Section 9
Outbreaks

Government of Saskatchewan

Guide for Completing the Outbreak Notification and Summary Report

The outbreak notification form is available online at https://www.ehealthsask.ca/services/manuals/Pages/CDCManual.aspx**, Sect. 9-55**

Submit outbreak notification forms by e-mail as **word attachments** (do not copy and paste into the body of an e-mail) to the **cdc@health.gov.sk.ca.** This e-mail address appears in the Global e-mail directory as "CDC Ministry of Health HE0". Submit Outbreak Notification Forms as follows:

- **Initial outbreak notification** for any suspected and confirmed communicable disease outbreak (including non-Category 1 and 2 CDs) to the Saskatchewan Ministry of Health immediately.
- **Update notification** to complete all yellow highlighted data fields within seven days.
- **Updated notification** indicating the outbreak has been declared over within 24 hours of such declaration.
- **Summary report** of the outbreak within 30 days following completion of the investigation (Disease Control Regs, Sect.20).

If information is missing or incorrect on the notification form, it will be returned to the person completing the form for validation or completion.

Note: An email to alert the Ministry does not replace the initial outbreak notification form.

NOTE: The Outbreak Report form is designed to be completed electronically only.

The date format for all sections of this form is alphanumeric:

DD/*3-letter abbreviation for month* /YYYY [e.g. 12/Oct/2018].

When completing the check boxes you must first manually delete any unwanted entry. A changed entry will NOT automatically delete the first entry.

Subject line of e-mail: Please include the outbreak number and type of outbreak in the Subject line.

Phases and timelines for completing the form:

Phase 1 – Initial Notification. Yellow highlighted data fields are to be completed, to the extent possible, for the initial notification reports. Initial notifications should be submitted within 24 hours of local public health being notified of an outbreak.

Phase 2 – Updating the notification. Complete any information not available at the time of the Initial notification. Please submit an Update notification as soon as possible or within a week.

Phase 3 – Declaring the outbreak over. Complete the date the outbreak is declared over and submit to the Ministry of Health within 24 hours of the outbreak being declared over.

Phase 4 – Final Summary report. Complete all data fields including **aggregate** numbers, epi curve and a summary of the investigation and interventions. Submit within 30 days following completion of the outbreak investigation

Definitions and procedures by section number on the form:

Section 1.

Initial notification: Check off the status of the outbreak: suspected or confirmed. Enter the date it is emailed to the Ministry.

- **Suspected outbreak** – Public health has begun an investigation to determine if an outbreak is occurring based on early indications. The Date Declared field should not be entered for suspected outbreaks.
- **Confirmed outbreak** – meets the confirmed outbreak definition. Complete the Date Declared field and two or more ill people at time the outbreak was declared.

Update notification: Refer to the definitions above. If upon investigation, the suspected outbreak was Found NOT to be an outbreak. Complete any of the remaining yellow highlighted data fields for confirmed outbreaks only. Enter the date it is emailed to the Ministry.

Outbreak Declared Over: Select the check box and complete the date in 6e to communicate the status of the outbreak to the Ministry.

Final Summary: Select the Outbreak Final Summary, enter the date and email it within 30 days following completion of the outbreak investigation. The final summary date is the date it is emailed to the Ministry.

NOTE: The outbreak notification is completed in a progressive fashion. The Final Summary should retain the Initial, Update, Outbreak Declared Over and Final Summary dates.

Instructions for reporting COVID suspect and confirmed outbreak notifications:
Please copy the Ministry COVID Response Unit (CRU@health.gov.sk.ca) when reporting COVID outbreaks to CDC@health.gov.sk.ca. This applies to phases 1, 2 and 3 of the notification process.

Section 2.

Identify the former health region where the outbreak has occurred.

Section 3.

Public health assigns the outbreak number which may take some coordination among outbreak managers within the former health region. The format of the outbreak numbering system should be assigned as follows:

<former health region <3-4 letter acronym> - <four-digit calendar year> - <three digit sequential number beginning at 001>. Example: SCHR-2018-001

The number is sequential within the calendar year.

This number also must be applied to all outbreak specimens being submitted to the Roy Romanow Provincial Laboratory (RRPL) for testing. Inform RRPL of the outbreak and the assigned specimen outbreak number at RRPL.Outbreak@saskhealthauthority.ca to ensure the specimens are prioritized for processing.

Former Health Region acronyms are:

Sun Country	SCHR
Five Hills	FHHR
Cypress	CHR
Regina-Qu'Appelle	RQHR
Sunrise	SHR
Saskatoon	SKHR
Heartland	HHR
Kelsey Trail	KTHR
Prince Albert Parkland	PAHR
Prairie North	PNHR
Mamawetan Churchill River	MCHR
Keewatin-Yathe	KYHR
Athabasca Health Authority	AHA
First Nations and Inuit Health	FNIH
Northern Inter-Tribal Health Authority	NITH

Do not reuse an outbreak number that has been assigned to an investigation, even if the outbreak notification form has not been submitted to the Ministry of Health.

Section 4.

