members and informal caregivers<sup>d</sup>. Annual influenza vaccination for HCWs is considered an essential component of the standard of care for the protection of clients/patients, and can also protect HCWs from acquiring influenza.

- a) Home care organizations should provide education to HCWs about the importance of annual influenza immunization.
- b) Home care organizations should encourage annual influenza vaccination for all HCWs who provide health care/services as they could potentially transmit influenza to vulnerable clients/patients.
- c) Education should be provided to clients/patients, household members and informal caregivers about the importance of annual influenza immunization.

## 2. ASSESSMENT

The term influenza-like-illness (ILI) is used for the presence of influenza-like symptoms. The following criteria for ILI<sup>6</sup> can be used to determine the need for applying the infection prevention and control measures found in this guidance:

- i. Acute onset of respiratory illness with fever and cough, and with one or more of the following: sore throat, arthralgia (joint pain), myalgia (muscle pain), or prostration (extreme exhaustion) which is likely due to influenza;
  - ii. In clients/patients under 5 years, gastrointestinal symptoms may also be present; and
  - iii. In clients/patients under 5 years or 65 years and older, fever may not be present.
- a) **Assessing HCWs**
    - i. Home care organizations should provide education to HCWs on how to self-assess daily for ILI (refer to above criteria in item 2, Assessment) during the influenza season and to stay away from providing direct client/patient care and other services that require at least a 2-metre contact with clients/patients and others in the home, and working in the home care office until symptoms resolve.
  - b) **Assessing clients/patients and informal caregivers in the home**
    - i. Education should be provided to clients/patients on how to self-assess daily for ILI (refer to above criteria in item 2, Assessment) during the influenza season when influenza is circulating in the community and to notify the home care organization prior to the next visit.

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<sup>d</sup> Informal caregivers - individuals who provide care/support to clients/patients in the home, but are unpaid and are not associated with an organization; e.g., relatives, friends, neighbours, etc.



- ii. Telephone assessment of clients/patients should be implemented when influenza is circulating in the community to identify whether the client/patient or household members have ILI or confirmed influenza prior to arriving at the home to alert the HCW to the risk.
- iii. When assessing for ILI or confirmed influenza by telephone is not possible, assessing at the entrance to the client's/patient's home or before entering the client/patient care area should be conducted. If possible, maintain a distance of two metres from the client/patient or household members with ILI or confirmed influenza. If a distance of two metres is not possible, a mask and eye protection and other personal protective equipment (PPE) (refer to item 7, Personal Protective Equipment) should be worn by the HCW, as required.
- iv. Positive ILI or confirmed influenza identified through client/patient assessment should be communicated confidentially, with permission from the client/patient, to the organization's supervisor, local public health, and other HCWs involved in the client's/patient's care so they are aware of the risk.
- v. Education should be provided to informal caregivers on how to self-assess daily for ILI (refer to criteria outlined in item 2, Assessment) during the influenza season with the suggestion that they stay away from providing direct home care services and working in the home care office until symptoms resolve.

### 3. RESPIRATORY HYGIENE

Respiratory hygiene includes coughing into sleeve, using tissues, and wearing a mask if coughing.

- a) Education should be provided to clients/patients, household members and informal caregivers on how to reduce the spread of influenza in the home and community settings with appropriate respiratory hygiene.
- b) Education should be provided to clients/patients and household members with ILI (refer to criteria in item 2, Assessment) or confirmed influenza and include the following:
  - i. Performing hand hygiene (refer to item 5, Hand Hygiene), and
  - ii. Performing and following respiratory hygiene when HCWs or others are present.
- c) Education should be provided to susceptible clients/patients, household members and informal caregivers (i.e., non-immunized individuals or immunized immunocompromised individuals) on wearing a mask and eye protection, and other PPE (refer to item 7, Personal Protective Equipment), when within two metres of a symptomatic individual who is not able to comply with respiratory hygiene.

## 4. SPATIAL SEPARATION

- a) A care location for individuals with ILI or confirmed influenza should be established that is away from others, preferably in a well-ventilated (e.g., open window) room of their own. If a separate room is not feasible, a two-metre distance should be established in a shared room whenever possible.
- b) Droplet and contact precautions (refer to item 6, Droplet and Contact Precautions and item 7, Personal Protective Equipment), should be followed if providing direct care within two metres of a client/patient with ILI or confirmed influenza.
- c) Assessment should be made as to whether the care or service can be provided without direct contact with the symptomatic individual (i.e., the HCW will remain more than two metres from the client/patient). For example, unregulated employees performing non-personal home support duties (e.g., laundry, meal preparation and house cleaning) should be able to avoid contact with symptomatic individuals. For volunteers delivering meals or medications, consideration should be given to whether the item can be left with another individual in the home or placed inside the door of the home.
- d) For household members who have ILI or confirmed influenza, the symptomatic individual should not enter the care area where the care/service is being provided to the client/patient. At a minimum, the other symptomatic individual should maintain a distance of two metres from the HCW at all times or should follow respiratory hygiene (refer to item 3, Respiratory Hygiene) if a distance of two metres cannot be maintained.

