VIRAL RESPIRATORY ILLNESS OUTBREAK PROTOCOL AND TOOLKIT

FOR LONG TERM CARE AND MENTAL HEALTH AND SUBSTANCE USE FACILITIES

September 2020

This Protocol and Toolkit is not intended for use in Assisted Living or Hospice settings. Assisted Living sites have a separate Toolkit

***For full use of the internal hyperlinks in this document (e.g., from the single page protocol to a Tool in the Toolkit and back), you will need to right click on the adobe Toolbar and select NEXT VIEW and PREVIOUS VIEW from the PAGE NAVIGATION TOOLS**

The current Fraser Health Respiratory Outbreak Protocol for Long Term Care Facilities is found at:
https://www.fraserhealth.ca/health-topics-a-to-z/long-term-care-licensing/clinical-and-safety-resources-for-long-term-care/respiratory-outbreaks#.XVx69pNKiUk

QUICK NOTES

*****For full use of the internal hyperlinks in this document (e.g., from the single page protocol to a Tool in the Toolkit and back), you will need to right click on the adobe Toolbar and select 'NEXT VIEW and PREVIOUS VIEW from the PAGE NAVIGATION TOOLS

Viral Respiratory Illness Case Definition

There is no single sign or symptom of illness that is diagnostic for viral respiratory infections like COVID-19 or influenza. Consider the following symptoms of COVID-19 and other viral respiratory infections:

- **Fever**
- **Sore throat or painful swallowing**
- **Muscle aches**
- **Cough**
- **Loss of sense of smell**
- **Fatigue**
- **Shortness of breath**
- **Loss of sense of taste**
- **Nausea and/or vomiting**
- **Headache**
- **Loss of appetite**
- **Diarrhea**
- **Chills**
- **Runny nose**

Suspect Viral Respiratory Illness Outbreak Definition

- One or more person with RI symptoms in a neighbourhood or floor. (staff and/or residents) **(Tool 14)**

Public Health Contact **(Tool 2a)**

- *For all long term care facilities in the Fraser Health Authority area including:*

  - Fraser Health-operated Long Term Care Facilities
  - Contracted and Private Pay Long Term Care Facilities
  - Mental Health and Substance Use Residential Facilities

Seven days a week including STATS: 0830-1930 CALL 604-949-7296 and FAX 604-476-7088 to reach your Public Health Outbreak Management Team (Tool 7)

PROTOCOL

This Protocol consists of 2 single page Checklists and a Flowchart. Each of the Checklists links to relevant Tools in the Toolkit

- **Pre-Season Planning, Preparation and Prevention Checklist**
  - This Checklist assists you to ensure appropriate steps have been taken to:
    - Prevent an outbreak due to INFLUENZA, COVID-19, or OTHER RESPIRATORY VIRUS; and
    - Be ready to manage an INFLUENZA, COVID-19 or OTHER RESPIRATORY VIRUS outbreak should one occur

- **Outbreak Detection and Consultation Checklist**
  - This checklist assists you to:
    - Detect a Suspect Viral Respiratory Outbreak;
    - Initiate Initial Response;
    - Initiate Laboratory Testing; and
    - Report and Consult PROMPTLY regarding SUSPECT OUTBREAK

- **Viral Respiratory Outbreak Control Measures Checklists**
  - This section includes a Flow Chart to guide in the use of the one-page Checklists to assist you in control measures for managing Viral Respiratory Illness Outbreaks
  - There are 2 Checklists:
    - Influenza: Lab- confirmed and highly suspicious
    - Non Influenza: mild or serious illness that is not influenza

TOOLKIT

The Toolkit is a collection of Tools designed to assist in using the Protocol. These Tools are referenced in the Checklists. Some of the Tools are references to materials that are on reliable websites including, Fraser Health, the BC Centre for Disease Control, HealthLinkBC, the Office of the Provincial Health Officer, PICNet BC and the Public Health Agency of Canada

Additional Tools may be added and existing Tools amended from time to time. Tools have Tool Numbers, not page numbers. This allows easy changes to the Tools as needed.

Table of Contents

Protocol

Toolkit

VIRAL RESPIRATORY ILLNESS OUTBREAK

PROTOCOL

Pre-Season Planning, Preparation and Prevention Checklist

AUGUST/ SEPTEMBER

- ☐ **DESIGNATE** the Outbreak Prevention and Management Team for your Facility and *'Prepare'* **(Tool 1)**
- ☐ **RECORD** contact information for your Public Health Contact **(Tool 2a)**
- ☐ **UPDATE** Physician Pre-printed Orders for influenza immunization, pneumococcal immunization (if needed) and antiviral medications **(Tool 3)**
- ☐ **PROVIDE** Your Pharmacy with residents' weights, ages, gender and serum creatinine levels for calculation of anti-influenza medication doses **(Tools 3, 19, 41)**
- ☐ **REVIEW** Nurse Immunizer status and requirements regarding nurse immunizer for staff immunization- including Peer Nurse Immunizer Program **(Tool 4)**
- ☐ **REVIEW** Source Controls: Engineering and Administrative **(Tool 5)**
- ☐ **COMPLETE** Prevention Audit Tool

SEPTEMBER

- ☐ **FAMILIARIZE** yourself with the current Fraser Health Respiratory Outbreak Protocol and COVID-19 Resource Toolkit
- ☐ **Discard** previous versions of the Toolkit and replace with the most recent version.
- ☐ **ASSEMBLE** your Respiratory Outbreak Resource Kit **(Tool 6)**
- ☐ **REVIEW** supplies needed **(Tool 6)**
- ☐ **UPDATE Contact List (Tool 7)**
- ☐ **PROVIDE** information on Influenza vaccines, treatment and prophylaxis within your facility **(Tool 8)**
- ☐ **PICK UP** Influenza Vaccine when it is available using the cold-chain method **(Tool 9)**
- ☐ **ORDER AND PICK UP** Pneumococcal Vaccine as required **(Tool 9)**
- ☐ **ORDER** Nasopharyngeal Swab Collection Kits from the BCCDC Laboratory **(Tool 10)**
- ☐ **OBTAIN** Secondary Packaging Per TRANSPORTATION OF DANGEROUS GOODS **(Tool 23b)**

OCTOBER/NOVEMBER/DECEMBER

- ☐ **POST** preventive signage **(Tool 11)**
- ☐ **CHECK** with Pharmacy regarding their readiness to start anti-influenza medications if needed **(Tools 3, 41)**
- ☐ **REVIEW AND PROMOTE** Hand Hygiene **(Tool 12)**
- ☐ **ENSURE** Use of Routine Practices and Hand Hygiene **(Tool 13)**

- ☐ **BE READY TO IMPLEMENT** control measures for a SINGLE case of viral respiratory illness (including proper use of PPE) **(Tools 14, 15, 16)**
- ☐ **VACCINATE** staff, volunteers, students, and residents **(Tools 17, 18, 19)**
- ☐ **COMPILE, COMPLETE and FAX** Readiness Report of vaccinations by Dec 31st to 604-507-5439 **(Tool 20)**
- ☐ **MAINTAIN** a List of Residents who have had this season's influenza vaccine **(Tool 19)**
- ☐ **MAINTAIN** a List of Residents who have had pneumococcal vaccine, as recommended **(Tool 19)**
- ☐ **ENCOURAGE** visitors and others to be immunized as recommended against influenza **(Tool 8)**
- ☐ **REVIEW** vaccination status for new residents on admission

REMAINDER OF SEASON

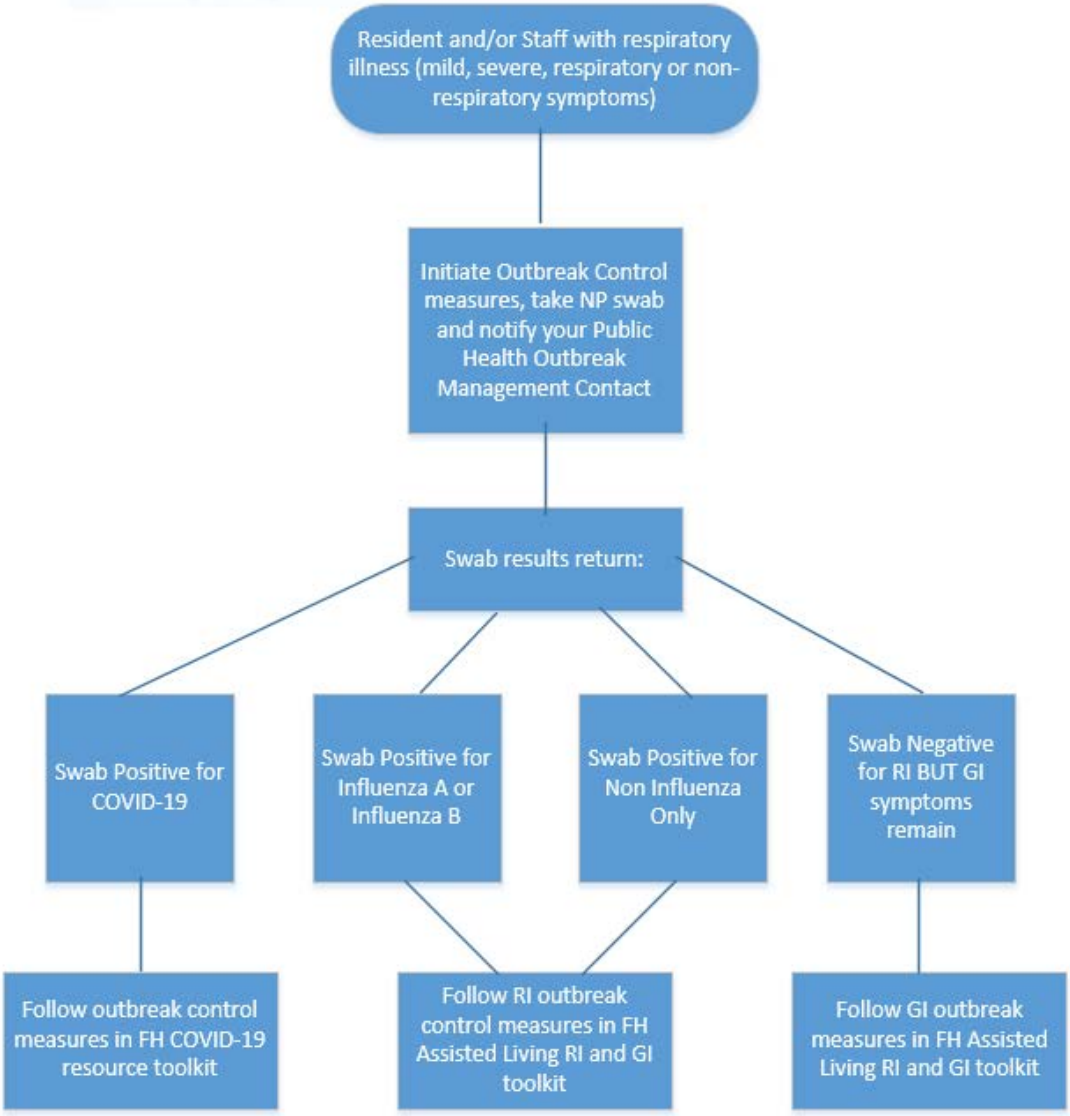
- ☐ **MAINTAIN the** record of immunization rates of both staff and residents from the Readiness Report **(Tool 17, 19)**

Outbreak Detection and Consultation Checklist

- ☐ **ISOLATE** residents with any RI or COVID-19 symptoms and place on Droplet Precautions **(Tools 15, 16)**
- ☐ **INITIATE** DETECTION AND ACTION STEPS promptly when there is 1 or more person with any RI symptoms a neighbourhood or floor (staff and/or residents) **(Tool 21)**
- ☐ **REPORT** to Public Health, Your Outbreak Management Contact for all Long Term Care Facilities and MHSU facilities in the Fraser Health Authority area **(Tools 2a, 21, 24, 25)**
- ☐ **COLLECT Nasopharyngeal** swabs for testing
- ☐ **FOLLOW** Instructions below to ensure quality specimens and fastest possible turnaround time
  - ➔ For Nasopharyngeal Swab specimens **(Tools 22, 23a, 23b)**
    - ☐ Complete the BCCDC Respiratory Outbreak Laboratory Form **(Tool 22)**
    - ☐ Include the name and phone number of the person to whom you want the laboratory to provide the results from the swab(s). Be sure to include an after-hours number, as results are often called to you in the evening. Be sure the person who will take the call from the lab will know what to do with the result
    - ☐ Notify the Virus Isolation Lab by Faxing completed Lab form to BCCDC at 604-707-2605
    - ☐ Fill out a BCCDC Virus Culture Requisition for each swab, mark it as "URGENT OUTBREAK-ASSOCIATED" and send it with the swab(s) **(Tool 23a)**
    - ☐ Package and send according to **(Tool 23b)** TRANSPORTATION OF DANGEROUS GOODS LAB SPECIMENS
    - ☐ Call TForce Final Mile Courier at 1-877-345-8801, bill to Acct #23270 and specify the **"ON & GONE"** delivery mode to the BCCDC Virus Isolation Lab
- ☐ **RECORD** specimens taken on the Resident and/or Staff Illness Report **(Tools 17, 19)**

  Contact Public Health seven days a week including STATS: 0830-1930 CALL 604-949-7296 and FAX 604-476-7088 for your Public Health Outbreak Management Team.**(Tool 7)**
- ☐ **INITIATE AND COMPLETE** Daily Surveillance Form Through Staff And Resident Illness Tracking Forms (**Tool 26, 27, 28**)
- ☐ **FAX** The Staff and Resident Respiratory Illness FORMS to your Public Health Contact each day.
  - o Use a different sheet for each neighbourhood, floor or other specified area
  - o For influenza and COVID-19, Staff and Resident Illness forms need to be updated each day
    If the outbreak is assessed to be due to a virus other than influenza, your Public Health Contact will advise you regarding daily reporting of illness.
- ☐ **DESIGNATE** a staff member and back-up to be responsible for daily outbreak tracking and updates
- ☐ **IMPLEMENT** the appropriate OUTBREAK CONTROL MEASURES (Influenza, COVID-19 or non-Influenza) based on swab results in consultation with your Public Health Contact **(**Tool 2a),
- ☐ **ORDER** a replacement swab kit. Use the order form BCCDC ORDER FORM and e-mail a scanned copy to kitorders@hssbc.ca **(Tool 10)**

FLOWCHART: RESPONDING TO A SUSPECTED OUTBREAK OF RI



VIRAL RESPIRATORY ILLNESS OUTBREAK

TOOLKIT

TOOLS 1 to 44

Flowchart for Outbreak Control Measures

CONTROL MEASURE CHECKLISTS FOR OUTBREAK MANAGEMENT - The recommended Control Measures and Reporting Expectations vary with the nature of the outbreak and are organized and presented as:

- **A FLOW CHART:** with definitions for assistance in selection of the best CHECKLIST for control measures
- Influenza Checklist
- Non Influenza respiratory Illness checklist

****

Though no single, simple protocol will cover all respiratory outbreaks optimally, the checklists provide rational approaches to viral respiratory outbreak management.

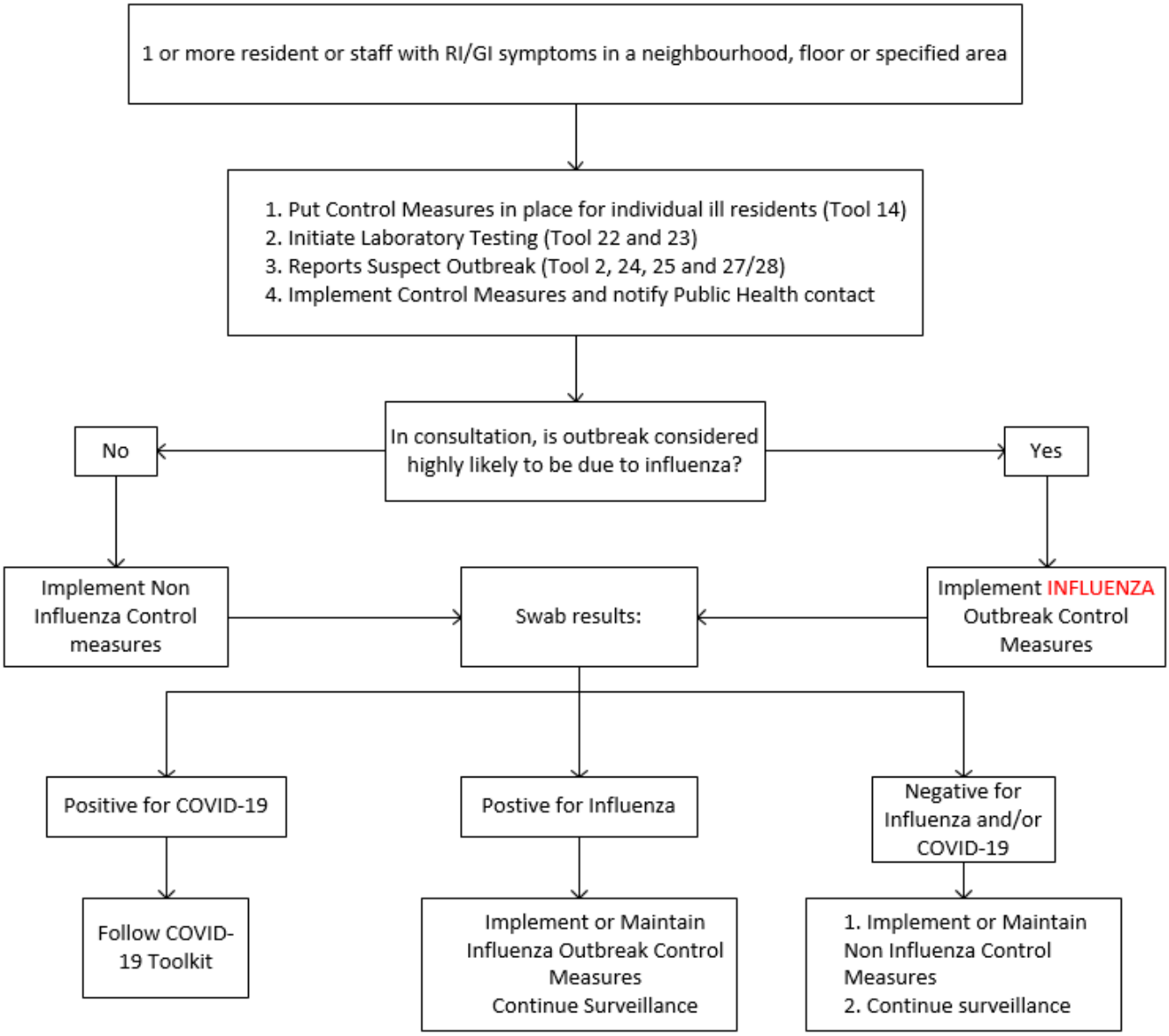
WARNING: For each of the Outbreak Scenarios, it is critically important to remain vigilant in surveillance in case the situation changes; for example, more than one virus may be causing illness in the same setting, additional laboratory testing may be indicated, a resident may have developed complications or a bacterial infection and need medical assessment, etc.

These checklists are provided as guides for the management of respiratory virus outbreaks. The checklists DO NOT substitute for:

- Consultation regarding Outbreak Management (as needed) with your Facility Medical Director and your Public Health Contact **(Tool 2a)**
- Consultation with your Facility Medical Director or with the Resident's Physician when warranted due to a specific resident's condition

For helpful Information about Common Respiratory Viruses, including Influenza (Tool 29).

FLOWCHART AND DEFINITIONS FOR RESPIRATORY OUTBREAK CONTROL MEASURES



If **OUTBREAK MANAGEMENT** is not going as expected (e.g., unexpected increase in new cases or change in nature/pattern of illness), **REVIEW** with your Public Health Contact regarding:

1. How Control Measures are being implemented
2. The possibility of more than one virus involved
3. Any indication for additional testing
4. Re-assessment of the most appropriate Control Measures
5. Any additional recommendations

DEFINITIONS

Non-Influenza Respiratory Outbreak characterized by predominately SERIOUS ILLNESS

- Illness is more than "a bad cold" in many or most of those affected
- Illness may be remarkable in its suddenness and accompanying extreme fatigue (prostration)
- Affected individuals generally are not up and about while ill
- Eating and drinking are likely to be affected
- Symptoms may persist
- There are complications such as pneumonia (viral or secondary bacterial), heart failure or septicaemia in residents or staff for whom pre-existing frailty or underlying chronic illness is not a satisfactory explanation for such complications
- Illness may be prolonged, with cases taking longer than expected to recover

Non-Influenza Respiratory Illness Outbreak characterized by predominately MILD ILLNESS

- Illness is mild and "common cold-like" in most of those affected
- From onset (or within a day or two), activity levels, including eating and drinking, are not markedly different than usual
- Note: There may be individual exceptions due to an underlying pre-existing illness that makes certain individuals very susceptible to complications from any respiratory infection

Influenza Outbreak Control Measures CHECKLIST: INFLUENZA A and B

Influenza is known or there is a high suspicion of influenza as the cause of the Outbreak

- ☐ **MANAGEMENT OF ILL RESIDENTS/PATIENTS:**
  - o Isolate ON droplet precautions **(Tool 15)** through their infectious period (5 days from onset) (NOTE: the isolation period for influenza is different from COVID-19) **(Tool 30a).**
  - o FOLLOW pre-printed orders **(Tools 3, 30a, 32, 41a-f).**
  - o Use ER transfer form for all transfers to acute care **(Tool 38).**
- ☐ **PREVENTIVE MEASURES FOR WELL RESIDENTS**
  Promote hand hygiene and respiratory etiquette. Implement anti-influenza prophylaxis, if recommended **(Tools 31a, 32, 41a-f).**
- ☐ **CONTROL MEASURES FOR ILL HEALTH CARE WORKERS:** ill staff stay away from work until 5 days from symptom onset or until symptoms gone, and test results negative for viral respiratory illness **(Tool 33a).**
- ☐ **PREVENTIVE MEASURES FOR WELL HEALTH CARE WORKERS:** All staff should perform self-assessments twice daily for symptoms related to COVID-19 Antiviral prophylaxis is recommended **(Tool 34a, 35, 36).**
- ☐ **IMMUNIZATION:** Adhere to Fraser Health Influenza Control Policy **(Tool 8).**
- ☐ **EDUCATION:** Teach staff, volunteers, residents' families and visitors about signs and symptoms and prevention of influenza **(Tools 8, 11, 12).**
- ☐ **CONSIDERATIONS regarding MOVING IN AND TRANSFERS:** Follow recommendations found in **COVID-19 Toolkit**
- ☐ **IMPLEMENTATION OF OTHER CONTROL MEASURES:**. Consider smaller group activities limited to well residents **(Tool 37).**
- ☐ **POSTING OF OUTBREAK SIGNAGE:** Post outbreak and precautions signs **(Tools 11, 12).**
- ☐ **UTILIZATION OF COHORTING:**, Cohort staff to work with well or unwell residents or in either affected or unaffected areas **(Tools 37)**
- ☐ **ADHERENCE TO INFECTION PREVENTION AND CONTROL PRACTICES**: Remind staff and visitors to use hand hygiene before and after contact with each resident. Post signs requiring droplet/contact precautions with ill residents and use of PPE (gloves, gowns, masks and eye protection) appropriately **(Tools 11, 12, 15, 16). Contact Public Health Contact with questions or concerns (Tool 2a).**
- ☐ **IMPLEMENT ENHANCED ENVIRONMENTAL CLEANING** and contact housekeeping services to ensure enhanced cleaning for the duration of the season **(Tools 39, 40).**
- ☐ **CLEANING AND DISINFECTION OF EQUIPMENT**—dedicate equipment when possible and ensure all shared equipment is cleaned and disinfected between users with a hospital grade disinfectant **(Tool 39).**
- ☐ **NOTIFICATION OF INFLUENZA OUTBREAK:**
  - o Community Care Facility Licensing (if a licensed facility) or Fraser Health Long Term Care Contracts and Services (if operating under Hospital Act)
  - o Any facility/institution that received a resident from you (include transfers up to two days before onset of illness in the first case) **(Tool 37)**
  - o BC Ambulance, HandyDART and other similar transportation suppliers, oxygen services, laboratory services and other service providers of any outbreak control measures that may affect their provision of services if called to your facility
  - o Your ACCESS Coordinator (or equivalent placement service such as Centralized Referral Coordinator for Mental Health Facilities) regarding any restrictions on moves into your facility or transfers