Type of outbreak: Identify the type of outbreak being reported according to the categorization of diseases shown on the form. Categorize invasive group A Streptococcal disease and Legionella outbreaks under Respiratory outbreaks. Healthcare facility outbreaks may also include antimicrobial resistant organisms, *C. difficile* or other organisms even though individual cases are no longer reportable to the Ministry

Section 5.

There are three categories of outbreaks for which this form can be used:

5a) Institutional outbreaks – select the type of health care facility or community-based institution from the checklist. Information related to healthcare facilities outbreaks is shared with the Provincial Infection Prevention and Control Coordinators.

5b) Community outbreak – the type is broadly defined. Includes any type of outbreak that affects more than a household but is not related to a public eating establishment or an institution as defined above. Community outbreaks are usually identified when the number of cases of an infection exceeds what is normally seen in a given period of time. The key is ongoing surveillance to know what "normal" is. Examples of a community outbreak: group exposed to an organism while on a tour, a wedding supper, scattered cases related to a contaminated commercial food product, respiratory infection circulating in the community, meningococcal cases, pertussis cases in excess of expected numbers.

5c) Public eating establishment outbreaks – includes commercial sites where food or beverages are served for human consumption, i.e. those inspected by public health.

Section 6.

Outbreak Definition

Symptoms and outbreak definitions apply to any of the above three kinds of outbreaks. The outbreak definition typically comprises the three elements of investigation, person, place and time: persons affected, symptoms, location, time frame and any other circumstances associating cases with a particular outbreak. Ongoing changes to the case definition may be necessary as the management and investigation of the outbreak proceed. Please enter the initial outbreak definition in the initial notification submission and the <u>final</u> outbreak definition in the Summary report.

Examples of outbreak definitions:

<u>Institution</u>: Residents and staff of Prairie Lily Nursing Home with onset on or after March 12, 2014 of a new or worsening cough, fever > 38° C, or a temperature that is abnormally elevated for that individual, and additional symptoms including myalgia, runny nose, sore throat, and headache.

<u>Community</u>: Guests attending the J.R. Smith family reunion on May 24, 2016 with lab confirmation of *Salmonella Heidelberg* in stool specimens or exhibiting symptoms of diarrhea, nausea and vomiting within 36 hours of attending the reunion.

<u>Eating establishment</u>: Patrons of Joe's Atlantic Restaurant at Maple Beach, SK consuming the seafood salad between July 1 and July 5, 2015 with symptoms including numbing around the lips, swelling of the tongue or difficulty breathing.

Date table

6a) Onset date of index case: the index case is the first case meeting the case definition.

6b) Onset date of last case: the date of the last case meeting the case definition.

6. Duration of outbreak: the number of days between the Onset Date of the index case and the Onset Date of the last case meeting the outbreak definition (6b minus 6a).

6c) Date reported to the health region: the date the institution, eating establishment or community source informed the health region of the outbreak.

6d) Date outbreak declared: this date is usually defined by the medical health officer or designate when sufficient data is observed to conclude that an outbreak has started. This data field is left blank for suspect outbreaks and completed when an outbreak is confirmed.

6e) Date declared over: this date is usually defined by the medical health officer or designate stating that no further cases are likely to occur given the length of time since the onset of symptoms for the last identified case meeting the outbreak definition. This data field should be completed and the form submitted to the Ministry of Health immediately (within 24 hours) upon declaring an outbreak over. Do not wait for the Final Summary report to be submitted. Check off the Outbreak Declared Over box in Section 1 of the form.

6f) Date facility closed: the date public health declared the facility closed to visitors or new admissions.

6g) Date facility opened: the date public health declared the facility re-opened to visitors or new admissions.

6. Duration of facility closure: the number of days between the Date facility closed and the Date facility opened (6g minus 6f).

Section 7. Laboratory findings

If the lab results are unknown when making an INITIAL notification, leave those fields and checkboxes blank. Submit this information as part of an UPDATE notification or as soon as the lab result is received, typically within a week.

7a) Primary organism – the biological agent responsible for the majority of the cases. Characterization includes serotype, subtype, phage type, pulse field gel electrophoresis (PFGE), PCR designation, etc. Organism characterization information may not be known until the investigation is well under way. Include it in the Summary Report.

7b) Secondary organism – additional biological agent(s) identified in lab specimens but often in fewer numbers than those infected by the primary organism. Cases may be co-infected with both organisms or two different organisms may be circulating separately but concurrently among cases comprising the same outbreak.

Concurrent Enteric and Respiratory outbreaks should be notified separately.

7c) Check **'No organism(s) identified'** if the lab result is negative.

7d) Check '**No specimens submitted'** if no samples were submitted for lab diagnosis.

Section 8. Primary risk for acquiring the infection:

This will be the professional judgment of those participating in the investigation.

NOTE: Please check only the primary risk for the majority of the cases.

Section 9. Numerical summary of your case investigation:

Enter numbers under the column(s) headings that best describe the role of the case(s) in the outbreak.

Patients/residents/students/family – relates to institutional outbreaks. Family members will typically be cases secondary to those directly affected by the outbreak (e.g. parents of daycare children or parents of students in a university dormitory).

