

FACILITY INFLUENZA IMMUNIZATION POLICY

I. PURPOSE:

To help ensure that those at greatest risk of complications and death from influenza are optimally protected through the appropriate use of influenza vaccine, health care facilities must develop policies for annual influenza vaccination of residents and staff, as well as policies for identifying, preventing and controlling influenza outbreaks.

Immunization policies for residents should include annual immunization in the fall as well as immunization any time during the influenza season (typically November to April) for any patient newly admitted or transferred to a health care facility who was not immunized during the season or whose immunization status is unknown. As a critical component of patient care, all facilities are required to adopt a written policy advocating staff influenza immunization. Staff who choose not to be immunized must be made aware that they can be excluded from work in the event of an influenza outbreak within their facility.

The National Advisory Committee on Immunization underscores that refusal of health care workers to be immunized implies failure in their duty of care to their patients. Non-immunized staff assist in the spread of influenza and pose an unacceptable risk to patients and co-workers during outbreaks. Their exclusion under the authority of the local Medical Health Officer is a legitimate way to protect patients and is supported by the BC Communicable Disease Policy Committee, the Health Act (Communicable Disease Regulations, Part 2; Sanitary Regulations Section 6 (e)) and Adult Care Regulations.

II. RATIONALE:

Influenza is a significant cause of death in Canada, especially amongst the elderly and frail. Many of the deaths due to influenza can be prevented through immunization. Influenza immunization is safe and effective and is the single most important way to prevent influenza-related complications and deaths.

Studies show that up to 25% of non-immunized health care workers are infected with influenza during the winter months. Persons with influenza are infectious even before they become sick. In one study, 59% of health care workers with documented influenza could not recall influenza symptoms and did not know they had been infected. Persons with mild or unrecognized influenza illness still shed virus and can spread it to others. Most health care workers continue to work even when they develop symptoms. In this way, staff may introduce influenza into facilities and spread it amongst patients and co-workers. When outbreaks occur in confined settings such as long term care (LTC) facilities, they spread very quickly and as many as 50% of residents can be affected. These residents are at highest risk of developing serious and sometimes fatal complications related to influenza.

Recent meta-analysis found vaccine protection against laboratory-confirmed influenza in young adults of 80% (95%CI 56-91%) when measured during certain seasons of match and 50% (95%CI 27-65%) during certain seasons of mismatch. The vaccine is also effective in reducing absenteeism and febrile respiratory illness among health care workers and other working adults. Influenza immunization reduces not only the duration and severity of illness, but also the amount of viral shedding. Influenza vaccine is less effective in protecting older frail adults from

infection. For this reason, influenza immunization of health care workers is important to protect these vulnerable persons from influenza and its complications, including death. Three cluster-randomised controlled trials and two cohort studies have now shown that immunizing health care workers protects patients from the serious outcomes of influenza. Immunizing both care providers and residents of care facilities reduces the risk of outbreaks and the disruption, illness and death these outbreaks cause.

III. DEFINITIONS:

Incubation Period:

The time interval between initial contact with an infectious agent and the first appearance of symptoms associated with the infection.

Influenza:

Influenza is a viral infection of the respiratory system. Symptoms of influenza include fever, cough, sore throat, muscle ache, extreme fatigue and headache. Unlike the common cold and most other respiratory viruses commonly called “the flu”, influenza virus infection can result in severe illness, pneumonia and even death. The incubation period of influenza is 1-4 days; duration of virus shedding is usually not more than 5 days after onset of symptoms in adults.

Influenza-Like Illness (ILI):

Symptoms and signs consistent with influenza in the absence of laboratory confirmation. This is defined as: onset of respiratory illness with cough and fever/chills and one or more of sore throat, sore joints, sore muscles or prostration (generally feeling unwell and having to lie down). In the elderly or the very young, fever and/or chills may not be present.

Transmission of Influenza:

Influenza is spread from person to person by inhalation of tiny droplets produced when a person infected with influenza coughs, sneezes, laughs or even talks. It can also be spread by contact with infected respiratory secretions through articles such as bedrails, facial tissue or utensils.

