Vancouver Coastal Health-Influenza Prevention and Control Program for Residential Care Facilities

Purpose	Early detection and implementation of control measures are essential for the control of outbreaks of Influenza in Residential Health Care Facilities. Under the Public Health Act, the Medical Health Officer (MHO) has the authority and responsibility to direct the management of outbreaks in the community and in residential health care facilities. The purpose of this document is to summarize the recommendations of the Medical Health Officer for the prevention and control of seasonal influenza outbreaks in acute and long term care facilities in Vancouver Coastal Health. Should a novel influenza pathogen be identified, the MHO or designate may change the recommended measures. The recommendations in this document should be incorporated into existing influenza guidelines in acute and long-term care facilities including contracted services such as food, housekeeping and laundry.
Prevention and Early Detection	All residential care facilities should maintain ongoing surveillance for influenza-like-illness (ILI). Although influenza season is typically from December to March, ILI can occur at any time in both residents and staff. Vaccination is the single most effective way to protect residents and staff from influenza. As soon as influenza vaccine becomes available, facilities should provide vaccine to residents and staff as well as recommend that visitors to the facility are vaccinated. The Public Health Surveillance Unit monitors a range of indicators of ILI in the community. When the seasonal trend in ILI activity in the community increases, suggesting a high risk of outbreaks in health care facilities, facilities should be vigilant in monitoring influenza infection control practices including: • Hand hygiene • Contact and droplet precautions for symptomatic persons • Routine practices Early detection and prompt reporting of ILI to the MHO will facilitate the determination of an outbreak and the implementation of control measures. **Early detection and immediate implementation of control measures can be two of the most important factors in determining the size and length of the outbreak.** • In the event of a suspected outbreak of influenza, immediately report and discuss the suspected outbreak with a MHO or designate (e.g. CD Nurse) at Vancouver Coastal Health. • Take viral specimens (nasopharyngeal or nasal swab) for lab testing as soon as possible. *See "Influenza-Like-Illness outbreak Specimen Collection" attached.* • Be prepared to implement antiviral medications as directed by the MHO.

Outbreak Management- **Pre-Season Planning and Prevention:**	1. **Identify an influenza lead** (i.e. Resident Care Coordinator, Director of Care). a. This person will be responsible for prompt identification of an outbreak, implementation of control measures, continued monitoring of cases, and reporting to the VCH MHO. b. For large outbreaks an outbreak team should consist of an outbreak leader and representatives from infection control, nursing, medical, housekeeping, food services, laundry services, occupational health, and public health. Additional team members may be invited to meet specific needs. c. Outbreak communication tools i. Make a list of key people and their phone numbers for notification in the event of an outbreak in your facility (e.g. MHO, Director of Care, Pharmacy, Physician in Charge, Resident's physician, Administration, etc.) ii. Keep all records, guidelines, and forms together in an easy to access location, typically at the nursing station for easy access during an outbreak iii. Notify staff as to location of the tools above **2. Vaccinate** a. Order influenza vaccine as per your local public health (PH) office guidelines. i. The local PH office will send an order form to each facility indicating when you may order influenza and pneumococcal vaccine. b. Update your facility policies for influenza outbreak management and annual influenza vaccination of residents and staff. c. Administer influenza vaccine annually to ALL residents, staff, physicians, and volunteers who work in the facility. i. Administer vaccine as soon as it becomes available with the appropriate product for the recipient. ii. Any new admissions/staff /physicians/ volunteers during the influenza season (typically through April) should be vaccinated. iii. Keep a record of the immunization status of the residents/staff/physicians/volunteers that is easily accessible by the nursing/medical staff at all times. d. Administer pneumococcal vaccine to all residents. i. This vaccine is given **once**, and can be given at any time during the year. (Note: persons with asplenia, sickle cell disease, immune-suppression related disease or therapy, chronic disease of heart, lungs, kidney or liver should have one additional dose **5 years** after dose 1). If vaccine history is not available, immunize with pneumococcal vaccine. e. Expectations for staff/physicians/volunteers: i. Receive annual influenza vaccine or mask for the duration of the influenza season (typically Dec 1-March 31; may be extended depending on influenza activity) ii. Mask if influenza outbreaks occur early in the season, before vaccine is available iii. Prophylactic antiviral medications are recommended for the benefit of staff during influenza outbreaks, but are not required. f. Encourage visitors to be immunized against influenza i. Provide information on influenza vaccination to staff, residents, family members and visitors at your facility