- ☐ **DAILY REPORTING:** Update the Resident and Staff Illness Reporting forms each day, adding new information, especially note swab results and hospitalizations/deaths **(Tools 27, 28)** and FAX daily to your Public Health Contact **(Tool 2a).**
- ☐ **ONGOING SURVEILLANCE:** Remain alert and assess for new cases twice daily.
- ☐ **TREATMENT AND PROPHYLAXIS:** Start treatment and/or prophylaxis as advised by your Public Health Contact (in consultation with your Facility Medical Director, if applicable)**(Tools 3, 30a, 31a, 32, 35, 36, 41a-f).**
- ☐ **REVIEW OF PROBLEM-SOLVING** with your Public Health Contact **(Tools 2a, 42a)** if outbreak management is not progressing as expected
- ☐ **CALLING OUTBREAK OVER:** Consult with your Public Health Contact **(Tool 2a).** An Influenza outbreak will usually be declared over on the 10th day from the start of antiviral prophylaxis. Antiviral prophylaxis can be discontinued on the 8th day from the start of antiviral prophylaxis **(Tool 43a).**

Non-Influenza Respiratory Illness Outbreak

- ☐ **MANAGEMENT OF ILL RESIDENTS/PATIENTS:** Isolate on droplet precautions **(Tool 15)** while infectious **(Tools 29, 30b).**
- ☐ **PREVENTIVE MEASURES FOR WELL RESIDENTS/PATIENTS**: Promote hand hygiene and respiratory etiquette **(Tool 31b).**
- ☐ **MANAGEMENT OF ILL HEALTH CARE WORKERS**: Ill staff stay away from work until symptoms gone and test results negative for viral respiratory illness (i.e. COVID-19) .Practice good respiratory etiquette and hand hygiene on return to work **(Tools 12, 33c).**
- ☐ **PREVENTIVE MEASURES FOR WELL HEALTH CARE WORKERS:** All staff should perform self-assessments twice daily for symptoms related to COVID-19**(Tool 34b).**
- ☐ **EDUCATION:** Teach staff, volunteers, residents' families and visitors of the signs and symptoms of respiratory illness, including respiratory etiquette and hand hygiene **(Tools 11, 12).**
- ☐ **CONSIDERATIONS regarding MOVING IN AND TRANSFERS:**. Receiving facilities and transport personnel should be aware of the outbreak and resident status **(Tool 37).** Use the LTC-AL COVID-19 transfer algorithm for cases of COVID-19 and for influenza/non-influenza use Tool 38 **(Tool 38).**
- ☐ **IMPLEMENTATION OF OTHER CONTROL MEASURES:** smaller group activities should be limited to well residents. During the outbreak, visitors should limit visiting to only one resident.
- ☐ **POSTING SIGNAGE:** Recommend using outbreak signage to advise visitors of the outbreak and precautions to use **(Tools 11, 12)**.
- ☐ **UTILIZATION OF COHORTING:** When possible cohort staff to work with well or unwell residents or in either affected or unaffected areas **(Tool 37).**
- ☐ **ADHERENCE TO INFECTION PREVENTION AND CONTROL PRACTICES:** Remind staff and visitors to use hand hygiene before and after contact with each resident. Post signs requiring droplet precautions with ill residents and use of PPE (i.e., glove, gowns, masks and eye protection) appropriately **(Tools 11, 12, 15, 16).**
- ☐ **IMMPLEMENT ENHANCED ENVIRONMENTAL CLEANING:** Ensure enhanced cleaning is in place for the duration of the season **(Tools 39, 40)**.
- ☐ **CLEANING AND DISINFECTION OF EQUIPMENT:** dedicate equipment when possible and ensure all shared equipment is cleaned and disinfected between users with a hospital grade disinfectant **(Tool 39).**
- ☐ **NOTIFICATION OF:**
  - Community Care Facility Licensing (if a licensed facility) **or** Fraser Health Long Term Care Contracts and Services (if operating under Hospital Act)
  - Any facility or institution that may have received a resident from you (include transfers up to two days before onset of illness in the first case in your outbreak). Note the respiratory pathogen causing outbreak, if known. Note that the outbreak is **NOT** thought to be influenza. Inform if significant change in determination of cause of outbreak
  - BC Ambulance, HandyDART and other similar transportation suppliers, oxygen services, laboratory services and other service providers of any outbreak control measures that may affect their provision of services
- ☐ **DAILY REPORTING:** Use the daily reporting forms **(Tools 27, 28)** for monitoring cases in your facility and fax to Public Health daily
- ☐ **ONGOING SURVEILLANCE:** Remain alert and assess for new cases twice daily. If a significant difference in pattern or severity of illness is noted during an outbreak (e.g., new cases are affected differently than early cases), additional viral testing should occur and should be reviewed with Public Health
  - Alert your Public Health Contact **(Tool 2a)** if additional testing is positive for Influenza or COVID-19.
    - **If outbreak is not resolving refer to Tool 42b**
- ☐ **CALLING OUTBREAK OVER:** Facility will declare the outbreak over usually between the 8th and 14th day after onset of illness in the last case **(Tool 43b)**. This may vary depending on the virus or viruses causing the outbreak **(Tool 29).** Respiratory Illness Outbreak Notifications (RIONs) are **not** sent for Non Influenza Outbreaks.

Tool 1: *Outbreak Prevention and Management Team*

(adapted from PICNet Respiratory Infection Outbreak Guidelines for Healthcare Facilities November 2018*)*

Organizational Leadership for infection prevention and control should be established and maintained in all health care settings, including Long Term Care facilities, to ensure effective and efficient outbreak prevention and management. Long Term Care facilities will find that formation of an *Outbreak Prevention and Management Team* is the best way to prevent, prepare for and manage viral respiratory or gastrointestinal outbreaks. Specific members of the Outbreak Prevention and Management Team are designated to:

- Know the Outbreak Prevention and Management Protocols well
- Communicate with the *Public Health Contact* **(Tool 2a)** when questions arise, especially when the Suspect Outbreak definition is met
- Ensure that actions recommended in the Protocols are used in the facility

Individuals should be designated to perform these functions such that there is coverage at all times, including after normal work hours, on weekends and on holidays

Outbreak Prevention and Management Team (OPMT)

Individuals responsible for prevention and control efforts should review the strategic Pre-Season Planning, Preparation and Prevention CHECKLIST to update facility policies and practices and take all recommended preparative steps, especially:

- Prevention strategies
- Strategies to increase resident, staff and facility resilience to viral outbreaks
- Surveillance steps to be able to recognize a suspect outbreak and promptly take the appropriate actions, including collecting and submitting laboratory specimens, contacting your Outbreak Management Contact **(Tool 2a)** and promptly introducing all indicated control measures
- Working with your Infection Prevention and Control Consultant on day-to-day prevention and control practices and special consultation as needed **(Tool 2b)**

Though the number and designations of members of an OPMT may vary with the type and size of a facility, the following list is useful to consider in building an effective Respiratory Outbreak Prevention and Management Team:

- Facility Medical Director
- Administrator
- Director of Nursing or Director of Long Term Care
- Person in your facility who has responsibility for Infection Prevention and Control
- Housekeeping/Laundry Supervisor
- Food Services Supervisor
- Pharmacist or other representative from the Pharmacy that supplies the facility
- Front-Line Staff Member
- Union Representative
- Person who will be involved in Communications

Clear definitions, communication and assumption of specific roles and responsibilities are particularly important for effective Outbreak Prevention and Management

Tool 2: *Contacts*

REPORT EVERY SUSPECT VIRAL RESPIRATORY ILLNESS OUTBREAK to your OUTBREAK MANAGEMENT CONTACT ASAP

If your facility outbreak is classified as a suspect or lab confirmed INFLUENZA outbreak you report DAILY to your **Public Health Contact (PHC)** who supports you in outbreak management until the outbreak is declared over. Public Health will refer to Infection Prevention and Control as needed

If your facility outbreak is caused by a respiratory virus other than influenza (Refer to Checklist "Non-Influenza")

Tool 2a: *Public Health (PH) Contact*

A ***Public Health Contact*** is available for all Long Term Care facilities within the Fraser Health area. All suspect Respiratory Illness Outbreaks **(Tool 14)** must be reported PROMPTLY to your Outbreak Management Contact. Delays in reporting of even an extra day, generally lead to a longer outbreak with more people affected. Your PH Contact will take your report of a suspect outbreak and work with you, in consultation with the Medical Health Officer (MHO), to ensure appropriate steps are taken to identify the cause of the outbreak and bring it under control quickly. The MHO or PH Contact will notify others by sending the Respiratory Illness Outbreak Notification (RION) if the outbreak is due to Influenza, COVID-19, or is highly suspicious for Influenza.

Seven days a week including STATS: 0830-1930 CALL 604-949-7296 and FAX 604-476-7088 your Public Health Outbreak Management Team (Tool 7)

Tool 2b: *Infection Prevention and Control Specialist*

When a viral Respiratory Illness Outbreak is declared the PH Contact will refer to Infection Prevention and Control if further support is needed as outlined in the Non Influenza Checklist**.**
Some examples may include the following;

- **PPE**
- **Cleaning and disinfection**

Tool 3: *Pre-Printed Order Template*

This Pre-Printed Order Template is an example of enabling orders for each resident to cover standard recommendations regarding viral respiratory illness prevention and management for quality care prior to and throughout the respiratory virus season. Every resident should have a completed pre-printed order by the end of September each year to cover the items in the TEMPLATE. These are to be reviewed annually and signed by the Medical Director for the facility or the personal medical or nurse practitioner for the resident (according to practice at your site)

- This TEMPLATE is provided to assist in development of pre-printed orders appropriate for your facility and has pre-printed orders for influenza preparedness, prevention and response (including immunization, treatment and prophylaxis). This template has been developed so you have a comprehensive and tested sample from which to work to develop your pre-printed orders or against which to compare your existing pre-printed orders. Many facilities utilize a single order to cover all items in the Pre-Printed Order template, including those that are only used in an outbreak situation on the recommendation of the Medical Health Officer. In such situations, the physician still must review all items in the Order and clearly note any exceptions.

- For Fraser Health-operated facilities served by the Lower Mainland Pharmacy, use the Pre-Printed Routine Orders and the Pre-Printed Influenza Outbreak Orders

- Appropriate dosage of important anti-influenza medications is based on calculated Creatinine Clearance (caCrCl) or estimated Glomerular Filtration Rate (eGFR) (Tool 41). A Serum Creatinine done within the previous 12 months is included on the pre-printed order template because it is necessary to calculate dosage if kidney function is impaired. Serum creatinine can also be done when an outbreak is recognized rather than in advance (for those who do not have a recent test result on file). Note: The Fraser Health Medication Quality and Safety Committee considered this issue in 2011 and supported a serum creatinine at least once per 12 months as a useful quality and safety precaution in terms of overall medication use by individuals living in Long Term Care

- This template also contains a reminder that a single dose of pneumococcal vaccine is indicated at age 65 years. If there is no acceptable record of having received pneumococcal vaccine, a dose should be given on moving into Long Term Care. If a resident has received a dose of pneumococcal vaccine and has any of the health conditions listed on the template, a one-time revaccination at 5 years after the initial dose is recommended

You may choose any format that works for you to design your pre-printed seasonal orders as long as it meets the requirements of the regulatory bodies for a valid pre-printed order. The need for anti-influenza medication doses to be adjusted based on renal function is built into the protocol. Your pharmacy will calculate the doses.

A joint statement from the British Columbia College of Nursing Professionals (BCCNP) and the College of Physicians and Surgeons of BC (CPSBC) includes the following statements:

- Physicians are authorized to give orders to registered nurses. Orders must be patient-specific; these can include instructions that are pre-printed. Pre-printed orders set out the usual care for a particular patient group or patient problem. They are made patient-specific by the ordering physician adding the name of the patient, making any necessary changes to the pre-printed order to reflect the needs of the individual patient, signing and dating the order. Standing orders are no longer permitted

- Orders that refer to another document (e.g., protocol, clinical practice guideline) are permitted under the Nurses (Registered) and Nurse Practitioners Regulation. The College of Registered Nurses of British Columbia (CRNBC) and the College of Physicians and Surgeons of British Columbia (CPSBC) believe that such references should be placed on the patient's chart. If this is not possible, the order must clearly identify the name and version of the document being referenced

PHYSICIAN ORDERS ***TEMPLATE***
RESIDENTIAL INFLUENZA PROTOCOL

MANDATORY ORDERS: PRECEDED BY BULLET ●

OPTIONAL ORDERS: CHECK APPROPRIATE BOXES
CROSS OFF and INITIAL IF NOT APPLICABLE

RESIDENT ADDRESSOGRAPH

Drug and Food Allergies:

MRP Pneumococcal Vaccine Records	**Year Given**	**Given, but Year Unknown**	**Not known if Ever Given**	**Not Given**
Initial dose				
Once Only Re-vaccination				

INFLUENZA SEASON PROTOCOL			
INDICATION	**MD ORDER FOR MEDICATION OR TEST**	**PLEASE CHECK √**	
Influenza Prevention	Annual influenza vaccination[1]	☐ YES	☐ NO
Pneumococcal Pneumonia Prevention[1]	**Pneumococcal polysaccharide vaccination**: Given at age 65 or on admission, whichever comes first **Once only revaccination at 5 years** is indicated for anybody with one or more of: chronic disease of the kidneys or liver, asplenia, sickle cell disease, solid organ or islet cell transplant , congenital immunodeficiency states or poor immune system function due to disease (e.g., HIV, lymphoma, Hodgkin's, Multiple Myeloma) or because of therapy (e.g., high-dose systemic steroid drugs to prevent transplant rejection)	**INITIAL DOSE** ☐ YES **5 YR BOOSTER** ☐ YES	**INITIAL DOSE** ☐ NO **5 YR BOOSTER** ☐ NO
Influenza Outbreak Preparation[1]	● **Serum Creatinine level** for calculation of estimated Creatinine Clearance (for residents not known to have impaired renal function, a result within the past 12 months as of the start of the viral illness season is acceptable)		
	● Nasal swab for viral testing (to determine cause of outbreak)		
Influenza Outbreak Response[1]	Antiviral **Treatment**[2,4] of Cases (if can be done within timeframe for benefit) and Antiviral **Prophylaxis**[2,4] of Well Residents	☐ YES	☐ NO
Influenza A (sensitive to oseltamivir) and **Influenza B Outbreak[2]**	**OSELTAMIVIR**[2,4] For symptomatic patients**: Oseltamivir** treatment x 5 days For patients **without new or worse cough: Oseltamivir** prophylaxis for 8 days if no new cases develop in outbreak area after 5 days of prophylaxis. If new cases develop between days 6 to 8 of prophylaxis, duration will be determined by Medical Health Officer.	☐ YES ☐ YES	☐ NO ☐ NO
Influenza A (sensitive to oseltamivir) and **Influenza B Outbreak[2]** AND **Influenza** (resistant to oseltamivir) **IF** recommended by public health)	**ZANAMIVIR**[2,3,4] **{Note: Zanamivir can only be used for patients who can use a diskhaler}** For symptomatic patients IF advised by Public Health due to resistance to Oseltamivir**: Zanamivir** treatment x 5 days For patients **without new or worse cough** IF advised by Public Health due to resistance to Oseltamivir**: Zanamivir** prophylaxis for 8 days if no new cases develop in outbreak area after 5 days of prophylaxis. If new cases develop between days 6 to 8 of prophylaxis, duration will be determined by Medical Health Officer	☐ YES ☐ YES	☐ NO ☐ NO

[1] As per Fraser Health Viral Respiratory Outbreak Protocol [2]Use on recommendation of Fraser Health Medical Health Officer
[3] There may be some restriction of use recommended [4]Recommended doses summarized in the Viral RI Outbreak Protocol and Toolkit

DATE:	MD SIGNATURE: **IF "NO" TO ANY OF THE OUTBREAK RESPONSE ORDERS, INDICATE REASON AND PROVIDE CONTACT NUMBER**

Tool 4: *Peer Nurse Immunizer Information*

Staff working in smaller community sites may have some difficulty accessing acute care sites to be vaccinated against influenza. The ***Peer Nurse Immunizer Program*** offers an option for you to vaccinate staff on location at your facility site. The Colleges mandate the requirements for their members for giving vaccine without an order. Information on the requirements is on the Peer Nurse immunizer page on the Fraser Health intranet site. A comprehensive online learning program is available from the BC Centre for Disease Control

For ALL facilities: For information and educational resources for HEALTH CARE PROVIDERS ABOUT IMMUNIZATION POLICY, PROGRAM AND CLINICS, please see:
https://www.fraserhealth.ca/employees/employee-resources/workplace-health-and-wellness/influenza

Peer Nurse Immunizers are your co-workers working with you on your unit or on a unit within your site. They will offer you a convenient and easy way to get your flu shot this year. Their role is to promote the uptake of flu vaccine within their site, through information, a positive attitude and provision of the Influenza Vaccine to their Peers

The Peer Nurse Immunizers will determine, in collaboration with their managers, ways in which to provide influenza vaccine to their peers. This could include static clinics, roving clinics, staff meetings and ad hoc at the request of the staff member

The Peer Nurse Immunizer must provide immunizations according to the established standards for vaccine storage, handling and administration

Community Pharmacies may provide immunization on site. If your community pharmacy is immunizing on site, please ensure that arrangements are made well enough in advance that timing for immunization will be in keeping with Public Health recommendations. In general, residents are recommended to receive vaccine as soon as supplies are available.

Information relating to the qualifications for those who can provide influenza vaccinations without a doctor's order may be found at the following sites:

- Registered Nurses
  https://www.bccnp.ca/Standards/RN_NP/Pages/Default.aspx

- Licensed Practical Nurses
  https://www.bccnp.ca/Standards/LPN/Pages/Default.aspx

- Registered Psychiatric Nurses
  https://www.bccnp.ca/Standards/RN_NP/Pages/Default.aspx

- Nurse Practitioners
  https://www.bccnp.ca/Standards/RN_NP/Pages/Default.aspx

- Pharmacists
  http://www.bcpharmacy.ca/administration-of-injections-program

- BCCDC Requirements
  http://www.bccdc.ca/imm-vac/ForHealthProfessionals/ImmunizationCourses/ImmsCompCourse.htm

Tool 5: *Source Controls—Ways to Minimize the Risk of Viral Respiratory Illness in your Facility*

Source Controls can help all who reside, visit or work in your facility to be less likely to be affected by respiratory viruses. Collaboration with workplace health, safety groups and building engineers has led to a framework that includes three tiers or levels of controls: *Engineering* controls, *Administrative* controls and *Personal Protective Equipment (PPE)* controls. Early fall is a good time to review Source Controls

Engineering Controls

Engineering controls remove or reduce a hazard by applying methods of minimization, isolation or ventilation. Practical engineering controls include, but are not limited to:

- Hand hygiene (i.e., hand washing facilities and alcohol-based hand rub dispensers);
- 2 metre spacing in multi-bed rooms;
- Curtains or other partitions, especially if 2 metre spacing is not possible; and
- Maintenance of air temperature and relative humidity within the recommended range
  [The dry indoor air so common throughout the respiratory virus season can increase the ease of virus spread and potential for exposure to cause illness. In accordance with Health Canada guidelines for thermal comfort and American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Standard 55-2004, a relative humidity range of 30-60% and a temperature range of 20-24˚C are recommended. The recommended ranges vary by season.]

Administrative Controls

Administrative controls are decisions for the facility that promote resilience, provide protection, reduce the likelihood of viruses being brought into the facility by ill workers or visitors and interrupt transmission when viruses are introduced to the facility. Administrative controls also include surveillance, early recognition and timely introduction of appropriate control measures when there is illness in the facility. Practical administrative controls include, but are not limited to:

- Compliance with the Fraser Health Influenza Control Policy **(Tools 8, 17, 18)** **(**http://www.fraserhealth.ca/professionals/resources/influenza/influenza**)**
- An immunization program for residents and staff (i.e., education, promotion and provision) that may also include volunteers and visitors. Influenza immunization is recommended (as per the Influenza Control Policy) for students involved in resident care during the “respiratory virus season.”
- Passive and active screening of visitors, volunteers and service providers [e.g., signage, limitations, personal protective equipment (as and when indicated) and appropriate restrictions]. Passive screening relies on general education and signage, leaving responsibility with those who have signs or symptoms of illness to report illness and follow advice. Active screening requires measures to actively screen those coming into the facility and may be recommended by your Outbreak Management Contact in certain situations, such as high levels of an influenza virus in the surrounding community (especially if not covered by the seasonal vaccine) or by some other virus circulating in the community that puts residents at significant risk
- Staff self-assessment for signs and symptoms of viral respiratory illness or active screening for staff if recommended by your Outbreak Management Contact due to certain situations such as a virus circulating in the community that puts residents at significant risk
- Enhanced screening of residents for signs and symptoms of respiratory illness
- Education on hand hygiene and respiratory etiquette
- Appropriate use of Routine Practices and, as indicated, Additional Precautions; and
- Cleaning and disinfection of frequently touched objects with special consideration of objects frequently touched by residents who may have difficulty with hand and respiratory hygiene

Personal Protective Equipment (PPE) Controls

PPE is an important control, but one that should not be counted on in place of engineering and administrative controls. PPE supplements rather than replaces other important controls. Each type of PPE has specific applications, advantages and limitations. Facilities and staff members should select PPE compatible with the hazard potentially encountered. PPE effectiveness depends on proper use. Improperly used PPE can actually increase risk of exposure. Staff should be fully knowledgeable of the applications, advantages and limitations of the PPE available within the facility.