## 5. HAND HYGIENE<sup>7</sup>

- a) Education should be provided to clients/patients, household members and informal caregivers on how and when to perform hand hygiene.
- b) Clients/patients, household members and informal caregivers should be encouraged to perform hand hygiene often; e.g., before putting on and after taking off a mask, after touching anything that a symptomatic individual has touched (e.g., household objects and surfaces), before eating, before touching eyes, nose or mouth, and after using the toilet.
- c) Hand hygiene should be performed after client/patient care (e.g., before putting on and after taking off a mask and after removing gloves at the point-of-care), after contact with the client's/patient's environment, immediately after touching household objects and surfaces used by the symptomatic individual, the care areas or bathroom, and before touching eyes, nose or mouth.
- d) Hand hygiene should be performed using either alcohol-based hand rubs (60% - 90%) or soap and water. When hands are visibly soiled, hand hygiene should be done with soap and water. Other types of hand rub products may contain either no

alcohol or alcohol in concentrations lower than 60%. There is no efficacy data on these products and they should not be used for hand hygiene in settings where health care is delivered.

- e) HCWs should have access to alcohol-based hand rub (ABHR) or a hand washing sink with soap and running water for the provision of care and service to clients/patients with ILI or confirmed influenza.
- f) When hands are visibly soiled and a hand washing sink is not available at the point of care, ABHR (with an alcohol concentration between 60% and 90%) should be used and hands washed with soap and water as soon as a hand washing sink is available.
- g) Hand wipes (impregnated with antimicrobials, plain soap or alcohol) may be used as an alternative to soap and water when a hand washing sink is not immediately available or when the hand washing sink is unsuitable (e.g., contaminated sink, no running water, no soap), for the following conditions:
  - i. When hands are not visibly soiled; and
  - ii. When hands are visibly soiled. ABHR should be used after the use of hand wipes, and hands should be washed with soap and water once a suitable hand washing sink is available.

## 6. DROPLET AND CONTACT PRECAUTIONS

- a) Home care organizations should provide education to HCWs on how and when to use appropriate PPE (refer to item 7, Personal Protective Equipment).
- b) Education should be provided to informal caregivers on how and when to use appropriate PPE (refer to item 7, Personal Protective Equipment).
- c) Droplet and contact precautions should be implemented for clients/patients with ILI or confirmed influenza.
- d) Refer to item 7, Personal Protective Equipment, for further details relating to droplet and contact precautions.

## 7. PERSONAL PROTECTIVE EQUIPMENT

- a) Home care organizations should ensure HCWs have access to sufficient PPE (i.e., masks and eye protection, gowns, gloves) for the provision of care and service to clients/patients with ILI or confirmed influenza.
- b) ***Droplet Precautions*** (masks and eye protection) should be used when within two metres of an individual (client/patient, or household member) with ILI or confirmed influenza.

- i. A mask should be worn when within two metres of a client/patient, or household member with ILI or confirmed influenza.
  - ii. After leaving the care area, the mask should be removed by the straps, being careful not to touch the mask itself, and safely discarded in the household garbage.
  - iii. Eye protection should be worn if a mask is required. Eye protection should be removed when leaving the care area and safely discarded in the household garbage (if disposable). Re-usable eye protection should be cleaned and disinfected as per organizational policy.
  - iv. Hand hygiene should be performed before putting on a mask and eye protection, before removing them, after removing them and after leaving the care area or home.
- c) **Contact Precautions** (gloves and gowns) should be used when direct contact with a client/patient with ILI or confirmed influenza or with the equipment and surfaces in the client/patient care environment is anticipated.
- i. Gloves and gowns should be removed when leaving the care area, taking care to avoid self-contamination. Discard gloves and gowns (if disposable) in the household garbage.
  - ii. Reusable gowns should be placed in a bag or other receptacle for reprocessing, as per organizational policy.
  - iii. Hand hygiene should be performed before putting on gowns and gloves, after removing gowns and gloves, and when leaving the care area or home.

## 8. CLIENT/PATIENT CARE EQUIPMENT

Reusable medical equipment should be cleaned and disinfected as per organizational policy.

## 9. ENVIRONMENTAL CLEANING

- a) Home care organizations should provide education to HCWs responsible for cleaning and personal support on how to reduce the spread of influenza in the home using environmental cleaning measures.
- b) Education should be provided to clients/patients, household members and informal caregivers on how to reduce the spread of influenza in the home using environmental cleaning measures that include the following:
  - i. Using appropriate cleaning products and household disinfectants;
  - ii. Daily cleaning of household objects and surfaces, paying particular attention to high touch surfaces (e.g., door knobs, light switches, etc.) and bathrooms used by symptomatic individuals with a household disinfectant;
  - iii. Daily cleaning of reusable eye protection; and
  - iv. Providing symptomatic individuals with their own towel, face cloth, toothbrush, etc., and instructing them to not share these items with others.