	ii. All visitors are eligible for free vaccine but may receive different vaccine products than residents iii. Post information on community influenza immunization clinics in your area. This information can be found at http://immunizebc.ca/clinics/flu **3. Antiviral Medication** a. The use of antiviral medication for both prophylaxis and treatment to assist in the control of outbreaks of influenza is well established. i. Oseltavmivir (Tamiflu) is the most commonly recommended antiviral medication for the control of outbreaks of influenza ii. Specific recommendations for the use of Oseltamivir or another antiviral for treatment and prophylaxis in an outbreak will vary for different strains of influenza iii. Residents who have received treatment will not need prophylaxis after completion of treatment iv. The local MHO will provide specific direction upon notification of the outbreak b. Plans for administration of antivirals i. Medical care providers and the Director of Care/designate should develop plans so that the antiviral medication can be given in a timely manner during the outbreak • The sooner antivirals are given, the more effective they are in controlling the outbreak ii. Plans should include: • Pre-printed/signed physician's orders (which contain an order for influenza vaccine; an order for pneumococcal vaccine if required; an order for antiviral medication, differentiating between **treatment** and **prophylaxis**; identification of any medical contraindication to influenza vaccine or antiviral medication). See attached example of a pre-printed order • Obtain an annual serum creatinine clearance level for all residents. In case of an outbreak and you do not have creatinine clearance on your resident, **give the first dose and order stat creatinine clearance in order to inform subsequent doses.**[1] • Pre-arrange with your pharmacy to obtain antiviral medication in a timely fashion • Provide staff and residents with information on antiviral use in an outbreak of influenza

[1] Refer to AMMI Canada guidelines at www.ammi.ca "The use of antiviral drugs for influenza: A foundation document for practitioners"

Case Definitions	**Influenza Like Illness Definition**: Acute onset of respiratory illness with fever and cough and with one or more of the following: • Headache • Sore Throat • Arthralgia, myalgia, • Prostration Note: Fever may not be prominent in patients under 5 years or over 65 years. **Influenza Like Illness Outbreak Definition:** Two or more cases of ILI in residents and/or staff within a 7-day period, with at least one case identified as a resident. Note: An outbreak is confirmed by a review of cases by the facility director or infection control doctor in consultations with the Medical Health Officer.
Outbreak Detection and Confirmation	In the event of a suspected outbreak of influenza: • **Immediately** report and discuss the suspected outbreak with a MHO or designate [i.e. Public Health Nurse, *Adult Care Licensing Officer (ALO)]* at Vancouver Coastal Health. • Obtain viral specimens as soon as possible and forward to BCCDC laboratory for testing • Implement outbreak control measures, including the use of antiviral therapy, as directed by the MHO. The MHO or designate will assess the case histories with the reporting facility and, if indicated, will declare an outbreak. The MHO will advise on control measures. Upon declaration of an outbreak, the MHO or designate will post the outbreak details on the VCH Hospital & Long-term Facility Outbreak Bulletin. The MHO designate can be reached at 604-674-3900 or toll free at 1-855-675-3900. VCH owned and operated facilities are to contact their ICP as per usual processes. ***After hours and weekends, call the MHO on call at 604-527-4893.***
Outbreak Management Infection Control & Cleaning and Disinfection Procedures During an Outbreak	***All outbreak control measures take priority over routine operations until the outbreak is declared over.*** **1. Maintain an outbreak line list** of cases in residents and a line list of cases in staff (nursing, food handlers, housekeeping, etc.). a. Record the details as required on the attached **VCH Influenza-Like-Illness Line List for Residents** and/or the **VCH Influenza-Like-Illness Line List for Staff**) b. Forward the line list(s) when requested to the MHO or designate **2. Facility** a. **Close the affected floor/unit/ward or facility** to new admissions, readmissions, or transfers unless medically necessary. i. If an admission or transfer is deemed medically necessary call a MHO or designate to review and discuss ii. If a resident is transferred to an acute care facility for treatment of influenza or its complications, they may return to the facility when they are medically stable. iii. Residents transferred to an acute care facility for non-influenza related conditions should not be re-admitted to the facility until the outbreak is