Tool 6: *Facility Respiratory Outbreak Resource Kit*

Assemble your influenza kit

- Fraser Health Respiratory Outbreak Protocol for Long Term Care and Mental Health and Substance Use Facilities
- List of all staff, volunteers, etc.
- List of all casual staff who may work in facility over the season
- List of residents (updated with new residents over the season)
- List of phone numbers, including after-hours numbers
- Adrenalin (epinephrine) kit for vaccination clinics
- Supply of nasopharyngeal swab kits
- Influenza kit kept in a location that is accessible to staff (and ensure that staff knows where it is kept and that they have reviewed its contents)
- Be sure to have a Facility Protocol outlining responsibilities for receiving telephone reports of lab results, notifying management and implementing outbreak response in evenings and on weekends

Order swab kits

- Order swab collection kits from the BCCDC/PHSA LABORATORY: Use the order form found on-line at;
  http://www.elabhandbook.info/PHSA/Files/AdditionalFiles%2f2_20200529_064105_AdditionalFiles_2_20200525_063230_AdditionalFiles_2_20191021_025346_SAMPLE%20CONTAINER%20ORDER%20FORM%20-%20DCQM_Q07_4104F%201.00%20Version%206.1%20(May%202020).pdf
  Indicate the number of swab kits needed and e-mail a scanned copy to kitorders@hssbc.ca **(Tool 10)**
- Having the nasopharyngeal swabs on hand can save a day or two when trying to confirm the cause of an outbreak
- Have available secondary packaging according to TRANSPORTATION OF DANGEROUS GOODS SPECIMENS**(Tool 23b)**

Be sure you have adequate Infection Prevention and Control supplies on-hand and know how to access extra supplies if needed urgently

- Hand soap (anti-bacterial soap is not required or recommended)
- Alcohol-based Hand Rub (70-90% ethyl alcohol base)
- Personal Protective Equipment
  - Gowns (Level 2)
  - Gloves
  - Masks (procedure or surgical masks)
  - Goggles or other acceptable eye protection (glasses do not count as eye protection)
- Tissues
- Surface disinfectants (wipes to clean equipment entering/exiting isolation room)
- Low-Level Hospital Grade Disinfectants (with a DIN number). See Low Level Disinfection Standard Operating Procedure
- Large Waste-bins
- Laundry hampers if using reusable Level 2 Gowns
- Preventive signage **(Tool 11)**

Tool 7: *Template for List of Important Contact Numbers*

Check your list of PHONE and FAX numbers

- Public Health Contact **(Tool 2a)**
- For Fraser Health Operated facilities*:* Central FAX number for Occupational Health
- Community Care Facility Licensing if your facility is licensed
- BCCDC Lab internet address and e-mail for sending Order for Nasal Swab Kits **(Tool 10)**
- BCCDC Laboratory FAX number for sending lab test information **(Tool 10)**
- Courier Service for sending Nasal Swabs for testing **(Tool 23)**
- Others to notify in event of an outbreak if you are calling for service
    - BC Ambulance
    - HandyDART or other transport services
    - Laboratory serving your facility
    - Pharmacy serving your facility
    - Medical gas/oxygen provider
    - Cleaning service
    - Hairdresser, physiotherapist, podiatrist, and other service providers

NAME	PHONE	FAX	COMMENT
Public Health Contact	**604 949 7296**	**604 476 7088**	
Medical Health Officer on call	**604-527-4806**		

Health Units Contact List for Vaccine Pick Up

Abbotsford Health Unit 104-34194 Marshall Road Abbotsford, BC V2S 5E4 **Ph:** 604-864-3400 **Fax:** 604-864-3410	**Agassiz Health Unit** Box 104, 7243 Pioneer Avenue Agassiz, BC V0M 1A0 **Ph**: 604-793-7160 **Fax:** 604-793-7161	**Burnaby Health Unit** 300-4946 Canada Way Burnaby, BC V5G 4H7 **Ph**: 604-918-7605 **Fax**: 604-918-7630
Chilliwack Health Unit 45470 Menholm Road Chilliwack, BC V2P 1M2 **Ph**: 604-702-4900 **Fax**: 604-702-4901	**Cloverdale Health Unit** #205-17700 56th Avenue Cloverdale, BC V3S 1C7 **Ph**: 604-575-5100 **Fax:** 604-574-3738	**Guilford Health Unit** 100-10233 - 153rd Street Surrey, BC V3R 0Z7 **Ph**: 604-587-4750 **Fax:** 604-587-4777
Hope Health Unit Box 176, 444 Park Street Hope, BC V0X 1L0 **Ph**: 604-860-7630 **Fax**: 604-869-2332	**Langley Health Unit** 20389 Fraser Hwy. Langley, BC V3A 7N2 **Ph**: 604-539-2900 **Fax**: 604-514-8036	**Maple Ridge Health Unit** 400-22470 Dewdney Trunk Road Maple Ridge, BC V2X 5Z6 **Ph**: 604-476-7000 **Fax:** 604-476-7077
Mission Health Unit 1st Floor, 7298 Hurd Street Mission, BC V2V 3H5 **Ph**: 604-814-5500 **Fax**: 604-814-5517	**New West Health Unit** 218 – 610 6th Street New Westminster, BC V3L 3C2 **Ph**: 604-777-6740 **Fax:** 604-525-0878	**Newton Health Unit** 200-7337 137th Street Surrey, BC V3W 1A4 **Ph**: 604-592-2000 **Fax**: 604-501-4814
North Delta Health Unit 11245-84th Avenue Delta, BC V4C 2L9 **Ph:** 604-507-5400 **Fax**: 604-507-4617	**North Surrey Health Unit** 220-10362 King George Hwy Surrey, BC V3T 2W5 **Ph:** 604-587-7900 **Fax**: 604-582-4811	**South Delta (Satellite)** 4470 Clarence Taylor Crescent Delta, BC V4K 3W3 **Ph**: 604-952-3550 **Fax**: 604-946-6953
TriCities Health Unit 200-205 Newport Drive Port Moody, BC V3H 5C9 **Ph:** 604-949-7200 **Fax:** 604-949-7211	**White Rock Health Unit** Berkeley Pavilion 15476 Vine Avenue White Rock, BC V4B 5M2 **Ph:** 604-542-4000 **Fax:** 604-542-4009	

Tool 8: *Information on Influenza Vaccines, Treatment and Prophylaxis—Educational Resources on the Internet*

- Season-specific information is placed on the Fraser Health intranet website
- General information on Influenza Vaccine (and Pneumococcal Vaccine) is available from HealthLinkBC (link provided below)
- The Canadian Communicable Disease Review publishes the Annual Statement on Influenza that is prepared for Canada by the National Advisory Committee on Immunization (NACI)

Fraser Health website

Home> Health Topics > Long Term Care licensing> Clinical and Safety resources for Long Term Care> respirator outbreaks

http://www.fraserhealth.ca

For information and educational resources for ***Health Care Providers about Immunization Policy, Program and Clinics***, please see:
https://www.fraserhealth.ca/employees/employee-resources/workplace-health-and-wellness/influenza

HealthLink BC Files, Index and Homepage links

https://www.healthlinkbc.ca/services-and-resources/healthlinkbc-files

Influenza Vaccine (Files 12 a-e)

https://www.healthlinkbc.ca/healthfiles/pdf/hfile12a.pdf -Why Seniors should get Seasonal Influenza Vaccine

https://www.healthlinkbc.ca/healthfiles/pdf/hfile12b.pdf - Facts about Seasonal Influenza

https://www.healthlinkbc.ca/healthfiles/pdf/hfile12c.pdf - Influenza Immunization: Myths and Facts

https://www.healthlinkbc.ca/healthfiles/pdf/hfile12d.pdf - Seasonal Influenza Vaccine

https://www.healthlinkbc.ca/healthfiles/pdf/hfile12e.pdf - Live Attenuated Influenza (Flu) Vaccine

Pneumococcal Vaccine

https://www.healthlinkbc.ca/healthfiles/pdf/hfile62b.pdf

NACI Statement on Influenza at Canada Communicable Disease Review (CCDR) at BCCDC site:

http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/

Click on current year CCDR…Select Advisory Committee Statement on Influenza Immunization

e.g., 2014: http://publications.gc.ca/collections/collection_2014/aspc-phac/HP40-114-2014-eng.pdf

Tool 9: *Obtaining and Transporting Influenza and Pneumococcal Vaccine (including 'Cold-Chain' Guide)*

Each season, your local Health Unit will provide a similar number of doses of seasonal influenza vaccine as your facility used the previous year. Please inform your local health unit if your need for influenza vaccine will be significantly different than last season

Vaccine Supply:

- **For Fraser Health Operated Facilities**
  - Facility is located on hospital grounds - influenza vaccine is ordered by the hospital pharmacy, through Public Health, and it is picked up at the pharmacy by the onsite facility
  - Facility is not located on hospital grounds - influenza vaccine is ordered and picked up from your local Health Unit **(Tool 7)**
- **For Contracted and Private Pay Facilities (not Fraser Health Operated)**
  - Order and pick up influenza vaccine from your local Health Unit **(Tool 7)**

Be sure to:

- Check that your vaccine refrigerator and "minimum-maximum" thermometer are in good working order
- Check that you have a large enough suitable, well-insulated cooler with a tightly fitting lid, enough freezer packs and insulating materials
- Read and adhere to Transport and Storage instructions from the BC Centre for Disease Control (link below and "Handle Vaccines with Care" section copied on following page
- Note recommendation for monitoring and recording refrigerator temperature twice daily

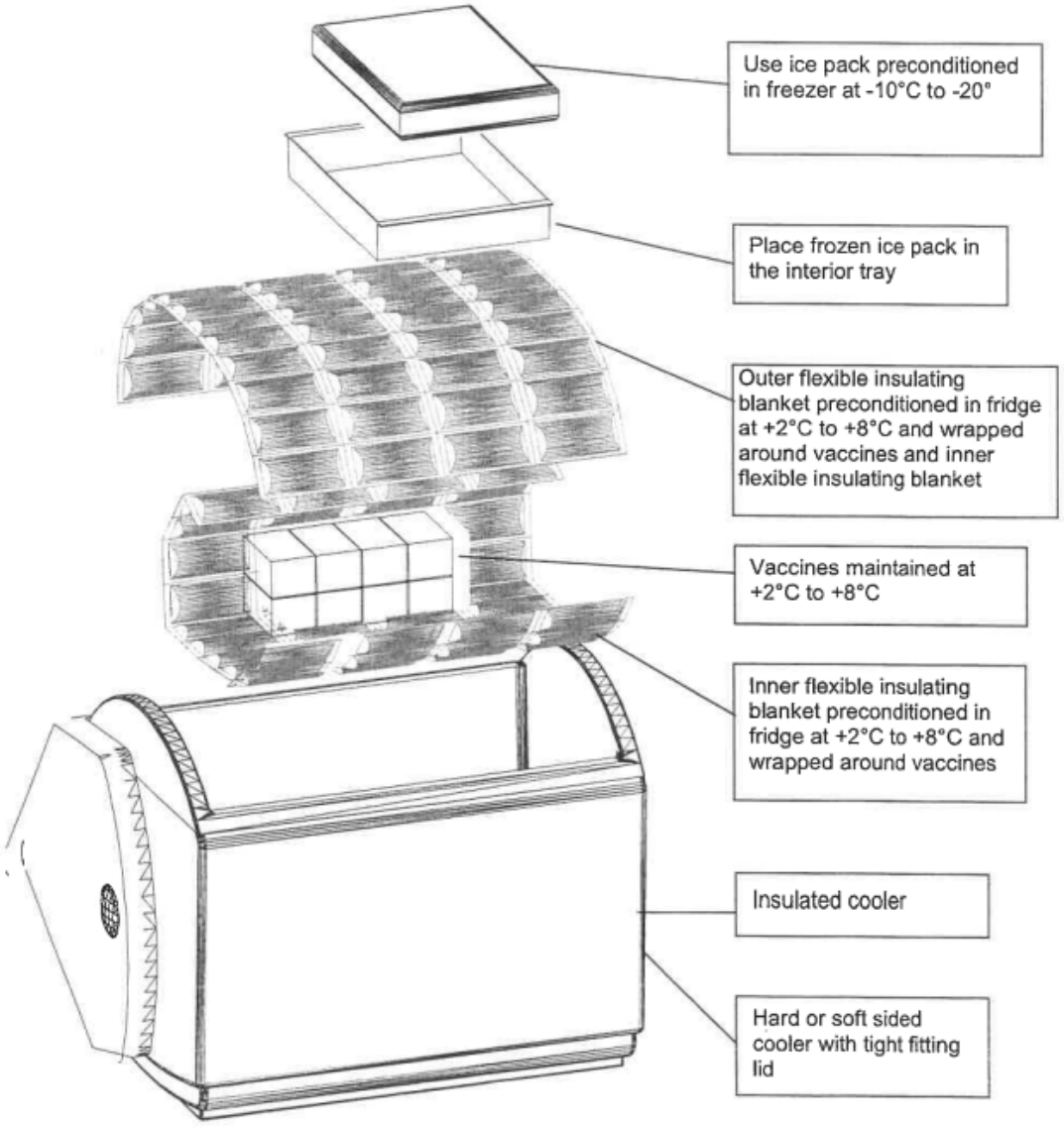
Handle Vaccine with Care: Transport and Storage:

- **Instructions and diagrams for Community Vaccine Providers are available at:**
  http://www.bccdc.ca/resourcegallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Immunization/Cold%20Chain/HandleVaccineswithCare.pdf

See: *Cold Chain Resources* for Community Providers

1. Handle vaccines with care (copy on following page)
2. Packing an insulated cooler (remember to use insulating material between vaccine and ice pack so the vaccine does not freeze)
3. How to store vaccines in the refrigerator
4. What to do if the temperature is outside the 2˚C to 8˚C range
5. Temperature form
6. Cold chain checklist

Packing an Insulated Cooler



Protect the vaccines. Protect your patients.

HANDLE VACCINES WITH CARE (BCCDC 2013)

Protect the vaccines. Protect your patients

Temperature

- ☐ Maintain a refrigerator temperature of between 2.0ºC to 8.0ºC
- ☐ Check temperature twice daily (am & pm) and record on a Temperature Form
- ☐ Store bottles of water (if space allows) on the empty refrigerator shelves and in the door
- ☐ Store ice packs in the freezer
- ☐ Open the refrigerator door only when necessary
- ☐ Do not store food, beverages or lab specimens in the refrigerator
- ☐ Have a refrigerator maintenance check done, at minimum, annually

Transportation

- ☐ Use a hard-sided insulated cooler with a tight–fitting lid along with frozen ice packs and insulating material to transport vaccines at all times
- ☐ Refrigerate vaccines a soon as you return to the office

Storage & Handling

- ☐ Store vaccine on the middle shelves of the fridge, never on the doors or in the crispers
- ☐ Keep vaccines in their original packaging to protect from light
- ☐ Use a separate tray in the refrigerator for opened vaccines and keep in original packaging. Use these opened vaccines before opening new vials/packages
- ☐ Clearly print the opening date on the label of a multi-dose vial. Use a multi-dose vial within 30 days of opening, unless there are specific directions in the product insert for discarding sooner
- ☐ Do not reconstitute vaccines or pre-fill syringes until ready to administer
- ☐ Use the correct diluent to reconstitute lyophilized vaccines

Inventory Management

- ☐ Rotate vaccines according to expiry date (place those with the longest expiry date at the back)
- ☐ Check for expired products every month
- ☐ Never use expired vaccine and always return them to the public health unit/office
- ☐ Keep vaccine stock at a minimum
- ☐ Order only the quantity of vaccine required for one month until the next scheduled pick-up of vaccines

Tool 10: *Ordering Swab Collection Kits from BCCDC Public Health Microbiology and Reference Laboratory*

To Order Swab Collection Kits

1. Use the BCCDC Public Health Laboratory order form found on line at:

   http://www.elabhandbook.info/PHSA/Files/AdditionalFiles%2f2_20200529_064105_AdditionalFiles_2_20200525_063230_AdditionalFiles_2_20191021_025346_SAMPLE%20CONTAINER%20ORDER%20FORM%20-%20DCQM_Q07_4104F%201.00%20Version%206.1%20(May%202020).pdf

   ► Outbreak kits
   ► Influenza-Like Illness Outbreak Kits

2. Complete the Order Form

3. Scan the completed Order Form

4. E-mail the scanned Order Form to kitorders@hssbc.ca or fax to 604-707-2606

If you are having difficulty obtaining your Swab Collection Kits, please inform your Public Health Contact **(Tool 2a)**

Note:

- Each *Influenza-Like Illness Outbreak Kit* has six nasal swabs (each swab with its own viral transport medium)
- One *Influenza-Like Illness Outbreak Kit* is usually enough for an outbreak
- Use the same process to Re-Order another *Influenza-Like Illness Outbreak Kit* IF you have used the swabs from your initial kit
- Check and record expiry date on the Viral Transport Medium vial when you receive your *Influenza-Like Illness Outbreak Kit* If the *Viral Transport Medium* expires, reorder a new Kit from BCCDC PHSA Laboratories

Tool 11: *Signage for Use throughout the Respiratory Virus Season (usually considered as October through May)*

Viral Respiratory Illness Infection Prevention and Control Signage

Please print/photocopy and use the signs **on the following pages,** as required.

Signage

- Attention Visitors
- STOP Clean your Hands (in Chinese, English and Punjabi)

fraserhealth

STOP

ATTENTION

This area is in outbreak

The following infection control and prevention measures are in place

Do not visit if you are sick.

Only Essential Visitors are permitted at this time

Everyone must wear proper personal protective equipment in this area

Clean your hands when entering and exiting any room or unit

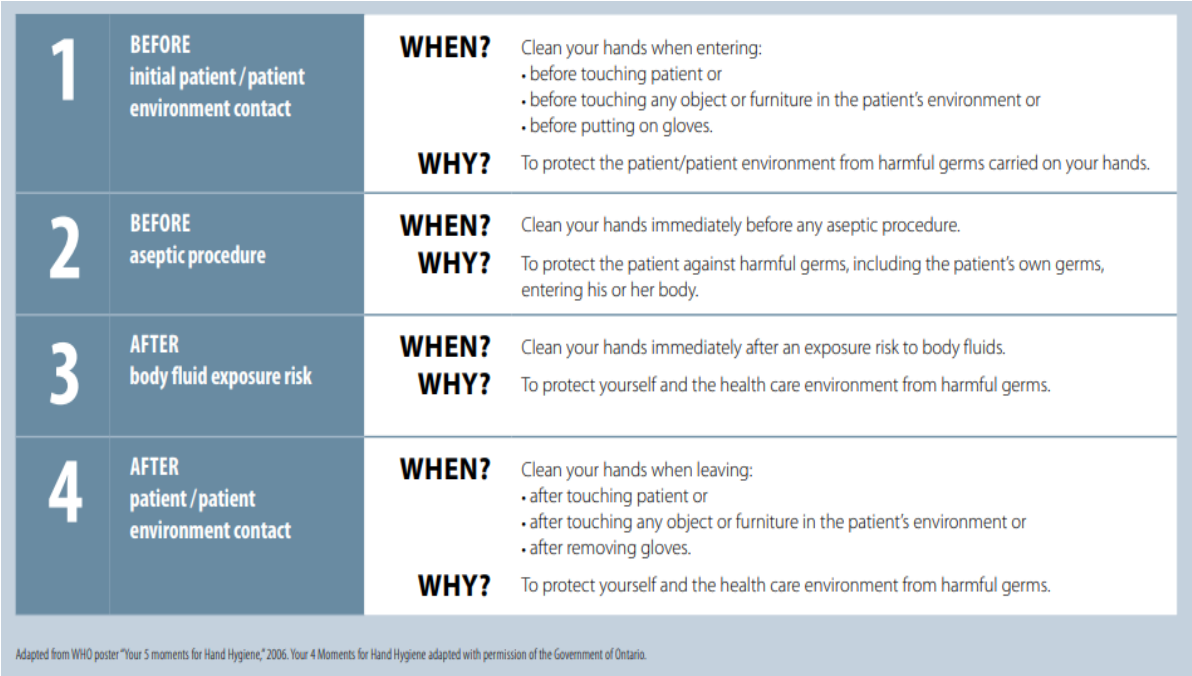
Thank you for your cooperation.

Prepared by LTC/AL/IL Coordination Centre: May 13, 2020
Reviewed by: Infection Prevention and Control

Tool 12: *Hand Hygiene*

REMEMBER: Gloves are NOT a replacement for Hand Hygiene

Four moments of Hand Hygiene (should NOT wear hand jewelry when providing care)



1	BEFORE initial patient / patient environment contact	WHEN?	Clean your hands when entering: • before touching patient or • before touching any object or furniture in the patient's environment or • before putting on gloves.
		WHY?	To protect the patient/patient environment from harmful germs carried on your hands.
2	BEFORE aseptic procedure	WHEN?	Clean your hands immediately before any aseptic procedure.
		WHY?	To protect the patient against harmful germs, including the patient's own germs, entering his or her body.
3	AFTER body fluid exposure risk	WHEN?	Clean your hands immediately after an exposure risk to body fluids.
		WHY?	To protect yourself and the health care environment from harmful germs.
4	AFTER patient / patient environment contact	WHEN?	Clean your hands when leaving: • after touching patient or • after touching any object or furniture in the patient's environment or • after removing gloves.
		WHY?	To protect yourself and the health care environment from harmful germs.

Adapted from WHO poster "Your 5 moments for Hand Hygiene," 2006. Your 4 Moments for Hand Hygiene adapted with permission of the Government of Ontario.

Alcohol Based Hand Rub

- Place a loonie sized amount of the product in the palm of hand
- Spread the product to cover all surfaces of both hands, including nail beds
- Rub hands together for 15-20 seconds or until dry
- If hands are visibly soiled, or when caring for residents with diarrhea and dealing with their environment, use soap and water

Hand Washing with Soap and Water

- Wet hands under a steady flow of warm water and apply soap (*if wearing jewelry, remove first*)
- Use friction to wash all surfaces of both hands, including web spaces, thumbs, wrists, and the back of the hands, rubbing the nail beds against the opposite palm
- Wash for a minimum of 15-20 seconds
- Rinse thoroughly and dry hands gently with clean paper towel
- Use paper towel to turn off tap
- Discard paper towel

NOTE: Ensure your clothing does not touch the sink

Fraser Health Hand Hygiene Information available on the Internet:
https://www.fraserhealth.ca/health-topics-a-to-z/long-term-care-licensing/clinical-and-safety-resources-for-long-term-care/hand-hygiene#.XXgFXnmouLMHand hygiene - Fraser Health Authority

Other moments of Hand Hygiene —it saves time and protects health

- After removal of gloves (including after cleaning and disinfecting procedures)
- Before and after touching the face, nose-blowing, etc.
- After using the washroom
- Before eating
- Between providing care to different residents
- If hands are visibly soiled, use soap and water
- If hands are not visibly soiled, alcohol-based hand rub is an alternative to hand washing

Hand Hygiene Pamphlets

- Included on the following pages;
  - Hand Hygiene Practice (summary pamphlet)
  - STAFF pamphlet
  - PUBLIC pamphlet

Make hand hygiene your responsibility – someone's life may depend on it.

Clean hands save lives

Hand Hygiene is performed using soap and water or alcohol based hand rub (ABHR). **Hand hygiene is indicated:**

- When arriving and leaving the healthcare environment (e.g. before and after your shift, on arrival and when leaving a unit etc.)
- Before and after using gloves for purposes other than aseptic procedures
- Before preparing medications
- Before handling food or drinks
- When hands are visibly soiled
- After exposure to your own body fluids (e.g. coughing, blowing your nose, sneezing, using washroom etc.)
- After smoking
- Before and after group activities (e.g. games, food service etc.)
- Whenever in doubt perform hand hygiene

Areas of the hand most commonly missed when performing hand hygiene

Two ways to clean your hands

Using Alcohol Based Hand Rub (ABHR)

1. Take <u>one loonie sized pump</u> of the product in the palm
2. Spread the product to cover all surfaces of both hands including web spaces, thumbs, wrists and the back of hands and nailbeds
3. Rub hands together for 15-20 seconds or until dry

Hand hygiene with **plain soap and water** is indicated:

- when caring for patients with diarrhea and their environment
- when hands are visibly soiled

Using Plain Soap and Water

- Wet hands under a steady flow of warm water
- Apply an adequate amount of the appropriate soap, i.e. one pump from the dispenser
- Using friction to wash all surfaces of both hands, including web spaces, thumbs, wrist and the back of the hands
- Rub nail beds against the opposite palm
- Wash for a minimum of 15-20 seconds
- Rinse thoroughly and dry hands gently with clean paper towel
- Use paper towel to turn off taps

It's okay to ask us to clean our hands!

We want to do everything we can to get you well.

Healthcare is a busy place. Sometimes we forget to clean our hands in front of you.

It's okay to ask…

- before one of us begins to check you or give you care

Ask us…

"Have you just cleaned your hands?"

"Would you mind cleaning your hands in front of me?"

What we will do

- Offer you hand sanitizer, hand hygiene wipe, or a soapy wet cloth.
- Remind you to clean your hands.
- Help you clean your hands, if you need it.

Remember…

It's okay to ask us for hand sanitizer, a hand hygiene wipe, or a soapy wet cloth.