Direct care staff – those with direct interaction with the cases, includes daycare providers, group home supervisors or correctional officers.

Food prep/service staff – includes those employed in institutions, public eating establishments and in community event outbreaks (caterers).

Community members – the general public not included in the above categories.

Total – total of the numbers in the row cells. **This column must be completed.**

9a) # ill (i.e. initial event or setting) – those meeting the description of cases in the outbreak definition, e.g. the number of sick residents on south wing of a long term care facility. Includes those without lab confirmation or those with negative/indeterminant lab results who otherwise meet the outbreak definition. The **initial notification** must show the number of suspected ill persons or two or more ill persons if an outbreak has been confirmed. This data field should be updated to reflect the number of ill at the Update and Final phases in the notification process.

9b) # at risk – the total of people who potentially could be infected as per the outbreak definition (the count includes both the ill and well people), e.g. all the residents on south wing of a long term care facility. The number At Risk comprises people in the area the outbreak is affecting. It could be confined to a wing/ward or it may be the whole institution. In community outbreaks it would include all the people attending a wedding or bus trip. For eating establishment outbreaks the number at risk is often unknown or is an estimated figure.

9c) attack rate (%) – should be calculated for each population category (column titles) as well as the total. Divide the number in cell a) "# ill" by the number in cell b) "# at risk" and multiple the quotient by 100.

9d) # of ill via subsequent transmission – the number of secondary cases, that is, those that acquired their infection through transmission from a person directly involved in an outbreak in an institutional setting, community event or eating at the food establishment. An example is a household member who becomes ill following exposure to an infected health care worker from the facility or an ill service provider in a restaurant.

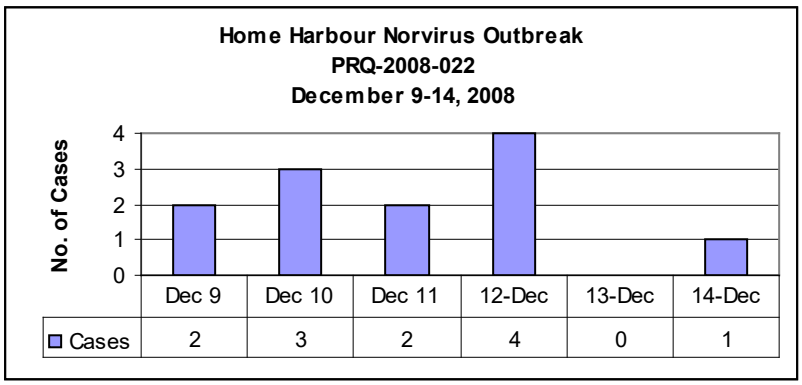
9e) # of hospitalized cases meeting outbreak definition – number of people sufficiently ill because of the infection or complications of the organism to warrant hospitalization.

9f) # of case fatalities related to outbreak – infection must be the primary or contributing cause of the patient(s)' death.

9g) # cases with positive lab test – count of those with lab confirmation of the organism. For confirmed outbreaks, this number must meet the number of lab-confirmed cases required by the definition for the disease being reported.

Section 10. Epidemiological Curve (for the Summary report):

An epi curve shows the number of cases meeting the outbreak definition according to a specified time period, usually days, but it also can be hours or weeks, and is usually based on time of onset of symptoms. Depict the number of cases (display by appropriate category if appropriate – sex, age, occupation, role in outbreak) according to the appropriate time period(s). The X-axis should show the appropriate units of time (days, hours). The Y-axis shows the number of cases for each unit of time along the X-axis. For example, 2 cases on December 9, 3 cases on December 10, 2 cases on Dec 11 and so on. December 9, 10, 11, 12, 13, 14 are units of time along the X-axis. You may wish to use two bars per time unit to show the number of residents versus number of staff.



Labels and titles should adequately describe the information in the epi curve. Please show the data as a table within the chart. Copy the chart into Section 12. To do this in Excel, right click on the chart. Choose Copy. Right click in the Word document. Paste as a Picture file (Enhanced) into the Word document. Re-size if needed.

Section 11. Investigative findings

Comprises a brief description of the investigative results including details that led to the investigation, the investigation process and the findings that led to the declaration of the outbreak or conclusion that this was not an outbreak. Additional information in emails by the Medical Health Officer(s) to the Ministry must also be included.

Section 12. Control measures implemented

A brief description of the control measures to contain the outbreak or prevent an outbreak. Progressive notes should be dated. Include information that would be instructive for managing similar outbreaks in the future. The final summary can be the same report prepared for the health region executive. Copy and paste it into Section 12 of the form or simply type the report in the space provided.

Section 13. Review and approval before submission

Before submitting the initial and final notifications, the information should be reviewed and authorized by the Medical Health Officer declaring the outbreak or reviewed and authorized by their designate.

Section 14. Reported by

The person preparing the report, job designation and their contact phone number.