Influenza Outbreak:

An influenza outbreak is a cluster of cases occurring within a short period of time in a defined area or group of people. An influenza outbreak in a facility is suspected when there are two or more cases of influenza-like illness (ILI) in a defined area (i.e. unit or floor or ward) in a seven-day period. A suspect outbreak of ILI should be reported to the Medical Health Officer or designate as soon as it is identified (within 24 hours or sooner). The Medical Health Officer (in consultation with the physician/nurse responsible for managing infection control) will determine whether illness within a facility constitutes an outbreak of influenza and what control measures should be implemented.

Influenza Vaccine:

Influenza vaccine is prepared from killed influenza virus. It stimulates the formation of immunity (antibodies) against three strains of influenza virus likely to be circulating that season.

Anti-viral Medication:

Medication (drugs) capable of preventing or treating viral infection. Two classes of drugs are licensed in Canada for the prevention and/or treatment of influenza: amantadine and the neuraminidase inhibitors (zanamivir and oseltamivir) For both, treatment should be started within 48 hours of onset of symptoms to be most effective. Amantadine is only effective against influenza A. The neuraminidase inhibitors are effective against both influenza A and B. Oseltamivir is taken orally; zanamivir is inhaled. Oseltamivir has been licensed in Canada for the post-exposure prevention of influenza A and B since December 2003. It is not licensed for seasonal (pre-exposure) prophylaxis, although it has been used off-label

(outside the licensed indications) for this purpose. Zanamivir was also recently approved for use for both seasonal (up to 28 day) and post-exposure prophylaxis against influenza A and B.

During the 2005-2006 influenza season in Canada, more than 90% of all influenza A/H3N2 isolates were resistant to amantadine. During the 2006-07 season, 25-30% of A/H3N2 isolates were also resistant to amantadine. During the 2007-08 season, 99.5% of A/H3N2 isolates were amantadine-resistant. During the 2009-10 season, 100% of both A/H3N2 and pandemic A/H1N1 (pH1N1) isolates were amantadine-resistant. Although seasonal A/H1N1 viruses retained sensitivity to amantadine when they were last circulating, the pH1N1 virus has replaced seasonal A/H1N1 strains since it emerged in April 2009. As such, the detection of influenza A is currently unlikely to be seasonal A/H1N1. Until this profile changes and health authorities are officially notified, amantadine is no longer recommended for the treatment or prophylaxis of influenza.

During the 2007-08 and 2008-09 season, oseltamivir resistance was identified among circulating seasonal A/H1N1 viruses worldwide including Canada. pH1N1 after its emergence in April 2009 has replaced seasonal A/H1N1. Testing of influenza isolates in Canada has indicated that most of the pH1N1 (99%) and all A/H3N2 and influenza B isolates were sensitive to oseltamivir among those tested September 1, 2009 through May 6, 2010. Antiviral resistance testing at the WHO Collaborating Center for Surveillance, Epidemiology and Control of Influenza at CDC on isolates collected during the period 13 Jun to 25 Sep 2010 showed that all pH1N1, A/H3N2 and influenza B isolates were sensitive to oseltamivir.

Recommendations described in this 2010-11 BC Facility Influenza Immunization Policy (dated October 18, 2010) will be updated based on evolving surveillance information during the season as appropriate. Health care providers using oseltamivir are advised to consult surveillance updates through public health and stay informed about influenza activity and resistance patterns during the 2010-2011 season. If oseltamivir resistance is detected or suspected in a facility outbreak setting (for example, if an outbreak is not controlled despite adequate antiviral prophylaxis), or if resistance is reported to be widespread in the community, up-to-date advice of local and provincial health authorities should be followed regarding antiviral use.

Health Care Facility:

Facilities providing ongoing residential care to groups of individuals, especially the frail or elderly. This includes acute care, long term care, intermediate care and extended care facilities and all other facilities that provide ongoing residential care to groups of individuals, especially the frail or elderly.