It's okay to ask us at any time if we have cleaned our hands.

It's okay to ask your family and visitors to clean their hands when they enter and leave your room and when they arrive and leave the building.

Questions?

We are happy to answer any questions you might have about this.

www.fraserhealth.ca

This information does not replace the advice given to you by your healthcare provider.

Catalogue #254374 (December 2016)
To order: patienteduc.fraserhealth.ca

Clean Hands Save Lives

Help Fight the Spread of Infection

Clean Your Hands

fraserhealth

Patients • Residents • Clients • Visitors

Protect your health and the health of others. Cleaning your hands might seem like a simple thing, but it is important. Follow these tips to keep your hands free of germs.

Clean Hands Save Lives

How can you help?

As the patient, **YOU** are the most important member of the healthcare team. You have a role to play in keeping yourself healthy.

Did you know?

Cleaning your hands is the most important way to reduce the spread of germs that cause colds, flu, and even serious or life-threatening diseases.

It's okay to ask!

'Clean hands' is everyone's responsibility. Ask your family and all your visitors to clean their hands often.

Infections can spread by simple contact with any number of surfaces such as door handles, tables, chairs, or elevator buttons.

So it's important we all work together to keep everyone safe by cleaning our hands properly and often.

How to clean your hands

When to use hand sanitizer:
(Alcohol-Based Hand Rub)

- before handling food or drinks
- before leaving your room
- after sneezing, coughing, or blowing your nose

How to use:

- Put a Loonie-sized amount in your hands.
- Rub all areas of your hands.
- Rub for 15 to 20 seconds until your hands are dry.

How to use hand hygiene wipes:

Take a hand hygiene wipe and rub all areas of your hands for 15 to 20 seconds.

Throw the wipe in the garbage after use.

When to use soap and water:

- when hands are dirty
- after visiting a bathroom

How to use:

- Wet your hands with warm water.
- Rub all areas of your hands and fingers with soap for 15 to 20 seconds.
- Rinse well.
- Dry your hands with paper towel.
- Use paper towels to turn off the taps.

Tool 13: *Routine Practices (Standard Precautions)*

The term “Routine Practices” is commonly used in Canada.

From the Public Health Agency of Canada (PHAC)
In this document, the term Routine Practices will be used;, however, some settings may use the term “Standard Precautions” (formerly known as universal precautions). Mitigating or preventing the transmission of respiratory infections is effectively achieved through strict compliance with Routine Practices and the use of Additional Precautions as needed.

Routine Practices are infection control practices **used by all employees** and medical staff **at all times** in **all health care settings** to prevent exposure to all body substances from all persons.

Included in Routine Practices are:

- Hand hygiene;
- Continuous use of “Respiratory Etiquette;” and
- Personal protective equipment:
  “According to Routine Practices in the Fraser Health Long Term Care Infection Control Manual staff members should assess their likelihood of being exposed to any body fluids by direct or indirect contact, by splashes or by fine mist sprays. They should then choose and don the appropriate personal protective equipment (i.e., gloves, surgical mask and eye protection) prior to entering the space where the exposure may occur”

1. Hand Hygiene

Hand hygiene is everybody’s responsibility: Health Care Providers (HCPs), clients, visitors and volunteers. Hand hygiene is the most effective way to prevent the transmission of microorganisms

Compliance with hand hygiene recommendations requires continuous reinforcement

- Either soap and warm water or alcohol-based hand rub (ABHR) is an accepted method of hand hygiene
  - Soap and water is required if hands are visibly soiled
- Residents who are able to participate in self-care should be taught, encouraged and reminded of the importance of hand hygiene before eating or preparing food, after using the toilet or other personal hygiene activities, before leaving their homes for common/public areas and when returning home from public places

2. Point-of-Care Risk Assessment

A Point-of-Care Risk Assessment is the evaluation of the interaction between the HCP, the resident and the environment to determine the potential for exposure to pathogens. Prior to any resident interaction, all HCPs have a responsibility to always assess the infectious risk posed to themselves and to others (e.g., other residents/visitors/HCPs).

Risk assessments for any interaction include:

- The resident’s symptoms and whether he or she may be consistent with an infectious process
- The type of interaction that will occur (e.g., direct care vs. bringing something into the room for them)
- The potential for contamination of themselves or any equipment used
- Identification of barriers (e.g., PPE) required to prevent transmission
- Whether all secretion/excretions are contained (e.g., continence, wounds well covered)
- Whether the person is able to follow instructions (e.g., cognitive abilities, mental health condition)

- The setting in which the interaction will take place (e.g., single room vs. multi-bed room vs. outpatient or common area)

In reality, HCPs do Risk Assessments many times a day for their safety and the safety of others in the healthcare environment. During a viral Respiratory Illness Outbreak, HCPs should be especially vigilant in identifying risk of exposure to Respiratory Viruses, especially when assisting those who are ill

3. Risk-Reduction Strategies

Risk-reduction strategies include engineering measures, client screening, using personal protective equipment (PPE), cleaning of environment, equipment, and laundry, using “single use only” equipment or ensuring proper disinfection and sterilization of reusable equipment**,** appropriate waste management and safe sharps handling**,** client placement and using preventative workplace practices such as HCP immunization policies

4. Education of Health Care Providers, Clients and Families/Visitors/Volunteers

All health care providers should receive general education on facility policies, which includes information regarding the principles of infection prevention and control. Review of hand hygiene, routine practices and additional precautions and chain of infection should be included and refreshed at intervals. Specific information should be emphasized as it relates to the specific work environment

Education for residents and family members should include specific information about their general condition (usually provided by the attending physician), and specific information concerning any infection. If the resident has an infection, this information should include practices necessary to reduce the risk of spread. The HCP should provide education for the resident and family as appropriate for the presenting condition

Tool 15: *Droplet Precautions*

DROPLET PRECAUTIONS

Families and Visitors:

STOP

Bed #

Please report to staff before entering

Clean hands before entering and when leaving room

Clean hands with
A) hand foam/gel or B) soap and water

Wear **mask and eye protection** when within **2 metres** of patient

If helping to care for the patient, put on **gown and gloves** before entering room, and remove them before leaving room.

Staff - Required:

- **Point of Care Risk Assessment**
- **Gown and gloves**
- Procedure mask with eye protection when within 2 metres of patient
- **Keep 2 metres between patients**

KEEP SIGN POSTED UNTIL ROOM CLEANED
HOUSEKEEPER will remove sign after Isolation Discharge cleaning

fraserhealth
Better health. Best in health care.

FH Infection Prevention & Control STORES #323289 August 2016

PICNet
PROVINCIAL INFECTION CONTROL NETWORK OF BRITISH COLUMBIA
A program of the Provincial Health Services Authority

Tool 16: *Removal of Personal Protective Equipment (PPE)*

How to Remove PPE When Leaving an Isolation Room

In the room (Remove PPE at least 2 meters away from the resident)

- Remove gloves, hand hygiene
- Undo neck ties of gown, Undo waist ties of gown
- Remove gown from sleeves without touching outside of gown, roll gown and discard in laundry or garbage
- Perform hand hygiene
- Remove and clean reusable eye protection. See cleaning and disinfection instructions http://fhpulse/quality_and_patient_safety/infection_control/novel_coronavirus/FH%20COVID-19%20Community%20LTC_AL_MHSU%20Facial%20PPE%20Cleaning%20[Instructions].pdf
- Perform hand hygiene

If wearing a procedure mask - in room	**If wearing an N95 respirator - in hallway or anteroom**
• Remove and discard mask • Perform hand hygiene • Put on a new mask and clean eye protection after leaving the room	• Remove and discard mask • Perform hand hygiene • Put on a new mask and clean eye protection after leaving the room

Donning and Doffing Personal Protective Equipment (PPE)

Donning PPE

1.	Perform hand hygiene	
2.	Put on gown • Tie neck and waist ties securely	
3.	Put on a procedure mask/N95 respirator • Place mask over nose and under chin • Secure ties, loops and straps • Mould metal piece to your nose bridge • Perform seal-check for respirator	
4.	Put on protective eyewear/face shield • Put on eye protection/face shield and adjust to fit • Face shield should be fit over brows	
5.	Put on gloves • Put on gloves, taking care not to tear or puncture • Fit glove over cuff of gown	

Donning and Doffing Personal Protective Equipment (PPE)

Doffing PPE

1.	Remove gloves • Grab outside edge near the wrist and peel away, rolling the glove inside out • Reach under the second glove and peel away • Throw into garbage immediately	
2.	Perform hand hygiene	
3.	Remove gown • Untie the neck ties • Untie the waist ties • Pull the gown forward using the outer contaminated side at shoulder area • Turn inward and roll off the arms into a bundle • Place cloth gown in linen hamper. If disposable gown is used, place it in general waste	
4.	Perform hand hygiene	
5.	Remove eye protection/face shield and a procedure mask/ N95 respirator • Handle only the ties/ear loops/straps • Untie bottom tie then top tie or grasp straps or ear loops. • Pull forward off the head, bending forward to allow mask/respirator to fall away from the face. • Discard immediately into garbage.	
6.	Perform hand hygiene	

LTC / AL / MHSU Facilities

Eye/Facial Protection Cleaning and Disinfection Instructions

The following cleaning and disinfection of eye/facial protection instructions are for **LTC, AL and MHSU Facilities**

Cleaning and disinfection: Health Canada COVID-19 Approved Disinfectant wipes (e.g. Accel Intervention™ wipes, Caviwipes™, or Sani-cloth wipes™)

PPE required: Exam gloves

More information on hydrogen peroxide based disinfectant - see the Health Hazard Information Sheet

A. Reusable Eye Protection

Goggles

Safety glasses

Face shields without foam

If reusable eye protection is visibly contaminated/soiled:

- Don a new pair of exam gloves
- Clean with soap and water to remove visible soil
- Do not use handwashing sinks to clean visibly soiled reusable eye protection
- Proceed to step 2 below
- If eye protection is extremely soiled, discard

Cleaning and Disinfecting Reusable Eye Protection

1. Clean hands and put on a pair of exam gloves
2. Using a new disinfectant, clean the item thoroughly from the inside to the outside
3. Use another new disinfectant wipe, disinfect the interior followed by the exterior of the facial protection
4. Ensure items remain wet with disinfectant for at least 1 minute (or applicable disinfectant wipe contact time).
5. Repeat above steps if visible soil remains
6. Allow to dry (air dry or use absorbent towel)
7. If necessary, use an absorbent towel to remove any residue
8. Remove gloves and perform hand hygiene
9. Store equipment in a clean container or area

B. Face Shield with Visor & Foam Forehead

To be used by a single healthcare provider over the same shift

If the foam forehead piece is visibly soiled or appears damaged and/or compromised: DO NOT REUSE

If the **visor** is visibly contaminated or soiled, please use the directions on the left **"If reusable eye protection is visibly contaminated/soiled"**

Cleaning and Disinfecting Face Shields with Visor & Foam Forehead

1. Clean hands and put on a pair of exam gloves
2. Using a new disinfectant, clean the item thoroughly from the inside to the outside
3. Use another new disinfectant wipe, disinfect the interior, followed by the foam band, strap, and then the exterior of the visor.
4. Ensure items remain wet with disinfectant for at least 1 minute (or applicable disinfectant wipe contact time).
5. Repeat above steps if visible soil remains
6. Allow to dry (air dry or use absorbent towel)
7. If necessary, use an absorbent towel to remove any residue
8. Remove gloves and perform hand hygiene
9. Store equipment in a clean container or area
10. Discard at the end of shift

fraserhealth
Better health. Best in health care.

Version: 2.0 | Initial Release: April 6, 2020 | Updated May 7, 2020

Tool 17: *Staff Influenza Immunization and Anti-Influenza Prophylaxis List*

The Provincial Influenza Control Policy applies in Fraser Health and can be found at: https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/current-health-topics/influenza-information

This *Influenza Control Policy* applies in the BC Health Authorities and provides requirements and guidance regarding Influenza Immunization and other Influenza-related measures for Long Term Care Facilities for the purpose of reducing the burden of influenza infection and resultant complications in residents, staff and visitors in Long Term Care. The Provincial Health Officer announces each year the beginning of the Influenza Season and date from which the *Influenza Control Policy* takes effect. Consult the Provincial Influenza Control Policy annually for updates. Physicians providing care in Long Term Care facilities are included in the Provincial Influenza Control Policy.

British Columbia also has a provincial Facility Influenza Immunization Policy that requires all health care settings to have a written staff influenza immunization policy in place. In addition, facilities should have a policy for immunization against other vaccine-preventable diseases. This Policy also includes information about the use of anti-influenza medications for prophylaxis (prevention) in Influenza Outbreak settings **(Tool 34a)** and situations in which exclusion from work in outbreak settings may occur if not immunized and not on prophylaxis.

The following is taken from the BC Facility Influenza Immunization Policy with some supporting information from the Provincial Infection Control Network of BC (PICNet BC).

Staff
The definition of staff should include casual and regular staff as well as contracted staff, volunteers and students who will be in the facility during the respiratory virus season.

Staff Immunizers
Ensure staff members who are to vaccinate other staff have completed the necessary training modules acceptable to their individual licensing body (BCCNP). Review current ***Peer Nurse Immunizer Program*** status and resource information **(Tool 4)** and Provincial Influenza Control Policy***.***

Immunization Tracking
All health care settings should maintain annual records of staff member influenza immunization. This should include name, date of birth, position (job), where in the facility they work and date of influenza immunization.

Annual Immunization
At the time of hiring or placement, information about the policy for annual influenza immunization should be provided to all persons carrying out activities in the facility. The policy for annual immunization against influenza should be reviewed with all staff members annually.

Report of Staff Immunization
Information on staff immunization should be maintained in a confidential manner and include:

- Staff immunization status (including those who are immunized off-site)
- Staff members who may be excluded from work in the event of an influenza outbreak
- Staff members who are eligible for anti-influenza medication for prophylaxis in the event of an influenza outbreak

Staff who report a medical contraindication to influenza vaccine should be provided with information on anti-influenza prophylaxis and early treatment (next page).

Prophylaxis

Recommendations regarding the use of anti-influenza medication for well staff will be in accordance with the principles of the determined on a situation-by-situation basis. Your Outbreak Management Contact will advise on use:

- Fraser Health Regional Influenza Outbreak Policy
- Staff are recommended to obtain anti-influenza prophylaxis by taking a letter **(Tool 36)** to a physician in order to receive and fill a prescription for Influenza Outbreaks at the beginning of influenza season
- The type of anti-influenza prophylaxis will be determined by the resistance pattern of the virus and as directed by your Outbreak Management Contact/ Medical Health Officer **(Tool 2a)**

Facility staff who are pregnant or have any of the conditions that have been identified as putting them at increased risk of severe illness and complications from influenza should consult with their physician about arrangements to be prepared to quickly start on appropriate anti-influenza medication at onset of symptoms compatible with influenza (as soon as possible within the first 48 hours of illness).

Symptom-free, unvaccinated staff working in influenza outbreak settings are recommended to receive the appropriate anti-influenza medication until the outbreak is officially declared over. Maximum duration on anti-influenza prophylaxis when using oseltamivir should not exceed 8 weeks. Influenza outbreaks in care facilities are generally declared over within 10 to 14 days of implementation of control measures. Staff members who will be using anti-influenza medication will need to obtain a prescription from their physician.

Current Listing of Staff in the Facility

A current list of staff members working in the facility should be maintained at all times, as it may be needed during an outbreak.

INFLUENZA VACCINE

Staff Influenza Immunization/Anti-Influenza Prophylaxis List (for facility use)

PERSON IN CHARGE OF PREPARING LIST OF STAFF INFLUENZA VACCINATION/ANTI-INFLUENZA PROPHYLAXIS:									TEL:	
			Complete only if staff is vaccinated at facility							
NAME OF WORKER/ VOLUNTEER/ STUDENT	EMPLOYER (if applicable)	FULL-TIME, PART-TIME, CASUAL, STUDENT, VOLUNTEER	INFLUENZA VACCINE NAME	LOT NO.	WHICH ARM?	DATE OF VACCINATION			REFUSED VACCINE?	MEDICAL CONTRAINDICATON TO INFLUENZA VACCINE
					R / L	DD	MM	YY	YES/NO	YES/NO

Tool 18: *Staff Influenza Immunization Record*

Staff Immunization Record For Influenza Vaccine (with Fraser Health logo)

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

fraserhealth

STAFF IMMUNIZATION RECORD
FOR SEASONAL INFLUENZA

NAME: ______________________________

VACCINE___________ FACILITY:__________

DATE: _____________ GIVEN BY: ______

Staff Immunization Record for Influenza Vaccine (without Fraser Health logo)

STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______	**STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA** NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______
STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______	**STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA** NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______
STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______	**STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA** NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______
STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______	**STAFF IMMUNIZATION RECORD FOR SEASONAL INFLUENZA** NAME: ____________________ VACCINE__________ FACILITY:__________ DATE: __________ GIVEN BY: ______

Tool 19: *Resident Influenza Immunization and Anti-Influenza Prophylaxis List*

Report of Patient/Resident Immunization

Information on patient/resident immunization should be kept in a central location with the following:

- Resident immunization status
- Resident orders for antiviral treatment or prophylaxis in the event of an influenza outbreak

You will be asked for this information if there is an outbreak in your facility.

Preparation for Influenza Vaccination of All Residents

- Provide information, answer questions
- Put together a list of names
- Identify anyone with a medical contraindication to influenza vaccine
- Check to see that other immunizations (e.g., pneumococcal vaccine) are up to date
- Be sure the physician orders are completed

Encouragement for visitors and others to be vaccinated against influenza before the start of the influenza season

- Provide information; answer questions

Review of anti-influenza medication with your pharmacist in order to:

- Provide information, answer questions
- Identify anyone with a medical contraindication to oseltamivir
- Ensure that a recent creatinine level has been done on all residents (within 12 months for people expected to have stable renal function) and the results are with the pharmacist.

  NOTE: Serum creatinine can also be done when an outbreak is recognized rather than in advance (for those who do not have a recent test result on file).
  However, the **Fraser Health Medication Quality and Safety Committee** considered this issue in 2011 and supported a serum creatinine at least once per 12 months as a useful quality and safety precaution in terms of **overall medication use** by individuals living in Long Term Care
- Ensure that the estimated creatinine clearance is calculated for each resident who has had a serum creatinine done in the previous 12 months
- Ensure that the dose of oseltamivir is determined for each resident
- Get pre-printed orders for anti-influenza prophylaxis to be used if there is an outbreak of influenza and your Outbreak Management Contact recommends treatment and/or prophylaxis
- Check that your facility's pharmacy can supply enough oseltamivir for use in an outbreak

Work with your pharmacist so your facility will be ready to give anti-Influenza medication on a few hours' notice to all residents for whom it is indicated to prevent influenza

- Oseltamivir treatment as soon as possible, preferably within 4 to 6 hours of recommendation;
- Oseltamivir prophylaxis as soon as possible, ideally within 24 hours of recommendation

*****Note**: A RION is not required for pharmacy to dispense antivirals. A letter is available in this package outlining that pharmacies should not require a RION to dispense antivirals in the event of an outbreak.

RESIDENT INFLUENZA IMMUNIZATION/ANTI-INFLUENZA LIST

PERSON IN CHARGE OF PREPARING LIST OF RESIDENT INFLUENZA VACCINATION/ANTI-INFLUENZA PROPHYLAXIS:	TEL:	DATE UPDATED:

RESIDENT NAME	NEIGHBOUR-HOOD, FLOOR OR OTHER SPECIFIED AREA	INFLUENZA VACCINE NAME	WHICH ARM?	DATE OF VACCINATION			INITIALS OF VACCINATOR	YEAR OF PNEUMO VACCINE	ESTIMATED CREATININE CLEARANCE	DATE SERUM CREATININE LEVEL DONE (WITHIN 1 YEAR IF CLINICALLY STABLE)			RENAL DOSING FOR ANTIVIRALS?		UP-TO-DATE ORDER FOR PROPHYLACTIC ANTI-INFLUENZA MEDICATIONS ON CHART?	
			R/L	DD	MM	YY			mL/min	DD	MM	YY	YES	NO	YES	NO

Tool 20: *Facility Influenza-Readiness Report*

The Readiness Report is a provincial requirement and needs to be reported (Faxed) to your Communicable Disease Nursing Team **by December 31st each year**. It provides information that is important in terms of assessment of readiness and is also important with respect to quality care.

Public Health is required to collate the information from the Readiness Reports and submit it to the BC Centre for Disease Control for:

- Assessment of province-wide preparedness; and
- A provincial summary report

Consequently, Public Health and/or Long Term Care is expected to follow up with you if your Readiness Report is not received by the deadline.

The process of completing the Readiness Report is also a useful check for you to ensure that you are ready should you experience an Influenza Outbreak in your facility.

FAX to CD Nursing Team-Fax 604 507 5439 by Dec 31st

FACILITY INFLUENZA-READINESS REPORT

(Please fill in all that applies to your facility)

FACILITY NAME:	DATE COMPLETED:	TEL:	FAX:	**NOTES:**
DIRECTOR OF CARE/MANAGER:		TEL:		
DIRECTOR OF CARE/MANAGER ALTERNATE:		TEL:		
MEDICAL DIRECTOR:		TEL:		
MEDICAL DIRECTOR ALTERNATE:		TEL:		

FH VIRAL RESPIRATORY OUTBREAK PROTOCOL AND TOOLKIT AVAILABLE: ☐ YES ☐ NO	**NASAL SWAB KIT AVAILABLE?:** ☐ YES ☐ NO

Staff and Others *(Do not count people who will not be at the facility at all between November and the end of May)*	**NO. OF PEOPLE**	**NO. VACCINATED AGAINST INFLUENZA SEASONAL**	**NO. WITH MEDICAL CONTRAINDICATION TO INFLUENZA VACCINE DOCUMENTED**	**NO. WITH MEDICAL CONTRAINDICATION TO OSELTAMIVIR DOCUMENTED**
REGULAR STAFF				
CASUAL STAFF				
VOLUNTEERS				
CONTRACT WORKERS (not Facility or FH employees)				

DOES YOUR FACILITY HAVE PRE-PRINTED ORDERS TO:	
DELIVER INFLUENZA VACCINE TO RESIDENTS EACH YEAR?	☐ YES ☐ NO
START OUTBREAK MEASURES, INCLUDING ANTI-INFLUENZA MEDICATIONS?	☐ YES ☐ NO
OFFER PNEUMOCOCCAL VACCINE TO ALL ELIGIBLE RESIDENTS UPON ADMISSION?	☐ YES ☐ NO
*** DOES YOUR FACILITY HAVE AN 'OUTBREAK PREVENTION AND MANAGEMENT TEAM'?**	☐ YES ☐ NO

Pneumococcal vaccine is given once, with one booster at five years only for those with asplenia, sickle cell disease, immunosuppressive disease or treatment, or chronic disease of the kidneys or liver. If no prior History of pneumococcal vaccine being given, then vaccinate.

Neighbourhoods, Floors or other Specified Areas in Facility *(Note: Completely separate = no sharing of people or things with other areas)*

NAME OF NEIGHBOURHOOD OR OTHER SPECIFIED AREA	**Floor**	**CAN THIS AREA BE MADE COMPLETELY SEPARATE? Yes**	**No**	**NO. OF RESIDENTS IN THIS AREA**	**NO. OF RESIDENTS IN THIS AREA VACCINATED AGAINST INFLUENZA THIS SEASON**	**NO. OF RESIDENTS IN THIS AREA VACCINATED AGAINST PNEUMOCOCCUS (*SEE NOTE ABOVE)**	**NO. OF RESIDENTS IN THIS AREA WITH UP-TO-DATE ESTIMATED CREATININE CLEARANCE**	**NO. OF RESIDENTS IN THIS AREA WITH OSELTAMIVIR DOSE CALCULATED**	**NO. RESIDENTS IN THIS AREA WITH PRE-PRINTED ORDERS FOR PROPHYLACTIC ANTI-INFLUENZA MEDICATIONS**
TOTAL FOR ALL NEIGHBOURHOODS/AREAS:									

Tool 21: *Suspect Viral Respiratory Outbreak Definition and Initial Response*

Suspect Viral Respiratory Outbreak Definition

One or more person with RI symptoms in a neighbourhood or floor (staff or residents).