Revisions

Date	Change
September 30, 2020	• Added suspect and confirmed as outbreak classifications. • Added submission of form within 24 hours of outbreak being declared over. • Removed ESBL and direct contact as type of outbreaks being reported. • Added group homes to community based institutions. • Changed summary of cases table to remove the number with complications and added subsequent transmission to depict the expanded chains of transmission. • Separated investigative findings and control measures. • Added MHO reviewed date as a quality assurance step in outbreak notification process.
November 2012	• Original draft.

Please see the following pages for the Outbreak Notification Report and Summary Form.

Saskatchewan

Sep 2020

OUTBREAK NOTIFICATION REPORT AND SUMMARY

Complete yellow highlighted areas for **Initial** & **Updated Notifications.** Complete green highlighted area for **Declared Over Date**

1. This is a notification of an: (check all appropriate boxes and complete all dates)

☐ **Initial** report ☐ **Suspected** or ☐ **Confirmed** Date (dd/mmm/yyyy): _____

☐ **Updated** report ☐ **Confirmed** or ☐ **Found NOT to be an outbreak** Date (dd/mmm/yyyy): _____

☐ Outbreak **Declared Over (include date in Section 6. e) below)**

☐ Outbreak **Final Summary** report Date (dd/mmm/yyyy): _____

2. Former Health Region: _____

3. Former Health Region Outbreak #: _____

4. Type of outbreak being reported: Check **ONE** ☐ Enteric ☐ Respiratory ☐ Vaccine preventable
☐ MRSA ☐ VRE ☐ *C. difficile* ☐ other, *specify:* _____

5a) Complete this section if this is an Institutional outbreak:

Type of Institution: Check **ONE**:

Healthcare Facility:		**Community-based Institution:**	
☐ Special Care Home		☐ Day Care Setting	☐ Retirement Home/Complex
☐ Integrated Facility		☐ School	☐ Personal Care Home
☐ Psychiatric Care Facility		☐ Post Secondary	☐ Home for the Developmentally Challenged
☐ Acute Care Hospital		☐ Workplace	☐ Correctional Centre
		☐ Group Home (e.g. social services)	

OR

Name of institution: _____

Town: _____

Floor(s), Unit(s) or Classroom(s) affected: _____

5b) Complete this section if this is a Community outbreak (not a public eating establishment):

Name of community: _____

Describe the setting (e.g. ceremony, recreational): _____

5c) Complete this section if this is a Public Eating Establishment outbreak:

Type of establishment: Check **ONE**: ☐ Fast-food ☐ Dine-in restaurant ☐ Coffee shop ☐ Lounge

Name of eating establishment: _____

Town: _____

Please complete applicable information below for the type of outbreak identified above.

6. Symptoms:		
Outbreak Definition:		
a) Onset date of index case (dd/mmm/yyyy):	**c) Date outbreak reported to former Health Region** (dd/mmm/yyyy):	**f) Date facility closed if different than date outbreak declared** (dd/mmm/yyyy):
b) Onset date of last case (dd/mmm/yyyy):	**d) Date Outbreak Declared** (dd/mmm/yyyy):	**g) Date facility opened if different than date declared over** (dd/mmm/yyyy):
Duration of outbreak (days) (b) minus (a):	**e) Date Outbreak Declared Over** (dd/mmm/yyyy):	**Duration of facility closure (days) (g) minus (f):**

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7. Laboratory findings: (submit via an Updated notification report as soon as organism is known)

a) ☐ Primary organism(s) identified including characterization: _____

b) ☐ Secondary organism(s) identified including characterization: _____

c) ☐ No organism(s) identified **(please check if applicable)**

d) ☐ No specimens submitted **(please check if applicable)**

8. Primary risk exposure for acquisition: Check **ONE**:

- ☐ Food service
- ☐ Commercially acquired pets
- ☐ Private water supply
- ☐ Public water supply
- ☐ Untreated surface water (e.g. lake)
- ☐ Treated recreational water (e.g. pool)
- ☐ Person to person transmission
- ☐ Illicit drug use
- ☐ Food product *(specify)*: _____
- ☐ Commercial product *(specify)*: _____
- ☐ Other *(specify)*: _____
- ☐ Unknown

9. Summary of cases	Patients/Residents /Students/Family	Direct Care Staff	Food Prep/ Service Staff	Community Members	Total (please complete all for Final Summary report)
a) # ill (i.e. initial event or setting					
b) # at risk					
c) attack rate (%): # ill/# at risk X 100					
d) # of ill via subsequent transmission					
e) # hospitalized cases meeting outbreak definition					
f) # case fatalities related to outbreak					
g) # cases with positive lab tests					

10. Insert the Epi Curve chart here. Please include the data table within the chart. To do this, in Excel click on the chart / go to the Menu bar / choose Chart / click Chart Options / click Data Table tab / check off Show data table box and click OK. Next go back to Menu Bar and choose Edit / click Copy. Return to the Outbreak Notification form and place cursor at arrow below, go to Menu Bar, choose Edit / click Paste.