## 10. LAUNDRY, WASTE, DISHES, CUTLERY

- a) Home care organizations should provide education to HCWs responsible for cleaning and personal support on how to reduce the spread of influenza in the home with appropriate cleaning of dishes, cutlery, and laundry, and the disposal of household waste.
- b) Education should be provided to clients/patients, household members, and informal caregivers on how to reduce the spread of influenza in the home with appropriate cleaning of dishes, cutlery, and laundry, and the disposal of household waste.
- c) Appropriate cleaning of dishes, cutlery, and laundry and disposal of household waste include the following:
  - i. Dishes/cutlery, clothing, bedding and towels used by the ill individual may be laundered and/or washed in the usual manner; and
  - ii. Consideration should be given to using a garbage can with a foot pedal (if available) and taking care to avoid touching the garbage can or contents when discarding waste (e.g., line can with a plastic bag). Hand hygiene should be performed after disposal of waste.

## 11. DISCONTINUING DROPLET AND CONTACT PRECAUTIONS

Droplet and contact precautions for seasonal influenza should be discontinued when the client/patient is no longer symptomatic or according to the organizational policy.

## REFERENCES

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3. Addendum to the 2010-2011 Seasonal Trivalent Inactivated Influenza Vaccine. Recommendations on the use of intradermal trivalent inactivated influenza vaccine (TIV-ID). Available at: <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/11vol37/acs-dcc-4/index-eng.php>. Accessed September 22, 2011.
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6. Flu Watch Definitions for 2012-2013. Available at: <http://www.phac-aspc.gc.ca/fluwatch/12-13/def12-13-eng.php>. Accessed October 11, 2012.
7. Public Health Agency of Canada, Hand Hygiene Practices in Healthcare Settings, 2012. PHAC release pending.

## ADDITIONAL INFORMATION

- Public Health Agency of Canada website, available at: <http://www.phac-aspc.gc.ca/influenza/index-eng.php>
- Nosocomial and Occupational Infections Section, Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, available at: <http://www.phac-aspc.gc.ca/nois-sinp/index-eng.php>

## APPENDIX A

### POINT-OF-CARE RISK ASSESSMENT<sup>1</sup>

Prior to any patient/resident/client interaction, all healthcare workers (HCWs) have a responsibility to always assess the infectious risk posed to themselves and to other patients/residents/clients, families, visitors, and HCWs. This risk assessment is based on professional judgment about the clinical situation and up-to-date information on how the specific healthcare/home care organizations have designed and implemented engineering and administrative controls, along with the availability and use of personal protective equipment (PPE).

The point-of-care risk assessment (PCRA) is an activity performed by the HCW **before every patient/resident/client interaction**, to:

1. Evaluate the likelihood of exposure to the infectious agent:
  - **from a specific interaction** (e.g., performing/assisting with aerosol-generating medical procedures, other clinical procedures/interaction, non-clinical interaction [i.e., admitting, teaching patients/residents/clients and families], transporting patients/residents/clients, direct face-to-face interaction with patients/residents/clients, etc.);
  - **with a specific patient/resident/client** (e.g., infants/young children, patients/residents/clients not capable of self-care/hand hygiene, have poor compliance with respiratory hygiene, copious respiratory secretions, frequent coughing/sneezing, diarrhea, etc.);
  - **in a specific environment** (e.g., single rooms, shared rooms/washrooms, hallway, assessment areas, emergency departments, public areas, therapeutic departments, diagnostic imaging departments, housekeeping, etc.);
  - **under available conditions** (e.g., air exchanges in a large waiting area or in an airborne infection isolation room, patient/resident/client waiting areas, etc.);

#### **AND**

2. Choose the **appropriate actions/PPE** needed to minimize the risk of the patient/resident/client, HCW, other staff, family, visitor, contractor, etc. of exposure to the infectious agent.

The PCRA is not a new concept, but one that is already performed regularly by HCWs many times a day for their safety and the safety of patients/residents/clients and others in the healthcare/home care environment. For example, when a HCW assesses a patient/resident/client and the situation to determine the possibility of blood or body fluid exposure or chooses appropriate PPE to care for a patient/resident/client with an infectious disease, these actions are both activities of a PCRA.

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<sup>1</sup> Public Health Agency of Canada. Prevention and Control of Influenza during a Pandemic for all Healthcare Settings. Annex F of the Canadian Pandemic Influenza Plan for the Health Sector. Available at: [www.phac-aspc.gc.ca/cpip-pdcpi/index-eng.php](http://www.phac-aspc.gc.ca/cpip-pdcpi/index-eng.php).