Initial Response

Residents:

Check residents for new or worse cough:

- Using the Illness Reporting forms **(Tools 27)**, list those who are sick, the day each first became sick, and the date each was vaccinated against influenza
- Use a different sheet for each neighbourhood, floor or other specified area
- If one or more people (staff AND/OR residents) have RI symptoms in a neighbourhood, floor or other specified area , initiate droplet/contact precautions **(Tools 15,** 16
- Take specimens when a resident and/or staff becomes ill and **notify your Public Health Outbreak Management Contact as soon as possible (Tool 2)**

Staff:

Report how many staff members have, or recently had, a new or worse cough:

- Using the Illness Reporting forms **(Tool 28)**, list each person, the day that she/he first developed symptoms and when she/he was vaccinated
- Staff who are coughing (new or worse cough) should:
    - Report to supervisor;
    - Go home and
- Go for COVID-19 testing at the nearest testing center

Tool 22: *BCCDC Nasal Swab Laboratory Testing Form (Sample)*

Fraser Health Area Nasal Swab Respiratory Illness Outbreak Lab Form

Courier Company: _____
Waybill Number: _____

PHSA Laboratories
BCCDC Public Health Laboratory

Influenza-Like Illness (ILI) Outbreak Laboratory Form

Instructions:
1. **Before shipping**, send this **completed form** to the BCCDC by Fax **(604) 707-2605**
2. **Enclose this completed form** AND completed requisition(s) with the specimen(s) and ship to BCCDC. A **maximum of 6 specimens** are accepted **per outbreak** (avoid submissions over multiple days).
3. Inform your MHO of the outbreak.
4. Test results will be telephoned to the Outbreak Contact, designated below.

Submit specimens to:

BCCDC: Public Health Laboratory
Virology Laboratory
655 WEST 12th AVENUE
VANCOUVER, BC V5Z 4R4
Tel: 604-707-2623
Fax: 604-707-2605

Location of Outbreak

Facility Name and Address:
(Please do not use abbreviations)

_____
_____
_____
_____

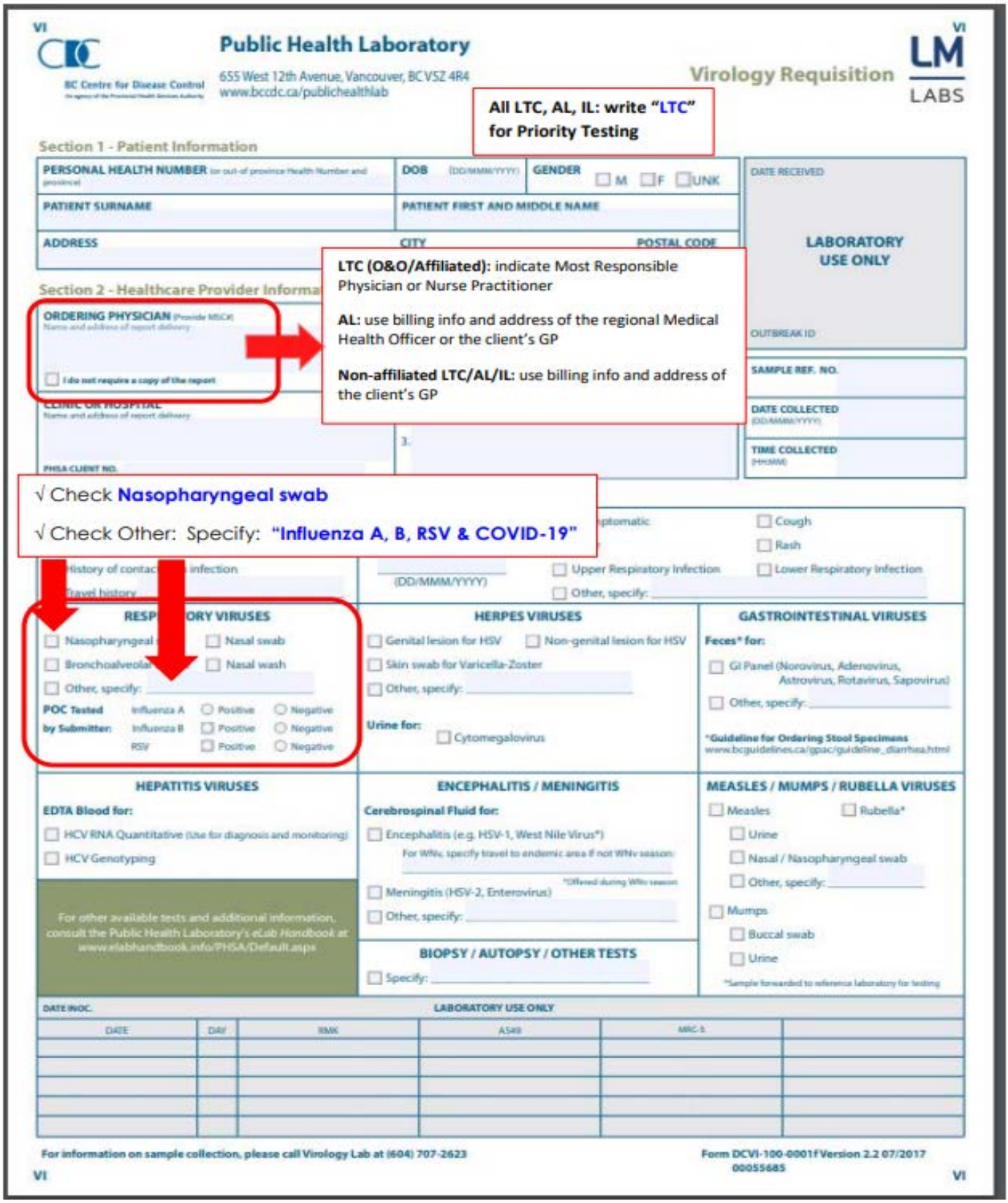
Contact number for results reporting

Telephone (Regular): _____

Telephone (After hours): _____

NOTE: It is important to provide a number that is either answered (regular and after hours) or has voicemail capability as results reporting may take place between 4;30 pm to 6:00 pm. The laboratory will not keep calling if there is no answer. Only results for influenza A/B/RSV will be provided.

Patient Name	PHN or DOB	Swab Sit	BCCDC CID Number	Flu A/B/RSV NAT*		Notes


Public Health Laboratory
BC Centre for Disease Control
655 West 12th Avenue, Vancouver, BC V5Z 4R4
www.bccdc.ca/publichealthlab
Virology Requisition
LM LABS
All LTC, AL, IL: write "LTC" for Priority Testing
Section 1 - Patient Information
PERSONAL HEALTH NUMBER
DOB (DD/MMM/YYYY)
GENDER M F UNK
PATIENT SURNAME
PATIENT FIRST AND MIDDLE NAME
ADDRESS
CITY
POSTAL CODE
DATE RECEIVED
LABORATORY USE ONLY
OUTBREAK ID
LTC (O&O/Affiliated): indicate Most Responsible Physician or Nurse Practitioner
AL: use billing info and address of the regional Medical Health Officer or the client's GP
Non-affiliated LTC/AL/IL: use billing info and address of the client's GP
Section 2 - Healthcare Provider Informa
ORDERING PHYSICIAN (Provide MSP#)
Name and address of report delivery
I do not require a copy of the report
CLINIC OR HOSPITAL
Name and address of report delivery
PHSA CLIENT NO.
SAMPLE REF. NO.
DATE COLLECTED (DD/MMM/YYYY)
TIME COLLECTED (HHMM)
√ Check Nasopharyngeal swab
√ Check Other: Specify: "Influenza A, B, RSV & COVID-19"
Cough
Rash
History of contact / infection
Travel history
(DD/MMM/YYYY)
Upper Respiratory Infection
Lower Respiratory Infection
Other, specify:
RESPIRATORY VIRUSES
Nasopharyngeal
Nasal swab
Bronchoalveolar
Nasal wash
Other, specify:
POC Tested by Submitter:
Influenza A Positive Negative
Influenza B Positive Negative
RSV Positive Negative
HERPES VIRUSES
Genital lesion for HSV
Non-genital lesion for HSV
Skin swab for Varicella-Zoster
Other, specify:
Urine for:
Cytomegalovirus
GASTROINTESTINAL VIRUSES
Feces* for:
GI Panel (Norovirus, Adenovirus, Astrovirus, Rotavirus, Sapovirus)
Other, specify:
*Guideline for Ordering Stool Specimens
www.bcguidelines.ca/gpac/guideline_diarrhea.html
HEPATITIS VIRUSES
EDTA Blood for:
HCV RNA Quantitative (Use for diagnosis and monitoring)
HCV Genotyping
For other available tests and additional information, consult the Public Health Laboratory's eLab Handbook at www.elabhandbook.info/PHSA/Default.aspx
ENCEPHALITIS / MENINGITIS
Cerebrospinal Fluid for:
Encephalitis (e.g. HSV-1, West Nile Virus*)
For WNv, specify travel to endemic area if not WNv season:
*Offered during WNv season
Meningitis (HSV-2, Enterovirus)
Other, specify:
BIOPSY / AUTOPSY / OTHER TESTS
Specify:
MEASLES / MUMPS / RUBELLA VIRUSES
Measles
Rubella*
Urine
Nasal / Nasopharyngeal swab
Other, specify:
Mumps
Buccal swab
Urine
*Sample forwarded to reference laboratory for testing
DATE INOC.
LABORATORY USE ONLY
DATE
DAY
RMK
A549
MRC-5
For information on sample collection, please call Virology Lab at (604) 707-2623
Form DCVI-100-0001f Version 2.2 07/2017
00055685

Tool 23a: *Swab Collection & PRE-PAID Shipping Information*

For residents

Specimens will be processed for influenza, COVID-19 and respiratory syncytial virus by nucleic acid testing first. A subset of specimens will be tested for other respiratory viruses by the Respiratory Virus Panel Luminex assay if initial influenza A/B and respiratory syncytial virus are negative. Nasal and nasopharyngeal swabs are preferred but nasopharyngeal washes, suctions and other lower respiratory tract specimens are acceptable as well.

Collection Kits:
Nasal/Nasopharyngeal swabs must be collected using a designated **Specimen Collection Kit**. These kits (swabs containing transport medium, biohazard bags and the Influenza-like Illness (ILI) Outbreak Laboratory Form) are provided by the BCCDC.
To order collection kits:
Use a BCCDC order form or a written request on your letterhead showing your **shipping address** and the **number of kits required**, fax to **(604) 707-2606 or email to kitorders@hssbc.ca**.

Indications for Testing:
Collect specimens from all patients and staff presenting with viral respiratory.

Specimen collection:
a) For personal protection, it is recommended that gloves, facemask and eye protection be worn while collection specimen.
b) Patients with copious discharge should be requested to gently clean their nose by washing or with tissue.
c) Incline the patient's head as required and insert the cotton swab along the base of the nasal cavity to a depth of 2-4 cm into the nostril. Swab around the inside of the nostril and along the nasal septum by rotating the swab between fingers
d) Place the swab into the accompanying vial of transport media and tighten the lid securely.
e) **Label** the container with the patient's **full name** and **date of birth**.
It is essential that the nasal passage be swabbed sufficiently firmly to collect infected cells rich in virus. Nasopharyngeal swabs inserted along the base of the nasal cavity (6cm or deeper) are excellent but may be more traumatic to the patient. Mucous discharge and throat swabs contain less virus and are discouraged.

Completing accompanying documentation:
One BCCDC Virology **requisition** must be completed for **each specimen**.
Only One Influenza-like Illness (ILI) Outbreak Laboratory Form is required for **each outbreak** (max. Six specimens on 1st sampling). **Please included PHN and Date of birth on requisition**

In completing the requisition:
Under **Test(s) Requested,** select appropriate sample type and if any POC testing performed
Under **ORDERING PHYSICIAN**, enter the full name and address of the physician/facility to whom the final report will be sent.
Under **ADDITIONAL COPIES TO**, if desired, enter the name, address and MSC number of another Health Unit or physician.

Submission of a completed Influenza-like Illness (ILI) Outbreak Laboratory Form with the specimens ensures that processing and reporting of findings reported is given highest priority.

Transportation of specimens:
Assemble outbreak specimens and follow Packaging of Lab specimens and transportation of specimens. Send by routine same day or overnight delivery or if not available, by courier.
Outside the Lower Mainland: DHL, 1-800-CALL-DHL (1-800-225-5345); bill to Acct. M45579.
Lower Mainland: Tforce, 1 877 345 8801; bill to Acct.23270.

Reporting:
Specimens received before 12:00h, Mon. to Fri.: results for influenza will be available by 20:00h the same day.
Specimens received after 12:00h Mon. to Thurs. will be tested the following day. Specimens received after 12:00h Fri. or on Saturday will be tested on Sunday. Specimens received on a statutory holiday will be tested on the following work day as outlined above.
For inquiries: Please call **Results Line at (877)-747-2522 from 8:30am to 4:30pm Monday to Friday**.

Tool 23b Transportation of Dangerous Goods Information for Fraser Health and BCCDC Laboratories

Please see links below for the new procedure of packaging and transporting of lab specimens to Fraser Health Laboratories or to BC Centre for Disease Control (BCCDC).

- Packaging of - Lab Specimens for Fraser Health and BCCDC Laboratories Poster
- Procedure for - Packaging of Lab Specimens for Fraser Health and BCCDC Laboratories

.

Tool 24: *Suspect Outbreak Reporting—Things to Report on the First Day and for the Duration of the Outbreak*

Please **DO NOT DELAY** in reporting your Suspect Outbreak to your **Public Health Contact** **(Tool 2)**

Delayed reporting and delayed initiation of control measures are associated with:

- Higher attack rates
- Increased frustration in management and
- Longer duration of the outbreak

Things to report on the first day

- Facility Name and Location
- Name and Contact Information for person from your facility who will be the contact for your Public Health Contact. Include name and contact information for regular work hours AND name and contact information for after-hours (evenings, weekends and holidays)
- Number of residents and number of staff with new or worse cough and the dates of onset of symptoms
- Date of onset of illness in first resident case and/or staff case
- Information about any laboratory specimens taken (i.e., number, date, names of residents, status)
- General layout of facility, including number of floors, common areas that are used by residents from more than one specific area and staff dedicated to affected area or serve other areas as well
- Movement of people and things throughout your facility
- If the affected area or areas in your facility are completely separate (Tool 25), can be made completely separate and can be maintained as completely separate throughout the outbreak
- Percent of residents and staff vaccinated against influenza (this is information you will have entered on your Facility Readiness Report (Tool 20) that you complete each fall in time to submit by December 31). This information may need to be reviewed/updated if there has been a change in staff or residents from the time it was initially completed.
- Any complications experienced by affected residents (e.g., pneumonia, congestive heart failure, hospitalization) and any deaths of affected residents
- Whether illness in affected individuals is predominately MILD or SERIOUS in nature
- What control measures you have already put in place
- If you have a copy of the Fraser Health Viral Respiratory Illness Outbreak Protocol on hand and if it is available at the affected site(s) in your facility

Tool 25: *Definition of Completely Separate Areas of Facility—Guidance for Implementation of Control Measures)*

Completely separate areas means

- Physically separate
- No movement of people (i.e., staff, visitors, service providers, others) between or through the areas
- No movement of things (e.g., equipment, books, recreational material, wheelchairs, meal carts, etc.) between the areas. Be aware of routine activities such as someone continuing rounds with a library cart going from affected to unaffected areas.

If all this is true, then Control Measures are usually put in place in the completely separate area only. Completely separate unaffected areas are exempt from outbreak control as long as complete separation can be maintained and monitoring for onset of new or worse cough is increased for the unaffected areas.

If any of this is not true, all areas that are not completely separate from the affected area should initiate and maintain outbreak control measures.

NOTE: *It is important to recognize that not all situations are the same. Decisions regarding areas under Control Measures are determined in consultation with your Public Health Outbreak Management Contact and will be made on an individual basis after assessment of your situation*

Tool 26: *Daily Surveillance and Reporting: Things to watch for and report after the first day until the end of the outbreak*

Daily Surveillance

- Look for new cases of RI symptoms in residents. All residents should be monitored twice daily for symptoms compatible with RI infections
- During a facility outbreak and in the event of a local community or community-of-care outbreak of influenza, monitoring should be increased to twice daily in unaffected areas as well
- Ask about new cases of RI symptoms in staff members and note if any staff members have submitted a nasopharyngeal swab specimen for testing
- Take additional swab specimens for viral testing on new cases among residents the situation changes and if additional testing is recommended by your Public Health Outbreak Management Contact
- Re-order swab testing kits as needed **(Tool 10)**

Daily Reporting

- Every day, update your Illness Reporting forms (just add new information onto the same sheet; start a new sheet whenever the old one is full)
- Update signs and symptoms if there are NEW symptoms in ill residents (i.e., change a "No" to a "Yes", but DO NOT change when symptoms resolve, leave as "Yes"). Also update if change in hospitalization or death
- Record new cases, **date of onset of first symptoms**, when vaccinated, and date of swab (if swabbed). Record the swab result when reported as either "Negative" or which virus it is positive for (i.e., A, B, or RSV)
- **Use a separate sheet for each area of facility (neighbourhood, floor or other specified area)**
- Use a staff illness report form for staff and a resident illness report form for residents
    - **If your facility outbreak is a highly suspicious of influenza or Laboratory Confirmed INFLUENZA outbreak** you will report **DAILY** to your Public Health Contact (Public Health Nurse) **(Tool 2a)** until the outbreak is declared over. Update the Resident and Staff Illness Reporting forms each day (just adding in new information) **(Tool 27, 28)**. FAX your completed Resident and Staff Illness Reporting forms **each day**. Report any problems or questions you have to your Public Health Contact. **(Tool 2a)**
    - **If your facility outbreak is determined to be caused by a virus other than influenza continue to** update and fax the Resident and Staff Illness Reporting forms each day (just adding in new information) and refer to these throughout the outbreak **(Tool 27, 28)**.
    - If residents and/or staff continue to present with new or worse illness (GI and /or RI), swab resident and/or staff and report to your PH Outbreak Management Contact
    - **If you are concerned that your outbreak is not responding to control measures or there are changes in the pattern of illness such as increased severity, consult promptly with your PH Contact.**

Tool 27: Resident Illness Report and Tracking Form

RESIDENT RESPIRATORY ILLNESS REPORT

Update Daily for all viral Respiratory Illness Outbreaks

For new outbreaks or confirmed Influenza and COVID-19 Outbreaks FAX Daily to 604.476.7088 to Public Health

FACILITY NAME:	NEIGHBOURHOOD, FLOOR OR OTHER AREA AFFECTED: Name: Total # of residents:		DATE PUBLIC HEALTH CONTACT NOTIFIED:
TELEPHONE (DIRECT TO CONTACT PERSON):	AFTER HOURS TELEPHONE NUMBER (DIRECT TO CONTACT PERSON):		TIME PUBLIC HEALTH CONTACT NOTIFIED:
FACILITY FAX NUMBER	EMAIL OF FACILITY CONTACT PERSON:		DATE ANTIVIRAL PROPHYLAXIS INTIATED:
FORM COMPLETED BY:	DATE OF FIRST REPORT:	DATE OF UPDATE 4:	DATE OF UPDATE 8:	DATE OUTBREAK DECLARED:
	DATE OF UPDATE 1:	DATE OF UPDATE 5:	DATE OF UPDATE 9:	
ROLE:	DATE OF UPDATE 2:	DATE OF UPDATE 6:	DATE OF UPDATE 10:	DATE OUTBREAK DECLARED OVER:
	DATE OF UPDATE 3:	DATE OF UPDATE 7:	DATE OF UPDATE 11:	

Name of Resident (Last Name, First Name)	Care Card Number (PHN)	Sex (M/F)	Age	New or Worse Cough (Y/N)	Fever (Y/N)	Sore Throat, Joint Pain, OR Muscle Ache, Extreme Fatigue (Y/N)	Diarrhea (Y/N)	Other gastro-intestinal (e.g., nausea, vomiting) (Y/N)	Date Onset of First Symptom MM	Date Onset of First Symptom DD	Date Swab Test Taken MM	Date Swab Test Taken DD	Swab Test Result: Negative or Name of Virus Found	Date of Last Influenza Vacc'n MM	Date of Last Influenza Vacc'n DD	Date Influenza Antiviral for Treatment Started MM	Date Influenza Antiviral for Treatment Started DD	FOR COVID ONLY: Recovered (see definition below*) (Y/N)	If applicable: Date Resident Admitted to Hospital MM	Date Resident Admitted to Hospital DD	Date of Resident's Death MM	Date of Resident's Death DD	Place of Resident's Death: Facility (F) or Hospital (H) F/H	Date of Transfer from Acute Care during Outbreak or Date of New Admission to Facility MM	Date of Transfer from Acute Care during Outbreak or Date of New Admission to Facility DD

*Recovered is defined as 10 days from symptom onset or until symptoms are resolved, which ever takes longer

Tool 28: *Staff Illness Report and Tracking Form*

STAFF RESPIRATORY ILLNESS REPORT

Update Daily for all viral Respiratory Illness Outbreaks

For new outbreaks or confirmed Influenza and COVID-19 Outbreaks FAX DAILY to 604.476.7088 to Public Health

FACILITY NAME:		NEIGHBOURHOOD, FLOOR OR OTHER AREA AFFECTED: Name: / Total # of staff:		DATE PUBLIC HEALTH CONTACT NOTIFIED:
TELEPHONE (DIRECT TO CONTACT PERSON):		AFTER HOURS TELEPHONE NUMBER (DIRECT TO CONTACT PERSON):		TIME PUBLIC HEALTH CONTACT NOTIFIED:
FACILITY FAX NUMBER		EMAIL OF FACILITY CONTACT PERSON:		
FORM COMPLETED BY:	DATE OF FIRST REPORT:	DATE OF UPDATE 4:	DATE OF UPDATE 8:	DATE OUTBREAK DECLARED:
ROLE:	DATE OF UPDATE 1:	DATE OF UPDATE 5:	DATE OF UPDATE 9:	
	DATE OF UPDATE 2:	DATE OF UPDATE 6:	DATE OF UPDATE 10:	DATE OUTBREAK DECLARED OVER:
	DATE OF UPDATE 3:	DATE OF UPDATE 7:	DATE OF UPDATE 11:	

Name of Staff Member (Last Name, First Name)	Care Card Number (PHN)	Sex (M/F)	Age	New or Worse Cough (Y/N)	Fever (Y/N)	Sore Throat, Joint Pain, OR Muscle Ache, Extreme Fatigue (Y/N)	Diarrhea (Y/N)	Other gastro-intestinal (e.g., nausea, vomiting) (Y/N)	Date Onset of First Symptom MM	Date Onset of First Symptom DD	Date Swab Test Taken MM	Date Swab Test Taken DD	Swab Test Result: Negative OR Name of Virus Found	Date of Last Influenza Vacc'n MM	Date of Last Influenza Vacc'n DD	FOR COVID ONLY: Recovered (see definition below*) (Y/N)	Date Last Worked At Facility MM	Date Last Worked At Facility DD	Date Returned To Work At Facility MM	Date Returned To Work At Facility DD	Does Staff Member Work At Another Facility? (Y/N)

* Recovered is defined as 10 days from symptom onset or until symptoms are resolved, which ever takes longer

Tool 29: *Helpful Information about Common Respiratory Viruses*

Virus	Epidemiology	Incubation Period	Symptoms	Infectious Period (Communicability)	Prophylaxis and treatment
Influenza A (in Northern Hemisphere)	Between October and March Causes mild to severe symptoms Causes infection in all age groups Can infect animals and humans Causes most outbreaks	1-4 days (average = 3 days)	Acute onset of cough, fever*, headache, muscle aches, sore throat, prostration and exhaustion. Cough is often severe and may last longer than other symptoms Gastrointestinal symptoms may occur in children Duration 2-7 days (Average = 4 days)	Probably 3-5 days from clinical onset in adults (Average = 4 days); up to 7 days in young children Asymptomatic people may be infectious	Yearly vaccine (for Influenza A and B) Anti-influenza medications for prophylaxis and treatment: ▪ Neuraminidase inhibitors for Influenza A and B (Oseltamivir or Zanamivir)
Influenza B (in Northern Hemisphere)	Between October and March Causes milder infection Mostly affects children Can cause outbreaks			Probably 3-5 days from clinical onset in adults (Average = 4 days); up to 7 days in young children Asymptomatic people may be infectious	
Parainfluenza virus Types 1, 2, 3 and 4	Entire year (little seasonal pattern) Predominately causes infection and outbreaks in young children and the elderly	2-6 days	Fever, cough, wheezing Croup	From shortly prior to clinical onset and for duration of active disease	Symptomatic treatment only
Respiratory Syncytial virus (RSV)	Usually late winter and early spring Predominately causes infection and outbreaks in young children and the elderly	Usually 4-6 days, range 2-8 days	Fever, cough, wheezing Bronchiolitis in children Pneumonia in adults	From a day or so before clinical onset and usually for 3-8 days. However, viral shedding may persist for several weeks or longer after symptoms have subsided, especially in children	Symptomatic treatment only. Exception is Ribavirin for very ill children with cardiac or lung disease only.