declared over.

b. Post outbreak notification sign(s) at facility entrance and/or floor/unit/ward advising visitors about the outbreak.
c. Notify housekeeping, food services and laundry that the facility has an outbreak of influenza so that department-specific outbreak management protocols are initiated. Enhanced housekeeping and cleaning should include more frequent disinfection of commonly touched surfaces/items, safe disposal of contaminated items and laundry within resident rooms, availability of antiseptic hand-cleaning agents at each resident's room, and disinfection of equipment between use for different residents/areas.
d. Notify other service providers such as volunteers, clergy, Handy DART, oxygen service, BC Ambulance, paid companions, students, and others of any outbreak control measures that may affect their provision of services.
e. Notify any facility that would have admitted a resident from you within the past 72 hours that you have an influenza outbreak.
f. Restrictions should be in place until the outbreak is declared over by the MHO, usually 6 days after the onset of symptoms in the last case.

3. Implement the following Infection Control Practices:

a. **Hand washing:**
   - **i.** Hand washing with liquid soap and warm water should be practiced by all staff at all times
   - **ii.** Alcohol (70% ethanol/ethyl alcohol or 1-propanol) based hand sanitizer may be used as an alternative to liquid soap and water when a sink is not readily available and provided that hands are not visibly soiled. (Note: Isopropyl alcohol hand sanitizers are not considered to be effective against non-enveloped viruses such as norovirus).

b. **Contact Precautions**:
   - **i.** Wear a gown and gloves when providing direct care to a symptomatic resident or while in their immediate environment
     - After removal of gloves, wash hands with liquid soap or use alcohol based hand sanitizer between patient/residents
     - Use gowns and change when contamination of the health care providers clothing is possible

c. **Droplet/Respiratory Precautions:** In additions to routine and contact precautions, staff and visitors are to use droplet/respiratory precautions when patients/residents are symptomatic
   - **i.** wear a surgical (procedure) mask[2] and eye protection when within 2 meters of a symptomatic resident
   - **ii.** the resident should be asked to wear a surgical mask when the health care worker is in the room

4. Patients/Residents:

a. Start antiviral prophylaxis and/or treatment if directed by the MHO **and** ordered by the resident's physician; reoffer vaccine to eligible unvaccinated residents
b. Restrict contact as much as possible *until symptoms resolve.*

[2] A fit tested N95 respirator is not required when providing most care to patients with influenza in LTC.