→

11. Investigative findings (Type text here):

12. Control Measures (Type or copy and paste text here):

13. MHO (or designate) review date ☐ Initial report (dd/mmm/yyyy): _____
☐ Final Summary report (dd/mmm/yyyy): _____

14. Reported by: _____
Phone: _____
Job Designation: _____

PLEASE EMAIL TO THE MINISTRY OF HEALTH AT cdc@health.gov.sk.ca

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Protocol – Introduction

Preamble

Outbreaks are common in long term care (LTC) facilities.[1] The following generic protocol provides general information regarding outbreaks in LTC and integrated facilities. These defined principles can be applied to a variety of settings. Regional and local infection control manuals contain supplementary information that should be referred to.

Protocols for the management of non-influenza respiratory and enteric outbreaks are included in Sections 9-40 and 9-50. Please refer to these sections for specific guidelines.

General Measures

An emphasis on health promotion and outbreak prevention from the traditional outbreak control is an important shift that needs to take place. Staff education and communication are essential to the success of infection control measures and outbreak management. Institutions should:

- Develop active, formal orientation and ongoing education programs for all staff.
- Ensure that all staff receive education in infection prevention and control (IPC) practices.
- Measure the effectiveness of their education program.
- Educate residents/clients, health care workers, and the public about their personal responsibility for disease prevention.

Long term care (LTC) facilities should also establish links with their regional and local IPC personnel[2] and Public Health to ensure the communication of roles and responsibilities prior to, and during outbreaks, are clear. To assist with this, key players should understand their roles and the roles of others.

[1] For the purpose of this document long term care facilities is inclusive of special care homes and similar care facilities.

[2] IPC Personnel can include onsite staff that specialize in IPC, regional IPC Practitioners, and in rare cases Public Health provides IPC services. Each facility should maintain the name and contact information of the appropriate IPC personnel to contact for prevention and control protocols.

Pre-Season Planning and Prevention

Outbreaks can occur at any time throughout the year but they occur more frequently throughout the winter months. Annually, ideally before outbreak season, all facilities should:

- Review laboratory procedures and ensure appropriate laboratory supplies are available in sufficient quantities. For additional information, refer to Section 9-43 Generic Respiratory – Investigation and Section 9-53 Generic Enteric Protocol – Investigation.
- Assemble other material and supplies (e.g., personal protective equipment, cleaning and hand hygiene supplies) required for outbreak management and ensure procedures are in place for rapidly obtaining additional supplies in sufficient quantities when an outbreak occurs.
- Create or update a list of key people and their contact information for notification purposes in the event of an outbreak in a facility. This may include members of the outbreak team, as well as a list of individuals or agencies that may be contacted for supplies or services.

Additionally, the Ontario Ministry of Health and Long-Term Care (2006) indicates the best practice in surveillance and IPC for infectious illness consists of the following:

1. Immunization – where available/applicable.
2. Case Finding/Surveillance.
3. Preventive Practices.
4. Reporting.
5. Evaluation.

Case Finding/Surveillance

The goals of ongoing surveillance include: identify early signs of infectious illnesses (in the community and within facilities), monitor for possible clusters of infections so outbreak measures can be implemented; prevent outbreaks of infectious diseases; protect resident/patient and staff health; and identify a potential outbreak in its early stages.

Early identification of cases can assist in abating an outbreak. All health care settings should ensure that they have the ability to identify cases of infectious illness and to detect clusters or outbreaks of infectious illness. A key component of case identification is also ensuring that case status is communicated to nursing staff, physicians, and infection control. *Public health must be notified when the etiology of the illness is a reportable disease or when there is an outbreak or cluster in any health care facility*.

Preventive Practices

IPC practices are designed to protect clients, health care workers and the public from exposures to infectious diseases, and reduce the risk of transmission in health care settings. Regional infection control committees provide expertise for determining IPC guidelines for LTC facilities. There is no such thing as "zero risk" for clients, staff or visitors; however, there are steps that should be taken to significantly reduce the risk. Details of the specific measures are included under Section 9-32 Generic Protocol – Prevention and Control Measures.

Reporting

Communication is essential during all phases of surveillance activities and throughout an outbreak. Reporting outbreaks early and in a consistent manner ensures that health care facilities and public health authorities have the information they need to prevent and control the spread of infectious respiratory and enteric illnesses. There are requirements for communication and reporting for both internal and external agencies. For additional information see Outbreak Management Team for Facility-Based Outbreaks - Membership Roles and Expectations on page 6 below.

Reports of circulating enteric or infectious respiratory illness in the community should be communicated by Public Health to facilities so they may heighten surveillance within the facility.

Evaluation

Evaluation is an important aspect of communicable disease and IPC programs. The management of outbreaks should be regularly evaluated to determine what went well, what were the challenges, and are there alternatives to managing the outbreak that may have been more successful. A lot of useful information is gained through evaluation and should be used as a learning opportunity during outbreak debriefing and be incorporated into the work process to enhance outbreak prevention and control measures.

In addition, outbreak management teams are recognized to play a major role in outbreak response.

Outbreak Management Team for Facility-Based Outbreaks

An outbreak management team should be established within the facility and health region. This team ensures coordination and communication to assist in containing an existing outbreak and to reduce the risk of further transmission of the infection to clients, residents, staff and the community.