Health Care Staff:

Persons carrying out paid or unpaid work in a health care facility. The policy applies to **all** staff members who work, volunteer or train in the health care facility during the typical influenza season (November – April, inclusive), regardless of whether they have direct or indirect contact with patients or residents.

Valid Medical Contraindication to Influenza Immunization:

Influenza vaccine should not be given to persons who had an anaphylactic or shock-like reaction to a previous dose of influenza vaccine or with known anaphylactic or shock-like reaction to eggs or any other component of the vaccine. Anaphylactic reaction consists of rapid onset of hives, swelling of the mouth and throat, difficulty breathing and shock. It is rare following influenza immunization.

IV. STAFF INFLUENZA IMMUNIZATION AND EXCLUSION POLICY:

- 1. Health care facilities in BC are committed to protecting patients and staff from the potentially debilitating and sometimes fatal complications of influenza.**

All health care facilities (acute, long term, intermediate and extended care facilities) are required to have a written staff influenza immunization policy in place, in addition to a policy for annual immunization of residents during the fall.

Policy for residents should include annual influenza immunization in the fall as well as provision for immunizing newly admitted or transferred patients who are not immunized or whose immunization status is unknown, any time during the influenza season (typically November to April).

Policy for staff should include annual influenza immunization in the fall as well as provision for immunizing any new staff that start work during the influenza season (typically November to April). The policy must include notice that non-immunized staff can be excluded from work in the event of an influenza outbreak in the facility. At the time of hiring or placement, information about the requirement for annual influenza vaccination must be provided to all persons carrying out activities in the facility. Additionally, if the time of hiring or placement occurs during the influenza season, the person responsible for the infection control program in the facility must ask any new employee for documentation of immunization with the current year's influenza vaccine. Persons who are not newly placed or appointed to the facility should be informed about the requirement for annual immunization against influenza.

- 2. All health care facilities, using their own occupational health resources, must offer influenza vaccination to their staff each year.**

Influenza immunization of staff can begin as soon as vaccine becomes locally available each fall. Vaccine should be offered to staff at a variety of sites and at a variety of times throughout the influenza season. Multiple strategies should be used to increase staff influenza vaccination, including educational opportunities, promotional materials, mobile vaccination carts, competitions, incentives, or by senior staff modeling receipt of immunization.

- 3. Staff members who decline influenza immunization due to medical contraindications should provide physician documentation as valid medical contraindication.**

This documentation should be maintained by the facility for reference in future years. Those who do not provide this documentation shall not be considered to have valid medical contraindication for the purposes of enforcing this exclusion policy. Persons who decline influenza vaccination but have no medical contraindications should be offered vaccine in subsequent years.

- 4. Staff must be made aware of the consequences of choosing not to be immunized.**

In the event of an outbreak, this includes exclusion from work and/or the requirement that they take an anti-viral medication (neuraminidase inhibitor). Anti-viral medication is not provided free to staff by the Ministry of Health Services. In advance of the influenza season, health care facilities should prepare a list of staff who may be excluded from work in the event of an influenza outbreak. Additionally, these persons should be assessed for eligibility for neuraminidase inhibitors prior to the influenza season and this information should be kept on hand at the facility for timely implementation of an anti-viral medication program when an outbreak occurs.

5. All health care facilities must maintain annual records of staff influenza vaccination status.

This includes name, date of birth, position (job), where in the facility they work and date of influenza vaccination. Staff immunized at an off-site clinic or by their family physician must provide written documentation, including the date influenza vaccine was received. Staff who report a medical contraindication to influenza vaccination should provide medical documentation. With appropriate documentation, "Contraindication" should be indicated for that staff member on the facility staff immunization record.

6. All health care facilities must remind persons carrying on activities in the facility that if they experience symptoms of influenza-like illness, they must not work and must self-report this as soon as possible to the person responsible for occupational health or infection control in the facility.

7. All facilities must maintain watch for influenza-like illness and notify the Medical Health Officer or designate immediately in the event of a suspected influenza outbreak (two or more cases of ILI among staff and/or residents in a defined area within a one week period).