	i. Place symptomatic residents in private rooms where possible. Alternatively, residents with confirmed influenza may be placed in the same room as other residents with confirmed influenza. Do not transfer well patients/residents into rooms with ill people ii. As much as possible, meals should be served in the client's room, or floor/unit/ward iii. Minimize contact between patients/residents on affected floors/units/wards with unaffected areas c. Remind patients/residents to wash hands thoroughly and report incidents of diarrhea/vomitus d. Provide all patients/residents with information on the illness and personal protective measures e. In consultation with the MHO or designate decrease or discontinue group activities or outings. Well patients/residents should not be discouraged from outings with family members or other one-on-one activities f. Cancel or reschedule appointments **that do not risk the health or well-being of the resident** until the outbreak is declared over. **5. Staff** a. Symptomatic staff are **excluded from working and will remain off work for five days or until symptoms resolve, whichever is sooner** i. Rarely, longer exclusions may be considered for staff caring for highly immunocompromised patients (typically only certain groups of hospitalized patients, e.g. hematopoietic stem cell transplant patients); discuss any concerns regarding a need for a longer exclusion with the MHO b. Reoffer vaccine to unimmunized staff c. Unimmunized staff or staff members who received a dose of influenza vaccine less than 14 days[3] prior to the onset of an outbreak are required to wear a procedure mask until the 14 day period from vaccine administration is over. During influenza season, unimmunized staff must wear a mask at all times. i. Antiviral medication is recommended for these staff members for their own protection, but does not remove a masking requirement. Antiviral medication may also be offered to immunized staff if recommended by the MHO ii. The MHO may advise on the need to exclude unimmunized staff d. **Staff working between outbreak and non-outbreak facilities** will be at the determination of the MHO. In general: i. Asymptomatic immunized staff may work at other facilities but are discouraged from doing so. ii. Unimmunized staff are excluded from working at other non-outbreak wards or facilities • The period of exclusion will be **one incubation period (three days)** from the last day the staff member worked at an outbreak facility or unit prior to working in a non-outbreak unit or facility. This time period is required to ensure staff members are not transmitting influenza prior to becoming symptomatic. e. Cohort staff as necessary e.g. staff working with symptomatic residents should

[3] It takes 14 days for the vaccine to provide protection

<table>
<tr><td></td><td colspan="2">avoid working with residents who are well, especially if the facility is partially closed
i. If dedicated staff is not available, the staff should first work with the well and then move on to care for the ill and avoid movement between floors and units where possible.
f. Strict hand hygiene must be practiced between residents at all times.
6. Visitors and Volunteers
a. Symptomatic persons should not enter the facility until their symptoms resolve. If the visit is deemed necessary, they should wear a surgical mask during the visit and to visit only their immediate family member or friend
b. All visitors should be encouraged to get the influenza vaccine when vaccine is available. Information on community influenza clinics should be provided.
c. Visitors to a patient/resident with ILI should be offered the same personal protective equipment as that worn by health care providers.
d. Restrict visitation of multiple residents/clients, including by privately employed non-care facility staff (e.g. paid companions)
e. Remind visitors about the importance of thorough hand hygiene</td></tr>
<tr><td>Specimen Collection</td><td colspan="2">Take viral specimens for lab testing as soon as possible
• Nasopharyngeal (NP) swabs are recommended, however nasal swabs are also acceptable if you are unable to get a NP swab. Do NOT send throat swabs.
• Results for influenza testing will be available on the same day for specimens received at BCCDC before 12pm from Mon-Fri.</td></tr>
<tr><td>Outbreak-Termination</td><td colspan="2">Control measures will be continued until the outbreak is declared over by the MHO, generally 6 days after the onset of symptoms in the last case.
Once the outbreak is declared over;
a. Discontinue prophylactic antiviral medication
b. Complete the “Influenza-Like-Illness Outbreak Report Form” and fax it to Vancouver Coastal Health CDC at 604-731-2756
c. Order replacement viral specimen kits by emailing the updated Sample container order form to kitorders@hssbc.ca or by faxing a request to BCCDC at 604-707-2606
d. Consider a debrief with your facility to evaluate the management of the outbreak
e. Remain alert for possible new cases in staff and residents. Report any suspect outbreaks to the MHO or designate</td></tr>
<tr><td rowspan="2">Reporting Forms</td><td>VCH Influenza-Like-Illness (ILI) Outbreak report</td><td>Submit after every outbreak.</td></tr>
<tr><td>Influenza Immunization Report</td><td>Submit by Jan 31, 2018</td></tr>
<tr><td>Attachments</td><td colspan="2">VCH Influenza-Like-Illness (ILI) Outbreak Specimen Collection
Example of Pre-Printed Orders
VCH Influenza-Like-Illness Line list for Residents
VCH Influenza-Like-Illness Line list for Staff
Sample Immunization Log for residents
Dear Health Care Provider letter for staff antivirals</td></tr>
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