Virus	Epidemiology	Incubation Period	Symptoms	Infectious Period (Communicability)	Prophylaxis and treatment
Adenovirus	Usually fall and winter Causes infection in all ages	Usually 4-5 days, range 2-14 days for respiratory disease	Conjunctivitis, sore throat, fever, and other respiratory symptoms	From up to a week prior to clinical onset and for duration of active disease Viral shedding may persist for a long period of time	Symptomatic treatment only
Other common respiratory viruses, such as: • **Rhinovirus** • ****Coronavirus** • *****Human Metapneumo-virus** • **Echovirus, Coxsachievirus and other Enteroviruses**	Throughout the year with peaks in the spring and fall	Usually 2-3 days, but may be longer	'Common cold' type illness: Sneezing, runny nose, cough, sore throat, sinus congestion, malaise, headache, myalgia (muscle aches) and/or low grade fever	Viral shedding usually most abundant during the first 2-3 days of clinical illness. Shedding usually ceases by 7-10 days, but may continue for up to 3 weeks	Generally, symptomatic treatment only
Sars-CoV-2	Causes infection in all ages (currently ~99% of British Columbians susceptible)	2-14 days (median 5 days)	Fever, chills, cough, shortness of breath/difficulty breathing, sore throat, runny nose/congestion, loss of smell or taste, headache, muscle aches, fatigue, diarrhea, conjunctivitis, confusion, abdominal pain, nausea and vomiting	From 2 days prior to onset of symptoms to 10 days from onset of symptoms (for mild/moderate cases) and up to 20 days from onset of symptoms (for severe/immunocompromised cases)	Symptomatic management

* *Fever may not occur in the elderly or immuno-compromised*

** *Non-SARS Coronaviruses (e.g., Coronavirus 229E, OC43 and B814) are not infrequently the cause of respiratory outbreaks, usually characterized by predominately MILD illness*

***Human Metapneumovirus has been associated with SERIOUS ILLNESS in the elderly. Reports suggest this is especially likely to occur when more than one virus is causing illness in the same outbreak (e.g., Human metapneumovirus and a parainfluenza virus or other combination)*

Adapted from PICNetBC 2011 – Respiratory Outbreak Guidelines
Available at: http://www.picnet.ca/ Guidelines and Toolkits Tab

Or directly at: https://www.picnet.ca/wp-content/uploads/PICNet_RI_Outbreak_Guidelines.pdf
for "Respiratory Infection Outbreak Guidelines for Healthcare Facilities"

Tool 30a: *Management of ill Residents during an Influenza Outbreak*

Isolate residents with RI symptoms in their rooms with droplet/contact precautions (Tool 15) through their infectious period (5 days from onset). Provide meals in rooms, regular trays can be used. Ensure that staff and visitors use Personal Protective Equipment (PPE) when within 2 metres of an ill resident (as indicated on droplet/contact precautions sign). Provide education regarding the use of PPE to ensure it is used properly. Follow standard protocols for laundry, utensils, garbage and medical waste. Increase cleaning to 2 times per day. If residents need to be transferred to acute care facilities complete and send the Communi*CARE* Transfer Form (Tool 38). Inform the BC Ambulance Service at time of booking and the receiving institution of your outbreak. The resident being transferred should wear a mask for the transfer (if can tolerate a mask). Anyone accompanying the resident should wear a mask, eye protection and gloves during transport.

Treatment

For outbreaks of influenza only: IF started within 48 hours of symptom onset, treatment may be helpful with Influenza A and Influenza B. Initiate treatment in accordance with facility protocol and pre-printed orders **(Tools 3, 32).** (Note: In Facility Influenza Outbreaks, it may be recommended to provide anti-influenza treatment to residents with severe illness, even if started later than 48 hours after symptom onset--perhaps up to 96 hours after symptom onset). Unless resistance to oseltamivir is identified, treatment is oseltamivir 75 mg twice daily for 5 days (dose adjusted by your Pharmacy based on estimate of kidney function). Consult with Facility Medical Director or resident's physician if need for medical assessment. If the influenza virus is resistant to oseltamivir (OsR), your Public Health (PH) Outbreak Management Contact will make recommendations.

Prophylaxis following treatment (generally NOT recommended)

For outbreaks caused by a single type of influenza virus only: In situations in which well residents are using anti-influenza medications for prophylaxis (prevention), residents who have received anti-influenza medications for treatment of cough illness during the influenza outbreak will stop using the medications at the end of the recommended 5-day treatment course, regardless of whether they were lab-confirmed or not. Treated residents will NOT switch to the use of anti-influenza medication for prophylaxis after their treatment is finished (Tool 32: FLOWCHART 32-1).

If a non-influenza respiratory virus is known to be, or highly suspected to be, causing illness in the same facility during an influenza outbreak: Your Medical Director or PH Outbreak Management contact may recommend that residents who were ill with suspected influenza, but NOT laboratory confirmed, continue on the prophylactic dose of anti-influenza medication until the outbreak is declared over. This may be done due to uncertainty as to whether the ill resident was initially ill due to the influenza or the other virus also causing illness during the outbreak. This will be recommended ONLY if influenza is still considered to be circulating in the facility (**Tool 32: FLOWCHART 32-2**).

If more than one Influenza virus is causing illness during an outbreak (e.g., Influenza A and Influenza B): In such situations, your Medical Director or PH Outbreak Management Contact MAY recommend that ALL ill residents who have been treated with a 5-day treatment course of anti-influenza medication, including those who have been laboratory confirmed as having had influenza and have completed a 5 day course of treatment, continue on the prophylactic dose of the anti-influenza medication until the mixed influenza virus outbreak is declared over (**Tool 32: FLOWCHART 32-3**).

If more than one Influenza virus is causing illness during an outbreak and one is an oseltamivir resistant (OsR) strain: If an unusual situation like this occurs, there will be consultation about the wisdom of using or not using anti-influenza medications. Your PH Outbreak Management Contact will be in touch with your Facility Medical Director to discuss and decide on the most appropriate approach.

Influenza Immunization following recovery

Unless there is a medical contraindication to influenza immunization, when recovered, any resident who was not previously vaccinated against influenza should be vaccinated with influenza vaccine if the influenza season is not yet over (due to potential for infection by a different influenza virus).

Tool 30b: *Management of ill Residents in a Facility during a NON-INFLUENZA RESPIRATORY OUTBREAK*

Isolate ill residents in their rooms on **droplet precautions** (Tool 15). Provide tray service meals in rooms. Ensure that staff and visitors use appropriate infection control measures when giving care or visiting at any time during the ill resident's infectious period.

Hand hygiene and respiratory etiquette should be practiced by staff and visitors and the resident encouraged and/or assisted to do so as much as possible.

Tool 31a: *Preventive Measures for Well, Unaffected Residents in a Facility and Duration of Antivirals*

Surveillance
Surveillance of well residents for onset of new or worse cough should be increased to **twice daily** through the course of the outbreak.

Hand Hygiene, Respiratory Etiquette
Well residents should be encouraged and assisted to practice Hand Hygiene and Respiratory Etiquette as much as possible.

Prophylaxis
Use of anti-influenza medication for prophylaxis of well residents in affected areas of an **Influenza outbreak** are an important infection prevention and control measure to stop the spread of influenza. Dosages will have been calculated at the start of the season by your Pharmacy. Anti-influenza prophylaxis for well residents should be implemented as soon as possible, when recommended **(Tool 32)**. Studies have shown a relationship between the time from the start of an influenza outbreak to initiation of prophylaxis AND the duration of the outbreak—***generally, the quicker anti-influenza prophylaxis is initiated, the sooner the outbreak will be over.*** When anti-influenza prophylaxis is started promptly, along with other recommended outbreak management measures, new cases are usually few, the number of new cases decreases quickly and usually no new cases are seen after just a few days on prophylaxis.

Antiviral prophylaxis should be continued for EIGHT DAYS from when they are first initiated in the area of the facility under Influenza outbreak measures. This change is based on a review of the epidemiology of outbreaks in Fraser Health.

If new cases are appearing after 72 hours of the introduction of control measures, including anti-influenza prophylaxis, consult with your Public Health Contact to review your situation **(Tool 2a).** If new cases are appearing on DAY SIX, when antiviral prophylaxis is supposed to be discontinued, consult with your Public Health Contact to review your situation.

Immunization
Residents who are not vaccinated against influenza should be vaccinated (unless there is a medical contraindication to vaccination or the influenza season is considered to be almost over).

Cohorting
A well room-mate can remain in the same room with the ill resident because she/he has already been exposed to the outbreak pathogen and could be infectious.

Tool 31b: *Preventive Measures for Well, Unaffected Residents in a Facility during a NON-INFLUENZA RESPIRATORY OUTBREAK*

Well residents should be encouraged and assisted to practice Hand Hygiene and Respiratory Etiquette as much as possible. There is no anti-viral recommended for prophylaxis (prevention) in well residents.

Well residents can participate in small group activities (2-4 residents) while physically distanced. See COVID Step down protocol for reference.

Tool 32: *FLOWCHARTS* to guide in the use of Anti-Influenza Medication as Treatment and Prophylaxis for:*

- **Uncomplicated Influenza Outbreak**
  - **FLOWCHART FOR:** Treatment for ill residents and Prophylaxis for well residents in Outbreaks caused by a single Influenza Virus type: Influenza A or Influenza B (**FLOWCHART 32-1**)

- **Complicated Influenza Outbreaks**
  - **FLOWCHART FOR:** Prophylaxis following treatment for recovering residents who were **not** laboratory confirmed as having Influenza, when a non-influenza virus (Coronavirus, Respiratory Syncytial Virus, Human Metapneumovirus or other respiratory virus) is also causing illness DURING an Influenza outbreak (**FLOWCHART 32-2**) (**Tool 29**)
  - **FLOWCHART FOR:** Prophylaxis following treatment for recovering residents when MORE THAN ONE Influenza Virus type is causing illness in the same Influenza outbreak (e.g., Influenza A and Influenza B both identified during the same outbreak) (**FLOWCHART 32-3**)

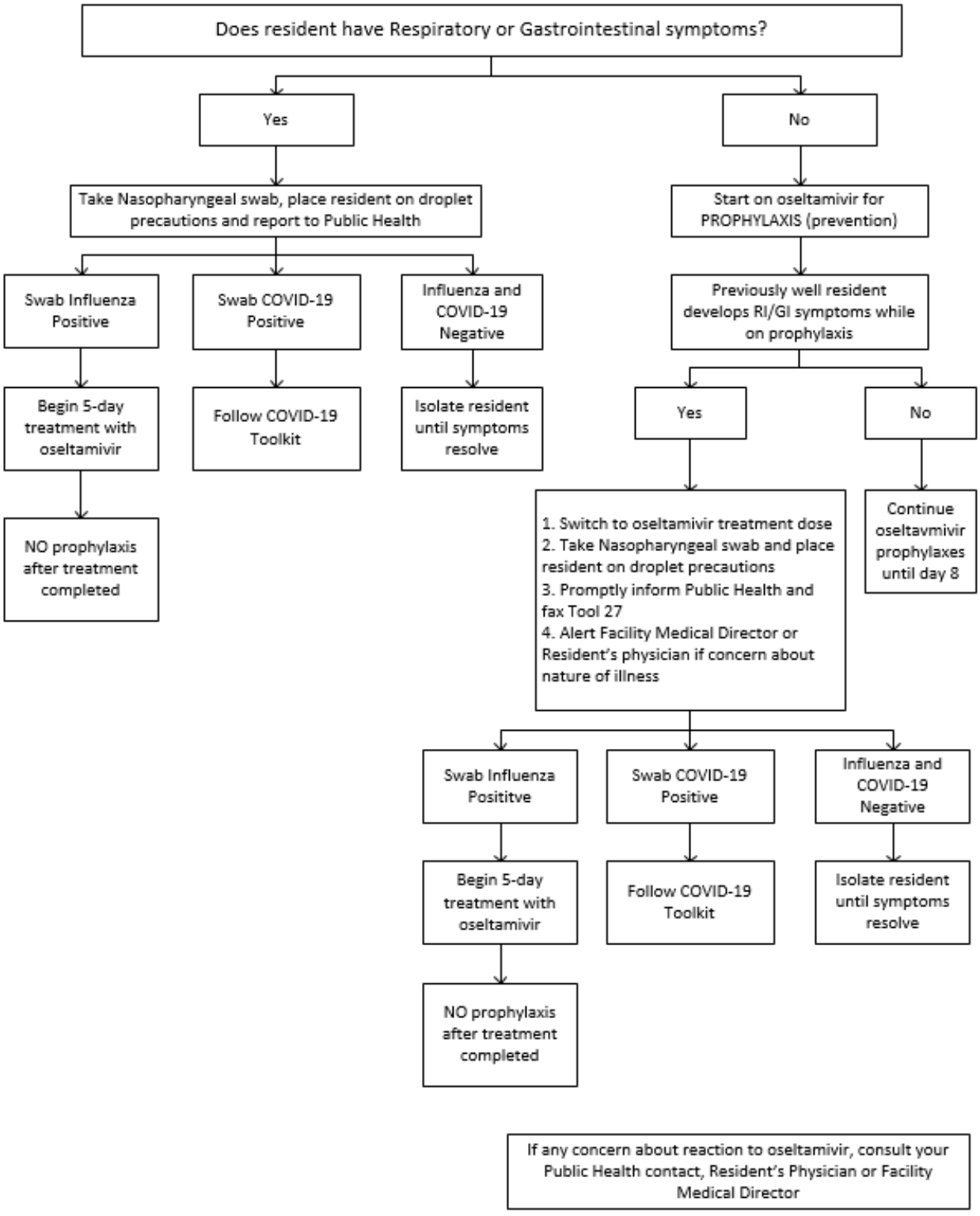
*****For use in consultation with your Public Health Contact, Facility Medical Director and/or Resident's Physician as indicated in Flowcharts

*SITUATION-SPECIFIC decisions may be made that are appropriate for the situation, but may differ from the general approach suggested in the following FLOWCHARTS

FLOWCHART 32-1:

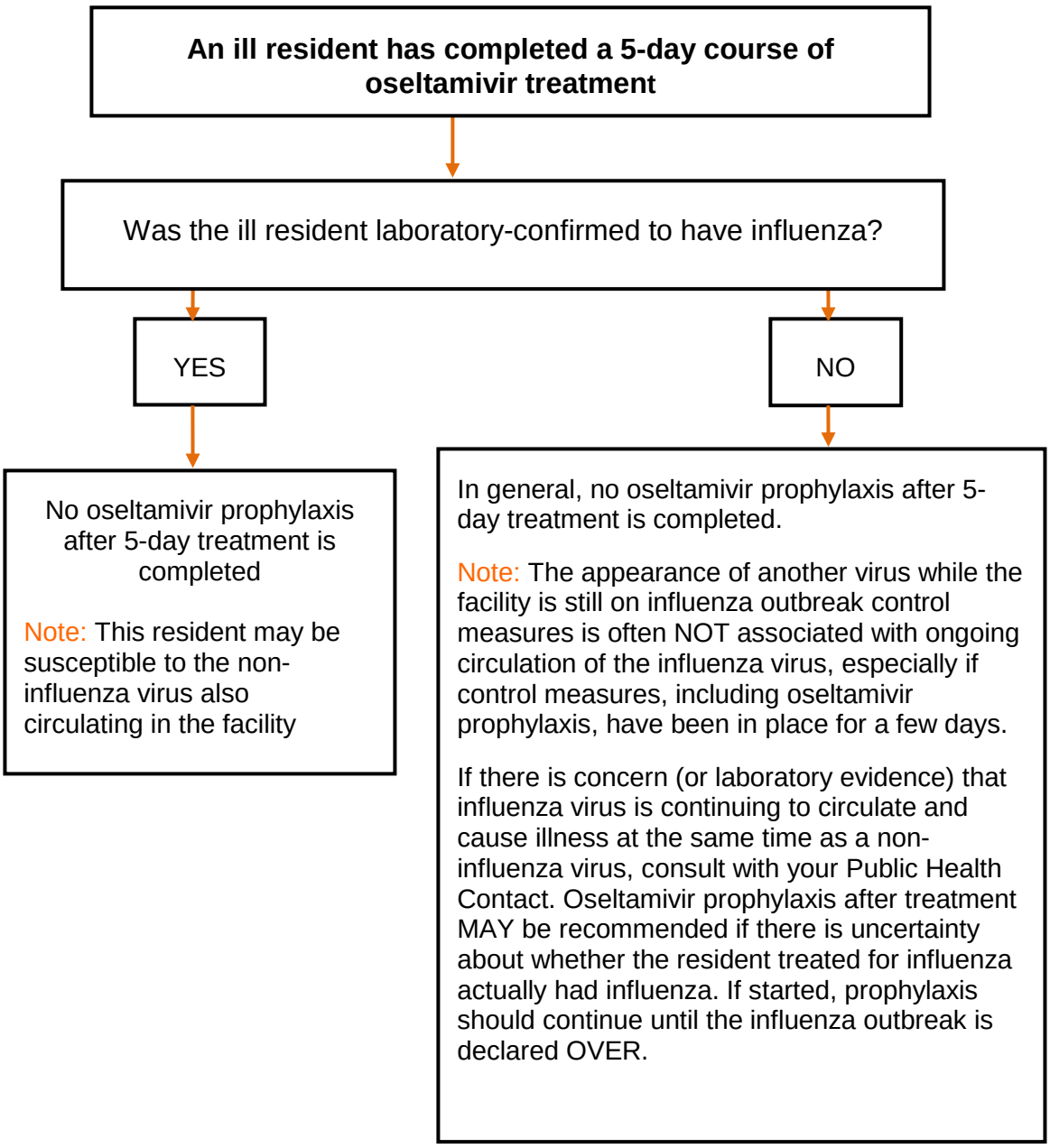
For use in the common situation in which A SINGLE INFLUENZA VIRUS type is believed to be causing the Outbreak (an Influenza A or an Influenza B virus)

Influenza Outbreak declared and Control Measures Initiated



FLOWCHART 32-2:

For use in a situation in which an Influenza outbreak is being managed with Influenza control measures (including oseltamivir prophylaxis and treatment) in place, BUT BEFORE THE OUTBREAK IS DECLARED OVER, residents on prophylaxis develop new or worse cough AND testing confirms a non-influenza virus is also causing illness during the influenza outbreak **(Tool 29)**



In this situation, your Public Health Contact will work with you to decide when to declare the influenza outbreak over and switch to a Non Influenza outbreak

FLOWCHART 32-3:

For use in a situation in which two different INFLUENZA Viruses are believed to be causing illness during the same facility outbreak.

Though not common, every few years a facility will experience an outbreak caused by an influenza virus (usually an Influenza A virus) and, at the same time or before the outbreak is declared over, will receive laboratory confirmation of residents becoming ill with a different influenza virus (usually an Influenza B virus).

Influenza Outbreak declared and Control Measures are in place

The ill Resident is considered to be a case (laboratory-confirmed)
OR
Due to new or worse cough, considered to be outbreak-related

Resident NOT symptomatic:
NOT considered to be a CASE

Treated with oseltamivir for 5 days

Not treated because unable to start treatment within 48 or 96 hours
(as per FLOWCHART 32-1)

UNLESS advised otherwise by your Public Health Contact:

1. START on oseltamivir prophylaxis after treatment completed, and
2. CONTINUE until mixed influenza virus outbreak declared OVER

UNLESS advised otherwise by your Public Health Contact:

1. START on oseltamivir prophylaxis after ACUTE symptoms have resolved, and
2. CONTINUE until mixed influenza virus outbreak declared OVER

CONTINUE oseltamivir prophylaxis until mixed influenza virus outbreak declared over

Tool 33a: *Control Measures for ILL Staff during an Influenza Outbreak*

Staff with RI Symptoms

Staff with onset of symptoms compatible with RI infections should report to their supervisor promptly. Go to the nearest testing centre for COVID-19 testing.

Isolation

- Stay at home (excluded from work) until well enough to work, symptoms have resolved, and you have tested negative for COVID-19.

Immunization after Recovery

- Unvaccinated staff who have recovered from a respiratory illness can still benefit from influenza vaccination, even if they had influenza, as it is not uncommon to have two or more strains of influenza circulate in the community each season
- If swabs are negative for Influenza/COVID-19 consider return to work when staff are well enough to return to work **AND** either their acute symptoms are gone **OR** they are 5 days from symptom onset (whichever is sooner)
- Use good hand hygiene and respiratory etiquette on return to work

Tool 33b: *Control Measures for ILL Staff during a Non-Influenza Respiratory Outbreak Illness*

Staff with onset of symptoms compatible with RI infeciton **should report to their supervisor promptly. Go to the nearest testing centre for COVID-19 testing**

Immunization after Recovery

- Unvaccinated staff who have recovered from a non-influenza viral respiratory illness can still benefit from influenza vaccination

Return to Work

- If swabs are negative for Influenza/COVID-19 consider return to work when staff are well enough to return to work **AND** either their acute symptoms are gone **OR** they are 5 days from symptom onset (whichever is sooner)
- Use good hand hygiene and respiratory etiquette on return to work

Tool 34a: *Preventive Measures for WELL, UNAFFECTED Staff during an Influenza Outbreak*

Expectations regarding preventive measures for unaffected staff members (including contracted staff, volunteers and students) during an influenza outbreak are contained in the Provincial Influenza Control Policy and the BC Facility Influenza Immunization Policy and its Question & Answer document

Direct links to the specific documents are:

Provincial Influenza Control Policy**:** https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/current-health-topics/influenza-information

Staff immunized 14 or more days prior:

- Hand hygiene and respiratory etiquette important, as always
- Adherence to recommended infection prevention and control practices during outbreak
- Extra vigilance in self-assessment (watch for signs and symptoms) and reporting at first signs of new cough or other signs and symptoms compatible with Influenza-Like Illness (ILI)
- Staff members who are pregnant or have other health conditions that put them at higher risk of complications from Influenza infection may want to consult with their physician. In some situations, arrangements for early anti-influenza treatment at first sign of Influenza-Like Illness may be recommended
- Recommended to take anti-influenza medication in the event of an outbreak

Unvaccinated Staff or Staff immunized less than 14 days prior:

- Hand hygiene and respiratory etiquette important, as always
- Adherence to recommended infection prevention and control practices during outbreak
- Extra vigilance in self-assessment (watch for signs and symptoms) and reporting at first signs of new cough or other signs and symptoms compatible with Influenza-Like Illness (ILI)
- If not vaccinated, offer influenza vaccine
- Recommended to take anti-influenza medication, such as prophylaxis, in the event of an outbreak

Unusual situations:
Management as recommended by your Public Health Contact

In some situations (e.g., influenza vaccine not yet available, very low rates of immunization coverage, inability to provide acceptable resident care due to staff shortage related to illness or potential exclusion), special considerations may be required and will be worked out in consultation between Facility Administration, the Facility Medical Director and Public Health Contact.