This is especially important during the typical influenza season from November to April. As influenza has been identified in North America during the summer months, facilities should remain alert for the possibility of influenza outbreaks year-round. As soon as an outbreak of influenza is suspected during the influenza season, non-immunized residents and persons carrying on activities in the facility who do not have contraindications to vaccination should be offered the vaccine.

8. The local Medical Health Officer or his/her designate will determine whether illness in a facility constitutes an outbreak of influenza and will assist with recommendations to contain and minimize the health consequences.

9. All facilities must provide their local health unit with influenza vaccination coverage data for residents and staff.

Only summary data is required, not individual records.

V. EXCLUSION PROCEDURES:

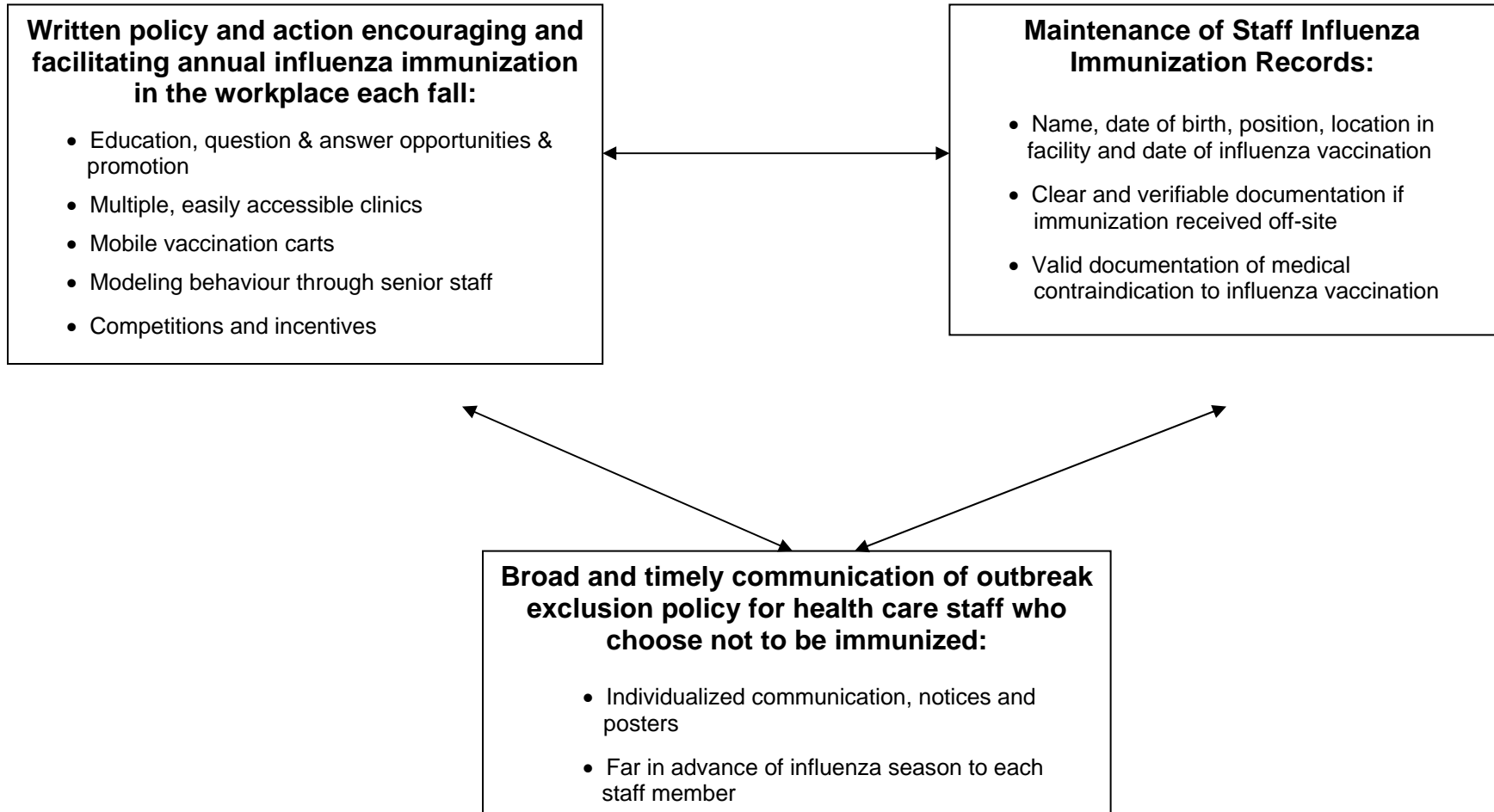
In the event of an influenza outbreak:

- Discuss prevention and control measures, including the exclusion of staff, with the local Medical Health Officer or his/her designate.
- Any staff with influenza-like illness (ILI) will be excluded for at least five days after the onset of symptoms OR until acute symptoms completely resolve whichever is longer.
- Health care staff who have been vaccinated more than 14 days prior to the onset of the outbreak and who do not have ILI can work in any facility without restriction.
- Non-immunized staff are subject to exclusion from work until the outbreak is declared over by the local Medical Health Officer. Anti-viral medication should be recommended

to all non-immunized staff. Because of resistance to amantadine, currently and until further notice, only neuraminidase inhibitors should be used in Canada for the prevention and treatment of influenza. Oseltamivir and zanamivir are both licensed for post-exposure prophylaxis. Oseltamivir is not approved for seasonal (pre-exposure) prophylaxis, but has been used off-label (outside the license indications) for this purpose. Zanamivir is approved for both seasonal (up to 28 day) and post-exposure prophylaxis in Canada. Neuraminidase inhibitors are not provided free to staff by the Ministry of Health Services. Facilities may choose to refer staff to their family physician for this prescription.

- An exception to exclusion of non-immunized staff may be made if the non-immunized staff member takes anti-viral medication as prescribed and the anti-viral medication is continued until the outbreak is officially declared over and as instructed by the local Medical Health Officer (up to eight weeks). These workers must be alert to the symptoms and signs of influenza, particularly within the first 48 hours after starting antiviral prophylaxis and should be excluded from the patient care environment if these develop. Careful assessment for ILI symptoms is also important in case the antiviral schedule for treatment rather than prophylaxis of influenza infection is warranted and in order to reduce the likelihood of resistance emerging due to suboptimal dosing in persons already infected.
- Staff who were not immunized prior to an outbreak of influenza, but who are immunized during the outbreak, may return to work in the outbreak setting after 14 days have elapsed since vaccination or when the outbreak is declared over by the local Medical Health Officer. Staff can return to work if anti-viral medication is taken for 14 days after the date of their influenza immunization or until the outbreak has been officially declared over, whichever is sooner. These workers must be alert to the symptoms and signs of influenza, particularly within the first 48 hours after starting antiviral prophylaxis and should be excluded from the patient care environment if these develop. Careful assessment for symptoms of influenza-like illness is also important in case the antiviral schedule for treatment rather than prophylaxis of influenza infection is warranted and in order to reduce the likelihood of resistance emerging due to suboptimal dosing in persons already infected.
- Non-immunized, excluded staff must not have developed ILI symptoms and must wait one incubation period (up to 4 days) from the last day they worked at the outbreak facility prior to working in a non-outbreak facility. This is because they may be incubating influenza. If ILI symptoms develop in that period, staff must be excluded for at least 5 days after ILI onset OR until acute symptoms completely resolve whichever is longer.
- Exclusion of non-immunized staff should be considered as a control measure to prevent transmission of influenza in the facility, and as an adjunct to other outbreak control measures. Where staff exclusions would compromise staffing levels severely and place residents at risk, the local Medical Health Officer may issue alternate recommendations.

Initiatives for Staff Influenza Immunization - Before Influenza Season Begins



MANAGEMENT OF STAFF DURING AN INFLUENZA OUTBREAK