Role of the Team

- To ensure communication to family, staff and community is timely and accurate.
- To ensure that Standard/Additional Precautions are in place, are understood and adhered to.
- To develop strategies to handle specific facility situational issues or concerns that may arise during an outbreak.
- To evaluate the effectiveness of the actions taken.
- To identify needs and communicate this to the regional corporate office.
- To submit a final report to the Regional Infection Control Committee once the outbreak is deemed over.
- To ensure that the Ministry of Health has received the required reports (initial and final) of the outbreak.

Suggested Membership of the Team

Facility:

- Facility Director of Care/Manager or designate
- Nursing staff of the facility

Regional:

- Medical Health Officer (MHO)
- Employee Health
- IPC personnel
- Communicable Disease Coordinator
- Public Health staff, such as the Senior Public Health Inspector (PHI), Public Health Nurse (PHN), or a representative of Environmental Health Team
- Director of Acute/Long Term Care
- Director of Environmental Services or designate
- Director of Food and Nutrition Services or designate
- Director of Building Services and Grounds or designate
- Manager of Administrative Services
- Corporate Communications Officer
- Staff Scheduling Coordinator
- Client Placement Coordinator

Other key players:

- Laboratory
- Occupational Health
- Human Resources
- Other – Pharmacy, Security, Laundry, Materials Management, Housekeeping, Dietary, Medical staff, Client Representative, Scheduling

Membership Roles and Expectations

Facility Director of Care/Manager or designate:

- Inform the MHO and the appropriate IPC personnel of the cluster of symptoms.
- Reinforce standard precautions and implement additional precautions as dictated by the situation.
- Once the outbreak is declared, post appropriate signage throughout the building as dictated by type of outbreak.
- Communicate to Directors that there is an outbreak and request names of those who will represent the departments on the Outbreak Management Committee.
- Maintain the daily line listing and ensure the updated list is sent to public health services.
- Ensure communication process is in place for nursing staff, families, physicians and referring-in sites.
- Notify Human Resources of required exclusion period staff members are required to wait before working in other health-care facilities/settings.
- Notify staff of outbreak and the period of exclusion recommended before working in other health-care facilities/settings.
- Ensure adequate supplies are on hand and are replenished as required (e.g. hand hygiene supplies, personal protective equipment, cleaning supplies, etc).
- Manage applicable visitor restrictions over the duration of the outbreak.

MHO/Designate:

- Declare that there is an outbreak.

- Create Outbreak Case Definition in collaboration with IPC and designated facility staff.[3]
- Follow regional policy on notifying regional administration staff of outbreak.
- Participate in the outbreak team meetings as per regional policy.
- Collaboration with regional Communications department to create a communication plan for media if necessary (radio/newspapers, public announcements, format, frequency etc.).
- Make the necessary recommendations for specific interventions required to mitigate the outbreak.
- Make staff-specific recommendations for chemoprophylaxis or immunization and cohorting.
- Institute standing orders for resident testing/chemoprophylaxis or immunization as necessary.
- Order facility closure if necessary.
- Declare the outbreak over.

Infection Prevention and Control and Employee Health:

- To ensure preventative, routine and appropriate additional precautions are in place and understood. The policy that is in place should have been reviewed prior to outbreak season.
- Ensure staff are aware of staff restrictions advised by the MHO.
- Advise staff of facility closure and exclusion period requirements advised by the MHO.
- To be a resource for outbreak team on outbreak control processes.

[3] The MHO and IPC personnel will develop a specific case definition for each outbreak. Case definitions usually include these four components:

1. Clinical information about the disease,
2. Characteristics about the people who are affected,
3. Information about the location or place, and
4. Time period for the outbreak.

Case definitions and the procedures to respond may be revised during an outbreak as laboratory information and clinical information becomes available.

Senior Management:

- Ensure that the staff understand and adhere to the routine and additional precautions that are put into place.
- Communicate to staff the strategies developed to ensure containment and evaluate effectiveness of these strategies.

Communications Officer:

- In collaboration with the MHO and the Ministry of Health, develop a communication plan for outbreak if necessary (radio/newspapers, public announcements, format, frequency etc.).
- Participate in the outbreak team meetings as required or as per regional policy.

Director of Acute/Long Term Care:

- Participate in daily committee meetings.
- Liaise with other directors in institutional and emergency care.
- Assist if additional resources are required.
- Provide updates to the Chief Executive Officer (CEO) as per regional protocol.

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Protocol – Prevention and Control

The fundamentals of Prevention and Control involve taking appropriate precautions. There are two levels of precautions: "Routine Practices/Standard Precautions" and "Additional Precautions".

A key to the success of these precautions in infection prevention and control is staff training. All staff must receive training in the principles of infection prevention and control (IPC) and in their role of ensuring residents/clients, themselves, and other staff are not placed at risk because of improper use of precautions. This knowledge is vital in understanding when additional precautions are necessary and the consequences of not adhering to the principles of IPC.