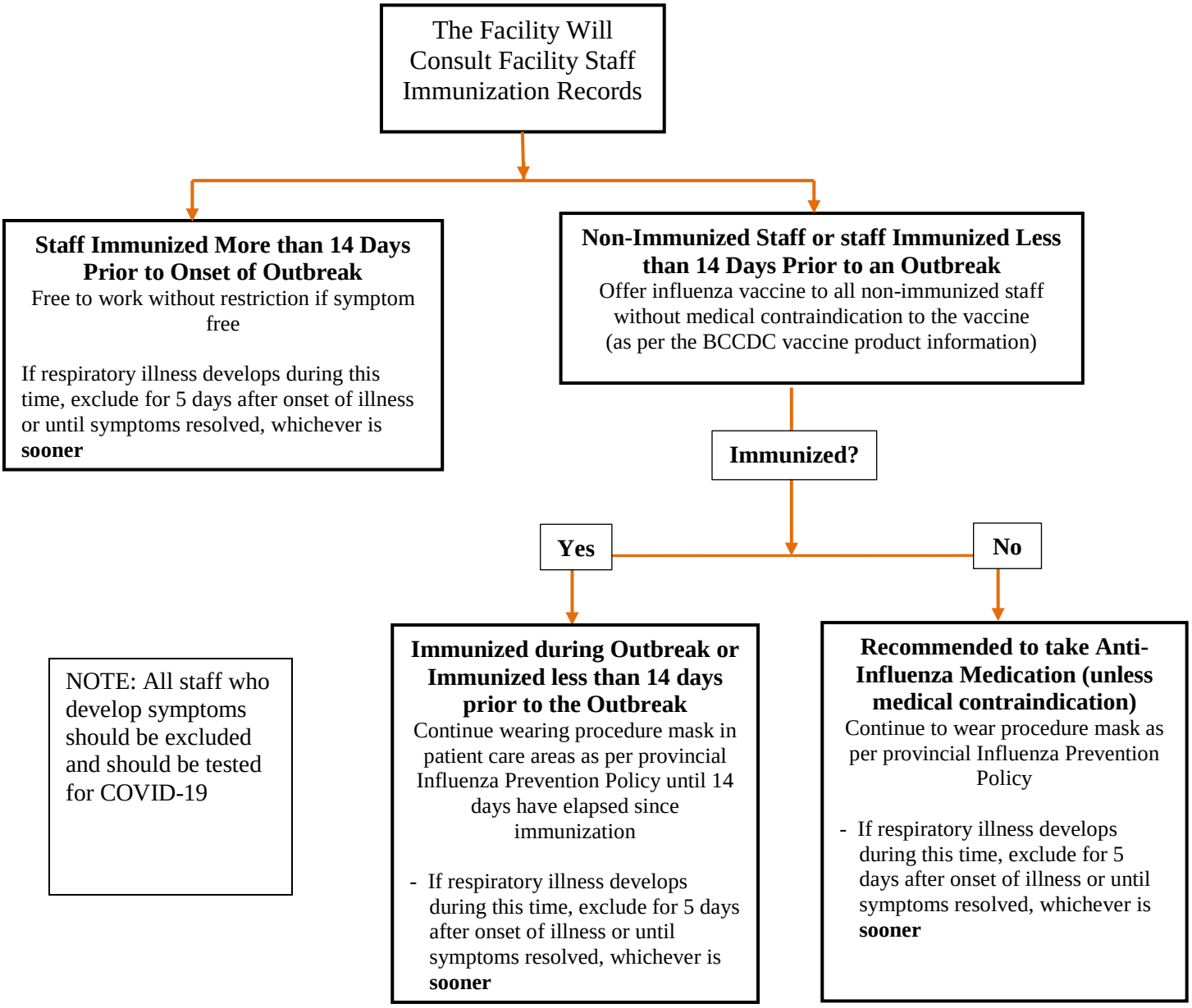
Tool 34b: *Preventive Measures for well, unaffected Staff during a NON-INFLUENZA RESPIRATORY OUTBREAK*

Staff without RI symptoms

- Staff should, if at all possible, work in either affected or unaffected areas, but not both
- Staff should if, at all possible, work with either ill or with well residents, but not both
- If the above are not possible, staff should work first in unaffected areas or with well residents, with strict hand hygiene between areas or residents. Obviously, this should not result in inappropriate delays in the care of ill residents

- Hand hygiene and respiratory etiquette important, as always
- Adherence to recommended infection prevention and control practices during outbreak
- Extra vigilance in self-assessment (watch for signs and symptoms) and reporting at first signs of new cough or other signs and symptoms compatible with Respiratory Illness. Well staff should be aware of signs and symptoms of viral respiratory illness and report and stay home if such signs or symptoms develop and get tested for COVID-19.

Tool 35: *FLOWCHART for use of anti-influenza medications when your Public Health Contact has required prophylaxis for non-immunized, asymptomatic staff (i.e., Influenza Outbreak or outbreak highly suspicious for influenza)*



Tool 36: *Letter to Physician for Non-Immunized Staff Member Recommending Anti-Influenza Medication for Prophylaxis during an Influenza Outbreak*

A Letter to Physician for Staff Member recommended to take Anti-influenza Prophylaxis for an Influenza Outbreak' is on the following page. Please photocopy and use as required.

Oseltamivir (Tamiflu®) is the medication of choice for treatment or prophylaxis (as indicated) in Influenza outbreaks in care facilities UNLESS the causative influenza virus is an oseltamivir-resistant Influenza A/H1. Zanamivir (Relenza®) is an acceptable alternative.

Process:

- Fill in the date AND the name of the staff member
- Provide the letter to the Staff Member to give to the Physician who will be asked to prescribe the anti-influenza medication

Notes:

Prophylaxis (prevention):

- Prophylaxis is recommended for staff members who are working in a facility during an influenza outbreak. The staff member is to use the medication for prophylaxis (prevention) UNTIL the outbreak is declared over.

Treatment:

- To be beneficial, anti-influenza treatment should begin within 48 hours of onset of symptoms**. If a staff member develops new or worse cough or Influenza-like Illness while on prophylaxis, the staff member should consult with the physician immediately. Calling ahead is important so that appropriate precautions can be taken to reduce risk of exposing others.**
- Updated guidance on the use of antivirals is available from the Association of Medical Microbiology and Infectious Disease Canada**,** www.ammi.ca/guidelines

fraserhealth

From the Office of the
Medical Health Officer

Type of Outbreak: Influenza A or B NOT Resistant to Oseltamivir

Date: _____

Re: Influenza Antiviral Prophylaxis for _____

This person is recommended to take anti-influenza medication to **protect against getting influenza** because of an outbreak of influenza at her/his place of work. If no contraindication, please prescribe **oseltamivir** as the medication of choice. Zanamivir (Relenza®) is an acceptable alternative. Amantadine is **NOT** recommended for prophylaxis or treatment of influenza sensitive to oseltamivir. See product monographs for detailed prescribing information.

Please Mark the Prescription: "For Prevention during an Influenza Outbreak"

To contact the MHO in your area during working hours, call 604-587-3828 or 1-877-342-6467

For Influenza A or B That Is NOT RESISTANT to Oseltamivir

Prevention for Both Influenza A and B**:** Based on prescribing information, the recommended dose of Oseltamivir for prophylaxis is **75 mg once daily** for individuals 13 years of age and older. For individuals with compromised renal function, oseltamivir dosing is adjusted based on estimated creatinine clearance: for estimated CrCl of >30-60 mL/min, the dose for prophylaxis is reduced to 30 mg once daily. With estimated CrCL of 10 to 30 mL/min, the dose for prophylaxis is reduced to 30 mg every other day. Recommendations for individuals with estimated CrCL < 10 mL/min or on renal dialysis are found in the Roche product monograph.

> ***Cautions and Contraindications*: Avoid use in pregnancy and lactation unless potential benefits outweigh potential risks to the fetus.** Safety with hepatic impairment is not established. Probenecid doubles the active metabolite of oseltamivir, but no dose adjustment is required.

Treatment for Both Influenza A and B (To be beneficial, anti-influenza treatment should begin within 48 hours of onset of symptoms): The recommended dose of Oseltamivir for treatment is **75 mg twice daily for 5 days**. For individuals with compromised renal function and estimated CrCl of > 30-60 mL/min, the dose for treatment is reduced to 30 mg **twice** daily. With estimated CrCL of 10 to 30 mL/min, the dose for treatment is reduced to 30 mg **once** daily. Recommendations for individuals with estimated CrCL < 10 mL/min or on renal dialysis are found in the Roche product monograph.

> ***Cautions and Contraindications***: as above for oseltamivir for prevention.

Prescribing Oseltamivir (TAMIFLU®) Product monograph may be found at: http://www.rochecanada.com/content/dam/roche_canada/en_CA/documents/Research/ClinicalTrialsForms/Products/ConsumerInformation/MonographsandPublicAdvisories/Tamiflu/Tamiflu_PM_E.pdf

Additional information is available from the Association of Medical Microbiology and Infectious Diseases Canada (AMMI) at: www.ammi.ca/guidelines

Tool 37: Other Measures and Restrictions

The measures and restrictions contained in this section should be maintained until the Outbreak is declared over unless modified following consultation with your Public Health Contact (Tool 2)

Restriction of Movements and Activities within the Facility

- **Post signs at the entrance(s) and other strategic locations around your facility**
  - Initiate **Passive Screening** for respiratory symptoms by posting **"Attention Visitors"** signage **(Tool 11)** and reminding visitors:
    - Not to visit if unwell
    - To practice hand hygiene and respiratory etiquette at all times
    - To follow Infection Prevention and Control recommendations including the use of Personal Protective Equipment, as indicated
    - To limit visiting to one resident
  - Initiate **Active Screening** (having visitors report to the welcome desk before visiting
  - Use signage that is specific for INFLUENZA **ONLY when using Influenza control measures** (Influenza known or suspected as the cause of the outbreak)

- **Movement of people entering and within the facility**
  - Temporarily suspend social activities of groups of residents in the facility.
  - Families and visitors should be alerted that the facility is experiencing a respiratory outbreak
  - Visitors should:
    - Visit only one person
    - Enter and leave directly
    - Perform hand hygiene using soap and water or Alcohol-Based Hand Rub (ABHR) before and after visiting
    - **If giving direct care**, use personal protective equipment as directed by staff and as explained in droplet/contact signage **(Tools 15, 16)**

- **Restrict the potential for movement of virus around your facility**
  - Equipment must be cleaned/disinfected between use on different residents (using a hospital grade low level disinfectant): See SOP IC13: 0600 Low Level Disinfection: http://fhpulse/quality_and_patient_safety/infection_control/Pages/ReprocessingMedicalDeviceStandards.aspx

- **Staff**
  - Staff should work in either affected or unaffected areas, but not both
  - Staff should work with either ill or well residents, but not both
  - If the above are not possible, staff should work first in unaffected areas or with well residents, following recommended infection prevention and control practices including hand hygiene between areas or residents. **NOTE: Attempts to cohort should not inappropriately delay needed care for ill residents (or any residents)**

Considerations Regarding Resident Moves in and out of the Facility during an Outbreak

Depending upon the extent of the outbreak and the physical layout of the building, restrictions that are recommended might be applied to one neighbourhood, floor, other specified area **or** the entire facility.

Transfers out of the Facility (to Hospital or to Another Care Facility)

- If a resident needs to be transferred to Acute Care or to another Care Facility from an area under outbreak control measures, NOTIFY the receiving Hospital or Care Facility that your facility has an outbreak (and, if known, what virus/viruses are causing the outbreak)
- If you have already transferred a resident to Acute Care or to another Care Facility during the outbreak, NOTIFY the receiving Hospital or Care Facility that your facility has an outbreak (and, if

known, what virus/viruses are causing the outbreak). **Include any transfers up to 2 days before onset of symptoms in the first affected person (first case)**
- **Notify BC Ambulance of outbreak when calling for transfer**
- If transferring to an Acute Care Hospital, be sure to Complete and Send the **Communi*CARE* Transfer Form** as per guidelines for its use **(Tool 38)**

PRINCIPLES Regarding New Moves into or Moves Back to One's Home in the Facility

Follow COVID-19 LTC/AL admission and Transfer algorithm

In all cases, decisions about a move should include involvement of:

- The **resident** and/or decision maker of the resident to be aware of the risks and benefits associated with the decision
- The **discharging or most responsible physician** knowledgeable about the resident's health status
- The **receiving Long Term Care facility physician/nurse practitioner** and facility medical director (where applicable)
- The Public Health Consultant

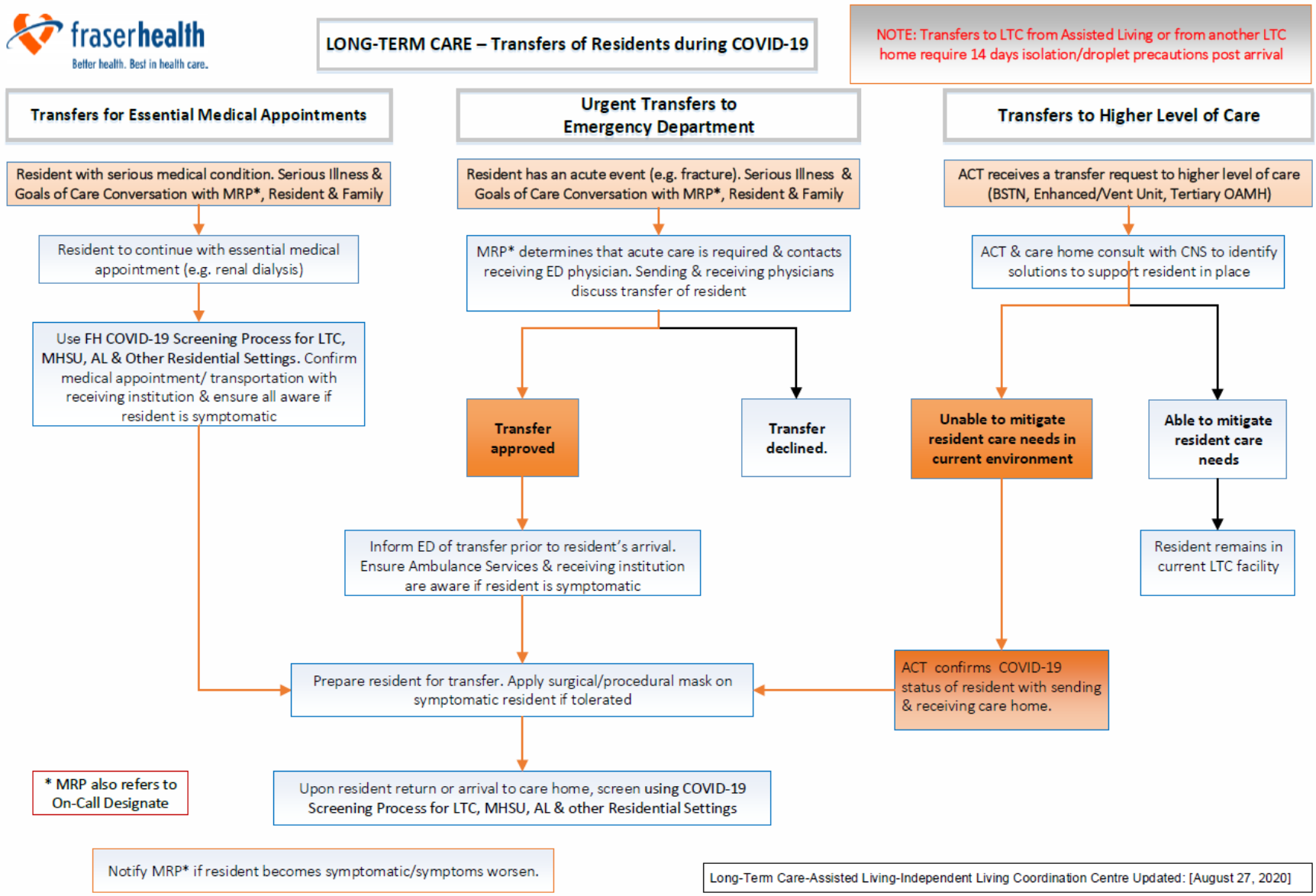
PROCEDURE for New Moves into the Facility while Outbreak Control Measures are in Place

Influenza

- New or returning residents to the facility should be immunized/offered immunization against influenza and should be started on antiviral prophylaxis prior to the move.
- For moves back to a facility, consistent use of the CommuniCARE Transfer Form **(Tool 38)** will also facilitate ongoing discussion about appropriateness of return to the facility

FLOWCHART 37-1: Influenza

Moves into or back to Long Term Care while INFLUENZA outbreak control measures are in place



FOR TRANSFERS WITHIN your facility, consult your Public Health Contact (Tool 2a). This includes moving a resident to or from an area WITH a declared INFLUENZA outbreak to or from a completely separate (Tool 25) area/neighbourhood WITHOUT a declared INFLUENZA outbreak.

PROCEDURE for New Moves into the Facility while outbreak control measures are in place

If not influenza, proceed with move-ins as per LTC/AL transfer protocol,

As Your Facility Gets Closer to the End of the Outbreak

Remain on the alert for possible new cases of cough

If staff or residents are coming down with new RI symptoms after a period with no new cases or there are changes in severity or pattern of illness, review surveillance and control measures. Consult with your Public Health Contact **(Tool 2a)**. Additional testing may be indicated if there is suspicion that a different virus might be causing the new infections.

Tool 38: Resident Transfer Form: Care Facility to Emergency Department (Communi*care*)

Guidelines for Use: The Resident Transfer Form is to be used by RN/RPN/LPN to provide information about a resident being transferred from Long Term Care to the emergency room (ER). It is a method of communicating essential information about a resident's condition to ensure that care requirements are safely met. As part of the **Communi*CARE process***, there is **regular communication between the facility and the hospital**—emergency or inpatient areas.

The Transfer Form MUST indicate if there is an OUTBREAK of any kind in your Facility

General Considerations

- An RN/RPN/LPN to complete the Resident Transfer Form and send with **each** resident being transferred to an ER
- After the form is completed, take a photocopy for the resident's record and send the original with the resident to the receiving hospital site
- The **ER** Form (both the original and copy) is a permanent part of the Health Record

FH Users may access the transfer form using this link on the Intranet:
http://fhpulse/clinical_programs/residential_care_assisted_living_and_specialized_populations/Residential%20and%20Assisted%20Living%20Documents/1%20RC%20A%20To%20Z%20Listing/C/NUXX105077B_ResidentCareFacilitytoER_Combined.pdf

External Users (contracted sites) may access the transfer form through the password protected Extranet using this link:
https://fhextranet.fraserhealth.ca/sites/ResidentialContractsServices/CommuniCARE/NUXX105077B_ResidentCareFacilitytoER_Combined.pdf

Tool 39: *Enhanced Cleaning*

Cleaning
Cleaning is the physical removal of foreign material such as dust, soil and/or organic material, including blood, secretions, excretions and microorganisms. Cleaning is accomplished with water, detergents and mechanical action.

Disinfection
Disinfection is the inactivation of disease-producing microorganisms using a hospital-grade disinfectant with a Health Canada approved Drug Identification Number (DIN).

Consult the Disinfectant Selection Guide
See **Tool 40** for information about disinfectants or access the BCCDC Guidelines at:

https://www.picnet.ca/wp-content/uploads/British-Columbia-Best-Practices-for-Environmental-Cleaning-for-Prevention-and-Control-of-Infections-in-All-Healthcare-Settings-and-Programs.pdf

Enhanced Cleaning

Enhanced Cleaning is increased cleaning of objects and surfaces that people touch with their hands to at least 2 times per day.

Commonly touched things and surfaces include: taps, toilet handles, doorknobs, railings, thermostats, phones, light switches, tables, chairs, rails, walkers, blood pressure cuffs, stethoscopes, otoscopes, canister lids, clipboards, PDA's, pens, keyboards, etc.