All housekeeping staff must be trained appropriately and made aware of the important role they play in the prevention of healthcare associated infections. New staff should be given a suitable amount of time to review regional policies and procedures for cleaning. Special training in IPC policies and protocols as well as Occupational Health and Safety standards, such as Workplace Hazardous Materials Information System (WHMIS) is vital. Training for new staff should involve hands-on training by initially shadowing staff members and then performing the cleaning duties under strict supervision.

Supervisors must play an active role in staff training and compliance as well as in the periodic review of policies. Equally important is the periodic evaluation and monitoring of staff in adhering to IPC protocols.

Routine Practices

Routine practices are the IPC protocols for use in the routine/daily care of all residents/clients at all times. Principles of routine practices include:

- Protecting residents/clients and health care workers (HCWs) and everyone in the long term care (LTC) facility;
- Considering <u>all</u> blood, body fluids, secretions, excretions, drainage, and tissues of <u>all</u> residents/clients potentially infective;
- Conducting a Point of Care Risk Assessment to determine the precautions required when providing care.

Routine practices include:

1. Hand hygiene
2. Point of Care Risk Assessment (PCRA)
3. Use of personal protective equipment (PPE) - (gloves, mask/respiratory/eye protection, face shields and gowns) when splashes or sprays of blood, body fluids, secretions, or excretions are possible
4. Respiratory hygiene (cough etiquette)
5. Environmental Controls - cleaning of resident/client care equipment, physical environment and soiled linen and patient placement/accommodation

Hand Hygiene

Hand hygiene is the most important measure in preventing the transmission of infections. Hand hygiene is the responsibility of all individuals involved in health care.

- Facilities must provide education, and reinforce strict adherence to hand washing by staff, residents/clients and visitors.
- Hand hygiene must be part of every HCW's orientation upon hiring.

Hand hygiene includes washing hands with warm water and approved non-antimicrobial soap from a dispenser for 15 seconds, and drying with a disposable towel. If hands are not visibly soiled, an alcohol-based hand rub can be used.

- Hand washing with soap and water must be performed when hands are visibly soiled and when gloves are removed.
- Alcohol-based hand rub/gel (with 60-90% alcohol content) can be used for decontaminating hands when hands are not visibly soiled.

Ideal locations for hand wash stations (alcohol-based hand rub/gel) include the entrance to a facility and on each unit/wing/ward with posted instructions on when and how to use the product. When using the resident's/client's sink, care must be taken to avoid contaminating hands from the environment after hand washing.

Hand Hygiene Technique

Refer to the facility/regional Infection Prevention and Control Manual for hand hygiene procedures.

When to perform hand hygiene:
Staff

- When entering and leaving the facility;
- Before and after any direct contact with a patient or their immediate environment and before contact with the next resident/client;
- Between procedures on the same resident/client where soiling of hands is likely;
- After a glove tear or suspected glove leak;
- After removing gloves;
- Before performing invasive procedures;
- Before preparing, handling, serving or eating food;
- Before feeding resident/client;
- Before preparing and administering medications;
- When hands are visibly soiled;
- After touching equipment and articles known or considered likely to be contaminated with blood, body fluids, secretions or excretions;
- After providing environmental services;
- After personal use of toilet, wiping nose, eating, make up application, smoking, coughing or sneezing, etc.

Resident/Client

- Before and after eating;
- After toileting;
- When hands are visibly soiled;
- Before going to another area within or outside the facility.

When resident/client hygiene is poor, staff should assist them with this task.

Visitors

- When entering and leaving the facility;
- When entering and leaving the unit/wing/ward;
- Before and after visiting a resident/client.

Proper instruction on hand washing should be provided to residents/clients, family members, and visitors.

Point of Care Risk Assessment

Prior to any resident/client interaction, all staff have a responsibility to always assess the infectious risk posed to themselves and others (including residents/clients, staff and visitors). A PCRA[1] is based on professional judgement about the clinical situation, along with the hierarchy of controls (engineering, administrative and PPE).

The PCRA is an activity performed by the HCW **before every patient interaction**, to:

- Evaluate the likelihood of exposure to the causative organism (suspected or known):

    1. From a specific interaction (e.g., performing clinical procedures, non-clinical interaction, direct face-to-face interaction, etc.).
    2. With a specific resident/client (e.g., patients not capable of self care/ hand hygiene, have poor-compliance with respiratory hygiene, etc.).
    3. In a specific environment (e.g., single room, bathtub, etc.).
    4. Under available conditions (e.g., minimal air exchanges area, etc.).

The final step of the PCRA is to choose the appropriate actions and/or PPE needed to minimize the risk of exposure.

[1] For more information on PCRA visit the Public Health Agency of Canada website

Personal Protective Equipment

Gloves

- Gloves provide an additional protective barrier between the hands and blood, body fluids, secretions, excretions and mucous membranes.
- Wear clean non-sterile gloves for contact with blood, body fluids, non-intact skin, mucous membranes and contaminated equipment.
- Must be changed after each resident/client contact, procedure or when moving from dirty to a clean area.
- Wear gloves when HCWs' skin is not intact and lesion can not be completely protected.
- Gloves should be used as an additional measure, not as a substitute for hand hygiene. Perform hand hygiene before and after glove use.
- Single use disposable gloves must never be reused or washed.