- See **Tools 11 and 12** for Respiratory Illness Infection Prevention and Control Signage and Hand Hygiene information
- Please ensure Enhanced Cleaning is in place for the duration of the season

Enhanced Cleaning Guidelines for RI/COVID Outbreaks

Frequently Touched Surfaces	Check off as completed
Cleaning agent to be used:	
1. Nursing Station:	
(a) Counters	
(b) Chairs	
(c) Light switches	
(d) Telephone(s)	
(e) Keyboard(s)	
(f) Nurse call monitoring system	
2. Medication Rooms:	
(a) Door (i.e., where hands commonly touch to push open)	
(b) Door knob on entry and exit	
(c) Counters	
(d) Light switches	
(g) Sink	
3. Clean Utility/Storage Room:	
(a) Door and knob on entry and exit	
(b) Sink and counter	
4. Dirty Utility/Storage Room:	
(a) Door and knob on entry and exit	
(b) Sink and counter	
5. Staff Washroom(s):	
(a) Sink basin and faucet	
(b) Toilet (lever/flush, horizontal surfaces, seat)	
(c) Floor	
(d) Soap dispenser	

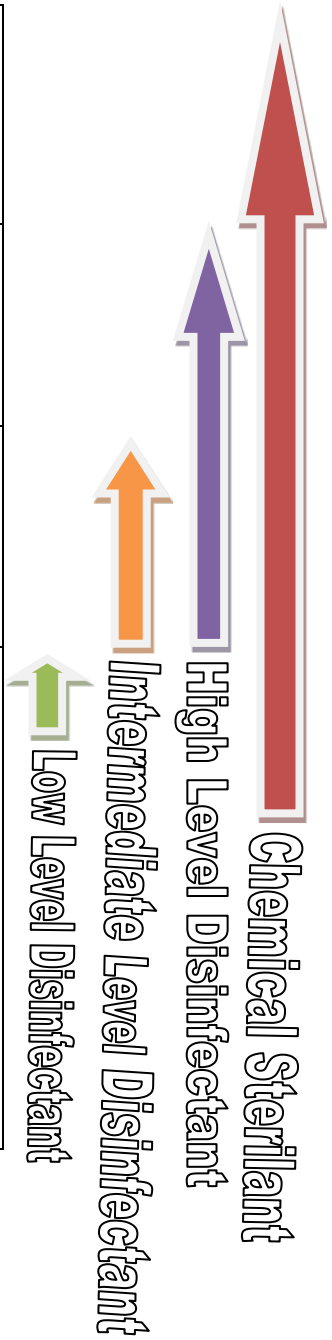
Frequently Touched Surfaces	Check off as completed
Cleaning agent to be used:	
(e) Paper towel dispenser	
(f) Light switch	
(g) Door and handles on entry and exit	
6. Staff Meeting Room(s):	
(a) Door and knob on entry and exit	
(b) Telephone	
7. Resident Common Areas:	
(a) Chairs and end tables	
(b) Kitchenette	
8. Hallways:	
(a) Mobile lifts	
(b) Resident doors and handles	
(c) Elevator buttons	
(d) Key pads	
(e) Handrails	
9. Resident Room Surfaces to be Cleaned:	
(a) Light switches	
(b) Bedrails	
(c) Bedside tables	
(d) Over-bed light	
(e) Over bed tables including framework	
(f) Bedside chairs	
(g) Wheelchair and/or walker	
(h) TV controller	
(i) Call button/ pull chord	
(j) Telephone	
10. Lavatory Surfaces:	
(a) Light switch	
(b) Safety – pull up bars	
(c) Faucets, sink, counter	
(d) Commode/toilet (lever/flush, horizontal surfaces, seat)	
(e) Door	
(f) Floor	
11. Shelves and Items Handled Regularly	
12. Dedicated Laundry Hamper	

Frequently Touched Surfaces	Check off as completed
Cleaning agent to be used:	
Employee Signature: _____ Date: _____ Time it took to complete: _____	
Supervisor Signature:_____ Date:_____	

Tool 40: *Disinfectant Selection Guide*

CLASSES OF ORGANISMS RANKED IN ORDER OF SUSCEPTIBILITY TO DISINFECTANTS

Least Susceptible	**Bacteria with Spores** (*B. subtitles, C. tetani, C. difficile, C. botulinum)* Protozoa with Cysts (*Giardia lablia, Cryptosporidium parvum)*
⇩	**Mycobacteria** (*M. tuberculosis, M. avium-intracellulare, M. chelonae*) **Non-Enveloped Viruses** (*Coxsachievirus, poliovirus, rhinovirus, Norwalk-like Virus, hepatitis A virus*)
	Fungi (*Candida species, Cryptococcus species, Aspergillus species, Dermatophytes*)
Most Susceptible	**Vegetative Bacteria** (Staphylococcus aureus, Salmonella typhi, Pseudomonas aeruginosa, coliforms) **Enveloped Viruses** (Herpes simplex, varicella-zoster virus, cytomegalovirus, measles virus, mumps virus, rubella virus, influenza virus, respiratory syncytial virus, hepatitis B & C viruses, hantavirus and human immunodeficiency virus)



Disinfection Guidelines are posted on the PICNET Website at:
https://www.picnet.ca/guidelines/residential-care/

NOTES:

- **Be sure that the disinfectant product has a DIN number**
- **Check manufacturers information to ensure that product is effective against organisms in question**
- **Follow product instructions for dilution and contact time**
- **Unless otherwise stated on the product, use a detergent to clean surface of all visible debris prior to application of the disinfectant**

Tool 41: *Dosing and other information for Physicians and Pharmacy about Anti-Influenza Medications*

- 41a: Anti-Influenza Medication Indications and Formulations: Prescribing Oseltamivir and Zanamivir - Influenza or highly suspicious of influenza
- 41b: Prescribing Oseltamivir (Tamiflu®) -- Influenza or highly suspicious of influenza
- 41c: Prescribing Zanamivir (Relenza®) -- Influenza or highly suspicious of influenza
- 41d: Neuraminidase Inhibitor Treatment and Prophylaxis Summary Table: Oseltamivir and Zanamivir -- Influenza or highly suspicious of influenza
-

NOTE:

1. Appropriate dosage of important anti-influenza medications is based on calculated Creatinine Clearance (caCrCl) or estimated Glomerular Filtration Rate (eGFR) as estimates of Kidney Function. Your pharmacy or laboratory performs these calculations based on a Serum Creatinine level. Normally, you will order a Serum Creatinine in preparation for the respiratory virus season unless there is already one on file that was done within the previous 12 months.

2. If you choose not to arrange for Serum Creatinine for those who do not have a result available from within the past 12 months, blood can be drawn and the test done promptly when an outbreak is recognized (rather than in advance).

3. In the absence of known kidney disease, an unadjusted dose of oseltamivir may be used for the duration of the outbreak OR a serum creatinine may be ordered and the caCrCl or eGFR calculated.

4. Calculated Creatinine Clearance (caCrCl) and estimated Glomerular Filtration Rate (eGFR) are sometimes used interchangeably. Either is considered acceptable. However, the eGFR may tend to overestimate creatinine clearance and, consequently, level of kidney function in some situations. This is especially likely in older individuals who are frail (lower body weight influences the caCrCl, but not the eGFR). Generally, this is not considered to be an issue with oseltamivir. If zanamivir is recommended and used, there is no requirement to adjust doses based on estimated kidney function

Reference: Glomerular Filtration Rate Equations Overestimate Creatinine Clearance In Older Individuals Enrolled in the Baltimore Longitudinal Study on Aging: Impact on Renal Drug Dosing; *Pharmacotherapy* 2013:33(9):912-921

Tool 41a: *Anti-Influenza Medication Indications and Formulations: Prescribing Oseltamivir, Zanamivir (Influenza or highly suspicious)*

Antiviral (Anti-Influenza) Drugs Currently Approved for Use in Canada

Drug	Trade Name & Manufacturer	Class	Indications	Formulation(s)
Oseltamivir [b]	Tamiflu®, Hoffmann-La Roche Inc.	Neuraminidase Inhibitor	Treatment of influenza A and B in persons 1 year of age and older who have been symptomatic for no more than 2 days Prevention of influenza A and B in persons 1 year of age and older following close contact with an infected individual	Capsules (30 mg, 45 mg and 75 mg): 10 capsules per blister pack Powder for oral suspension (12 mg/ml when reconstituted): 900 mg per bottle (volume of 75 ml in a 100-ml glass bottle)
Zanamivir [b]	Relenza®, GlaxoSmithKline	Neuraminidase Inhibitor	Treatment of influenza A and B in persons 7 years of age and older who have been symptomatic for no more than 2 days. Prevention of influenza A and B in persons 7 years of age and older (in United States, approval for prophylaxis is for persons 5 years of age and older) [c]	ROTADISK® consisting of a circular foil disk with four blisters each containing 5 mg of zanamivir. A DISKHALER® inhalation device is provided to administer the medication (through inhalation). One box contains 5 disks, which is equivalent to one treatment course

[a][Adapted from Annex E of Canadian Pandemic Influenza Plan for Health Care Sector]

[b] **Links to product monographs:**

Relenza (2012):

HTTPS://CA.GSK.COM/MEDIA/535135/RELENZA.PDF#PAGE=28

Tamiflu (2014):
http://www.rochecanada.com/content/dam/roche_canada/en_CA/documents/Research/ClinicalTrialsForms/Products/ConsumerInformation/MonographsandPublicAdvisories/Tamiflu/Tamiflu_PM_E.pdf **Select: TAMIFLU Product Monograph**

[c] See: http://www.cdc.gov/flu/professionals/antivirals/index.htm

Tool 41b: *Prescribing Oseltamivir (Tamiflu®)* -- Influenza or Presumptive influenza

Since 2010, the NACI Annual Statement on Influenza Vaccination has **NOT** included a section on use of antivirals. For Influenza Prevention and Treatment Dosages of oseltamivir, see pages 15-16 of the July 2014 product monograph from Roche (the manufacturer) for Tamiflu® (oselatmivir), available at: http://www.rochecanada.com/content/dam/internet/corporate/rochecanada/en_CA/documents/Research/ClinicalTrialsForms/Products/ConsumerInformation/MonographsandPublicAdvisories/Tamiflu/Tamiflu_PM_E.pdf

Elderly Residents:
Safety has been demonstrated in elderly residents of nursing homes who took TAMIFLU for the prevention of influenza. Many of these individuals had cardiac and/or respiratory disease, and most had received vaccine that season. No Dose Adjustment is required for elderly patients with normal renal function. Dose Adjustment is required when the calculated Creatinine Clearance (CrCl) is **60 mL/min or less** or an individual requires **renal dialysis** *(See dose recommendations below--as per Fraser Health Influenza Treatment/Prophylaxis Pre-Printed Orders - effective 10 September 2014).*

Treatment for Influenza A or Influenza B:
Oseltamivir, 75 mg TWICE DAILY for 5 days (capsule or suspension) for adults (residents) EXCEPT where:

- **CrCl is 31 to 60 mL/min:** Dose adjusted to 75 mg oseltamivir DAILY for 5 days **OR** 30 mg oseltamivir TWICE DAILY for 5 days (as 30 mg capsule or suspension)
- **CrCl is 10 to 30 mL/min:** Dose adjusted to 30 mg oseltamivir DAILY for 5 days as 30 mg capsule or suspension
- **CrCl is less than 10 mL/min and not on dialysis:** Dose of 75 mg **ONE DOSE ONLY** as capsule or suspension

Recommendations for individuals on renal dialysis are:

- **For individuals on *High flux intermittent haemodialysis:*** An initial dose of 75 mg orally, followed by 75 mg orally administered after each haemodialysis session over a period of 5 days *(NOTE: Oseltamivir is significantly cleared via haemodialysis)*
- **For individuals on *peritoneal dialysis:*** A SINGLE dose of 30 mg orally administered prior to the start of peritoneal dialysis as 30 mg capsule or suspension

***Cautions and Contraindications*:** No dose adjustment is required in adult patients with hepatic impairment. Avoid use in pregnancy and lactation unless potential benefits outweigh potential risks to the fetus. Probenecid doubles the active metabolite of oseltamivir, but no dose adjustment is required.

Prophylaxis (Prevention) for Influenza A or Influenza B: Oseltamivir, 75 mg DAILY (capsule or suspension) for adults (residents), EXCEPT where:

- **CrCl is 31 to 60 mL/min:** Dose adjusted to 30 mg oseltamivir DAILY as 30 mg capsule or suspension
- **CrCl is 10 to 30 mL/min:** Dose adjusted to 30 mg oseltamivir EVERY OTHER DAY as 30 mg capsule or suspension
- **CrCl is less than 10 mL/min and not on dialysis:** No data for use. Consult with Physician or Clinical Pharmacist. *A dose of 30 mg PO **ONE DOSE ONLY** given at or near the start of the outbreak is an option*

Recommendations for individuals on renal dialysis are:

- **For individuals on *High flux intermittent haemodialysis:*** Consult with Physician or Clinical Pharmacist. *An initial dose of 30 mg orally as 30 mg capsule or suspension, followed by 30 mg after alternate (every second) haemodialysis session for the duration of the outbreak is an option*
- **For individuals on *peritoneal dialysis:*** An initial dose of 30 mg orally as initial dose followed by 30 mg **ONCE WEEKLY** as 30 mg capsule or suspension

Cautions and Contraindications: as noted above for oseltamivir for treatment

Tool 41c: *Prescribing Zanamivir (Relenza®)* -- Influenza or highly suspicious of Influenza

Since 2010, the NACI Annual Statement on Influenza Vaccination has **NOT** included a section on use of antivirals. For Influenza Prevention and Treatment Dosages of zanamivir, see the May 2012 product monograph from GlaxoSmithKline (the manufacturer) for Relenza® (zanamivir), available at:

HTTPS://CA.GSK.COM/MEDIA/535135/RELENZA.PDF#PAGE=28
(See dose recommendations below, as per Fraser Health Influenza Treatment/Prophylaxis Pre-Printed Orders - effective 10 September 2014)

Treatment for Influenza A or Influenza B*: Zanamivir* is administered as a powder by inhalation via a Diskhaler® that is provided with the medication—Two inhalations of 5 mg each (total of 10 mg) **TWICE** daily (Q12 H). No dosage adjustment is required for elderly residents or for impaired renal function.

> ***Cautions and Contraindications*****:** Zanamivir should not be used in **pregnancy,** especially during the first trimester, unless the possible benefit to the patient is thought to outweigh any possible risk to the foetus. It is not known if zanamivir is excreted in human breast milk. However, because many drugs are excreted in human milk, caution should be exercised when administered to a nursing mother.
>
> Difficulty with the inhalation method of administration is a limiting factor in the use of zanamivir in the elderly. Difficulty with inhalation is greatest for individuals who are not oriented to person, place or time and are totally dependent in activities of daily living. Individualized supervision and encouragement improve the likelihood of compliance. Generally, zanamivir is safe and well tolerated. However, zanamivir is **generally not recommended** in individuals with **severe underlying chronic pulmonary disease or severe asthma** because of the risk of serious bronchospasm and decline in respiratory function. If a decision is made to prescribe zanamivir for such an individual, this should be done only under conditions of careful monitoring of respiratory function.
>
> Individuals who use inhaled bronchodilators should be advised to do so before taking zanamivir.
>
> Zanamivir is contraindicated in persons with known hypersensitivity to zanamivir or the inhalation powder's components, including lactose, which contains milk protein. Rarely, allergic-like reactions, including facial and oropharyngeal edema, bronchospasm, laryngospasm, urticaria, serious skin rashes and anaphylaxis, have been reported. Zanamivir should be discontinued and immediate medical attention sought if these reactions occur.

Prophylaxis (Prevention) for Influenza A or Influenza B: Zanamivir is administered as a powder by inhalation via a Diskhaler® that is provided with the medication—Two inhalations of 5 mg each (total of 10 mg) **ONCE** daily. No dosage adjustment is required for elderly residents or for impaired renal function.

> ***Cautions and Contraindications***: as above for zanamivir for treatment

Tool 41d: *Neuraminidase Inhibitor Treatment and Prophylaxis Summary Table: Oseltamivir and Zanamivir* -- Influenza or highly suspicious of Influenza

Adults		Oseltamivir (Tamiflu®) PO (capsule or suspension)	Zanamivir (Relenza®) Inhalation 5 mg per blister
Treatment	Cr Clearance of > 60 mL/min	***Treatment:*** 75 mg PO TWICE DAILY for 5 days	2 inhalations (10 mg) TWICE DAILY for 5 days
Prophylaxis[a]	Cr Clearance of > 60 mL/min	***Prophylaxis:*** 75 mg PO DAILY	2 inhalations (10 mg) DAILY
Renal Impairment (Adult)	Cr Clearance of 31–60 mL/min	***Treatment:*** 75 mg PO DAILY for 5 days ***Prophylaxis:*** 30 mg PO DAILY	No dosage adjustment necessary No dosage adjustment necessary
	Cr Clearance of 10–30 mL/min	***Treatment:*** 30 mg PO DAILY for 5 days ***Prophylaxis:*** 30 mg PO every other day	No dosage adjustment necessary No dosage adjustment necessary
	Cr Clearance of less than 10 mL/min and **not** on dialysis	***Treatment:*** 75 mg PO x ONE dose ONLY ***Prophylaxis:*** Consult with Physician or Clinical Pharmacist. A dose of 30 mg (ONE dose ONLY) given at or near the start of the outbreak is an option	No dosage adjustment necessary No dosage adjustment necessary
	High-Flux Intermittent Haemodialysis	***Treatment:*** 75 mg PO x 1 as initial dose, followed by 75 mg PO after each dialysis session ***Prophylaxis:*** Consult with Physician or Clinical Pharmacist. An initial dose of 30 mg orally followed by 30 mg after alternate (every second) haemodialysis session for the duration of the outbreak is an option	No dosage adjustment necessary No dosage adjustment necessary
	Peritoneal Dialysis	***Treatment:*** 30 mg PO x 1 dose ***Prophylaxis:*** 30 mg PO x 1 as initial dose, followed by 30 mg PO once WEEKLY	No dosage adjustment necessary No dosage adjustment necessary
	Continuous renal replacement therapy (CRRT)	Consult with Clinical Pharmacist	No dosage adjustment necessary

[a]***Note*** *- Duration of prophylaxis is determined by the circumstances. Standard post-exposure prophylaxis is given* for 8 days if no new cases develop in outbreak area after 5 days of prophylaxis. If new cases develop between days 6 to 8 of prophylaxis, duration will be determined by Medical Health Officer*Pre-exposure prophylaxis generally continues for the duration of exposure. Pre-exposure prophylaxis is an off-label use for oseltamivir and an off-label use for zanamivir if used longer than 28 days.*

Tool 42a: *Problem Solving for Influenza A and/or Influenza B Outbreak (Suspect or Laboratory Confirmed)*

It takes 1-3 days from the time a person is infected with influenza virus until she/he starts showing signs and symptoms. Therefore, for an influenza outbreak in which anti-influenza medication is initiated promptly as early treatment for ill residents and prophylaxis for well residents, the number of new cases should drop right off after a few days of influenza outbreak control measures.

If new cases keep appearing 4 to 5 days after outbreak control measures were started, there may be a problem with the outbreak control.

OR

It is possible that there is more than one virus causing illness in your facility. Additional laboratory testing may detect other serious respiratory viruses or bacteria.

Due to COVID-19, all newly symptomatic staff or residents should be routinely swabbed for COVID-19 so that adequate infection prevention and control practices can be implemented if needed.

Things to watch out for in Influenza outbreaks

- More than one strain of influenza can be involved in an outbreak of influenza
- More than one respiratory virus can be involved in an outbreak of respiratory illness
- RSV and other viruses can cause serious illness that may be difficult or impossible to distinguish clinically from influenza, but does not respond to anti-influenza medications and usually will be identified by testing of nasal swab specimens, and
- People with influenza and other viral respiratory infections are more likely to get bacterial infections such as pneumococcal pneumonia

Problem solving if an outbreak isn't stopping: Questions to consider

- If influenza is involved in the outbreak, are ALL residents appropriately vaccinated against influenza AND taking anti-influenza medication (if, and as recommended)?
- If influenza is involved in the outbreak, are ALL staff members and volunteers and regular visitors either vaccinated against influenza OR on anti-influenza medication (if and as recommended)? *[For the purposes of influenza control, staff also includes people who work in the facility, but are not employees of the facility (e.g., physicians, nurse practitioners, contracted cleaning, kitchen or other staff, lab technicians, hairdressers, physiotherapists, podiatrists, activity coordinators and others)]*
- Is there any possibility the influenza virus causing the outbreak is resistant to the anti-influenza medication being used?
- Are potentially infectious people with cough moving about in the facility (e.g., ill staff members returning to work too soon; ill visitors coming into the facility)?
- Is any equipment being used for sick and well residents without being washed and disinfected in between?
- Is personal protective equipment not being changed when going from care of sick residents to care of well residents?
- Are there lapses in hand hygiene?
- Is it possible that another virus, in addition to influenza, is causing illness?
- If another virus is contributing to illness, is it one that requires a higher level disinfectant (e.g., a non-enveloped virus)?

Tool 42b: *Problem Solving for Non-Influenza Respiratory Illness Outbreak*

Since there are no anti-viral medications recommended for the common viral respiratory outbreaks experienced in Long Term Care facilities other than for influenza, it almost always takes longer for an outbreak caused by a virus other than influenza to come under control. Still, after 4 to 5 days under outbreak control measures, the number of new cases appearing should begin to drop off.

If there is an increase in the frequency of new cases, it is possible that another virus has been introduced and is causing illness in your facility. Additional laboratory testing may detect other serious respiratory viruses (including influenza) or perhaps a bacterial infection. **Especially if illness in the new cases is different, consult with your Public Health Contact** **(Tool 2a)** about further testing.
Due to COVID-19, all newly symptomatic staff or residents should be routinely swabbed for COVID-19 so that adequate infection prevention and control precautions can be implemented if needed.

Problem solving if an outbreak isn't stopping

- Are potentially infectious people with cough moving about in the facility (e.g., ill staff members returning to work too soon; ill visitors coming into the facility)?
- Are ill residents being appropriately isolated?
- Is any equipment being used for sick and well residents without being washed and disinfected in between?
- Is personal protective equipment not being changed properly when going from care of sick residents to care of well residents?
- Are there lapses in hand hygiene?
- Is it possible that the virus causing the outbreak needs a higher level disinfectant (e.g., a non-enveloped virus)?

Tool 43a: *Declaring an Influenza Outbreak OVER*

Influenza A and/or Influenza B Outbreak (Suspect or Laboratory Confirmed)

For a Seasonal Influenza A or B Outbreak, Antiviral Prophylaxis Will Generally Remain in Place Until Day 8, When Day 0 is the Day Prophylaxis Was Started

Other Outbreak Control Measures Will Remain in Place Until Day 10, When the Outbreak can be Declared Over

RATIONALE: A person with Influenza usually sheds virus for 3-5 days.
If this virus infects someone else, it usually takes 1 to 3 days to show symptoms,
3 to 5 days shedding + 1 to 3 days for a newly infected person to show symptoms
= 4 to 8 days*

With the use of antiviral prophylaxis as part of Influenza Outbreak management, it is common to see new cases of influenza up to 5 days after prophylaxis has been started. However, it is unusual to see new cases more than 5 full days after prophylaxis has been started. Consequently antiviral prophylaxis can generally be stopped on Day 8 (when Day 0 is the day it was started), and the outbreak can be declared over on Day 10. All new symptomatic cases should be swabbed to determine whether they are true influenza cases, whether there is resistance to the antivirals, or whether a non-influenza virus is also circulating. Consult with your Public Health Contact for advice about stopping the antiviral prophylaxis and declaring the outbreak over **(Tool 2a).**

Day outbreak declared	Day 0 Antiviral prophylaxis started	Days 1-5 Expect new influenza cases	Days 6-7 Expect no new influenza cases – if cases arise swab and consult	Day 8 Stop antiviral prophylaxis	Day 10 Stop other outbreak control measures OUTBREAK DECLARED OVER	

The **Public Health Contact** **(Tool 2a),** via the Respiratory Illness Outbreak (RION) notification e-mail, will inform Fraser Health Long Term Care, Assisted Living and Specialized Populations (RCALSP) Contracts and Services and Community Care Facility Licensing that the Influenza Outbreak has been declared over and that Outbreak Control Measures have been terminated.

Tool 43b: *Declaring a Non-Influenza Respiratory Illness Outbreak Over*

Consider the outbreak over by the 8th to 14th day after onset of illness in the most recent resident case OR 3 days (72 hours) after the last time a staff member with symptoms worked in the facility,(whichever happens last)

This may vary depending on knowledge of the virus or viruses causing the outbreak **(Tool 29)**.

Without the help of an anti-influenza agent like that used for an influenza outbreak, it is difficult to specify an exact case-free interval to be used to call the outbreak over. It will not be unusual to see sporadic cases for some period of time after the outbreak seems to be settling.

A Respiratory Illness Outbreak (RION) notification e-mail is **NOT** used for non-influenza outbreaks.

Please Note: COVID-19 outbreak will generally be declared over after two incubation periods (28 days)

Tool 44: Letter to pharmacies regarding influenza antiviral orders

Date: _____

Dear Pharmacist,

As you may know, Long Term Care facilities within the Fraser Health region follow the Viral Respiratory Illness Outbreak Protocol and Toolkit when managing respiratory outbreaks. This protocol includes a preprinted order for influenza antiviral prophylaxis or treatment for influenza-confirmed outbreaks and those which are highly suspected to be caused by influenza (Tool 3).

Influenza antivirals should be initiated when an influenza outbreak or an outbreak highly suspected to be influenza is declared by Public Health. During periods of peak influenza activity, Public Health may presumptively initiate antivirals recognizing that there is a high pre-test probability that influenza is the causative virus. In these circumstances, antivirals will be discontinued once it is confirmed that influenza is not the causative organism.

There have been some concerns in the past, expressed by pharmacists, to initiate influenza antivirals without the receipt of a respiratory illness outbreak notification (RION) from the facility. However, this can introduce delays in initiating antivirals promptly which can lead to further transmission of influenza. To avoid delays in starting antivirals as soon as possible, facilities may communicate outbreak information to the pharmacy verbally without a RION. **Please initiate antivirals without a RION in these cases.** There is no requirement to receive the emailed RION prior to dispensing antivirals to a facility.

The Viral Respiratory Illness Outbreak Protocol and Toolkit can be found on the Fraser Health Website by searching “Respiratory Outbreaks” on fraserhealth.ca.

If you have any questions please contact the Communicable Disease Public Health Duty Nurse at 604-507-5471.

Thank you,