Gowns

- Long sleeved fluid resistant gowns are worn to protect skin and clothing of HCWs when there is potential exposure to blood or body fluids.
- If gowns are worn, they should be removed immediately after the indication for their use and placed into an appropriate receptacle.
- Perform hand hygiene after removing gowns.

Masks/Eye/Face Protection (safety glasses, goggles, face shields)

- Protect mucous membranes (e.g., eyes, nose, and mouth). In addition, respirators provide protection from inhalation transmission of airborne organisms.
- The need for a mask and eye protection during resident/client care depends on the task performed. Wear when there is the potential for splattering or spraying of blood, body fluids, secretions or excretions when providing direct care.
- Select the appropriate mask and eye protection: wear when within two meters of resident/client with respiratory illness and when performing cough-inducing and aerosolizing procedures.

Refer to Region/Facility Infection Control Manual for further information and procedures for donning and doffing PPE.

Respiratory Hygiene/Cough Etiquette

Respiratory illnesses are transmitted by:

- Coughing or sneezing (direct contact with droplet or airborne organisms by spray into mucous membranes or inhalation);
- Touching one's own eyes/nose/mouth with their hands after physical contact with someone who is sick or a contaminated environment.

Respiratory hygiene is a combination of measures designed to minimize the transmission of respiratory pathogens. Residents/clients, visitors, and staff should be instructed in proper respiratory hygiene including:

- Covering the mouth and nose with a tissue during coughing or sneezing with prompt disposal of the tissue into the garbage;
- Covering the mouth and nose with the upper sleeve if tissue not available;
- Performing appropriate hand hygiene;
- If staff, resident/client, and visitors are personally ill, wearing a surgical mask (if tolerated) when coughing or sneezing to contain droplets and decrease contamination of the surrounding environment;
- Maintaining spatial separation of two meters between others when coughing or sneezing.

Respiratory Education

- Post signage/alerts discouraging ill visitors from visiting the facility.
- Instruct residents/clients and visitors to inform facility staff if they are coughing or sneezing. Refer to Section 9-33 Generic Protocol – Limiting the Spread for details on restrictions.
- Provide masks or tissues to resident/clients who are coughing or sneezing.

- Provide masks or tissues to visitors who are coughing or sneezing who cannot be excluded from the facility (palliative/compassionate care visiting).
- Provide tissues and alcohol-based hand rub/gel in common areas (e.g., dining room, lounge), entrance to facility/unit/wing/ward.
- Place symptomatic residents/clients on Contact/Droplet Precautions. Refer to specific precautions in Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities.

HCWs with symptoms of an acute viral respiratory infection should:

- Report to their immediate supervisor and, if directed, notify the appropriate facility/region employee health/IPC contacts and be assessed for fitness to work; if they are cleared to work, they should have minimal contact with individuals at high risk for complications of infectious respiratory infections.
- HCWs may also be required to wear a mask if they are coughing and/or sneezing.

Environmental Control

The transfer of microorganisms from environmental surfaces to residents/clients and health care staff is largely via hand contact with contaminated environmental surfaces and equipment. While hand hygiene is important to minimize the impact of transmission, cleaning and disinfecting equipment and environmental surfaces plays a key role in reducing the potential contribution to the spread of infection. Items that are involved in environmental control include resident personal care items, reprocessing of resident/client care equipment, environmental cleaning, laundry and dishes. [2]

Resident/Client Personal Care Items

- Personal care items (i.e. lotions, creams, soaps, razors, toothbrushes, nail files/clippers) must not be shared between residents/clients.

[2] For more information refer to Health Canada's Infection Control Guidelines: Appendix II – Cleaning Procedures for Common Items

Reprocessing of Resident/Client Care Equipment

- Client care items include health care equipment such as intravenous poles, thermometers, patient lifts, etc.
- Whenever possible, resident/client care equipment should be dedicated to the resident/client. Health care equipment that has been in contact with a resident/client is cleaned, disinfected and sterilized (as indicated).
- Equipment soiled with blood, body fluids, secretions or excretions should be handled in a manner that prevents contamination of skin, mucous membrane exposure, contamination of clothing and transfer of microorganisms to other residents/clients and the environment.
- Ensure facility staff are trained and follow recommendations for cleaning, disinfection and sterilization of resident/client care equipment as per Health Canada Infection Control Guidelines: Hand Washing, Cleaning, Disinfection and Sterilization in Health Care.[3]
- Health care facilities should have policies and procedures in place for:
    - routine cleaning, disinfecting and monitoring of equipment;
    - sterilization of equipment and maintenance of sterility.

Environment Cleaning

Components of an effective cleaning/disinfecting process are:

- Correct quantity of cleanser/disinfectant;
- Correct concentration;
- Clean cloths;
- Correct contact time (follow manufacturer's directions);
- Correct technique.

Refer to your facility housekeeping policies and procedures for routine cleaning and disinfecting surfaces and objects with the facility approved detergent-low level disinfectant.

[3] http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98pdf/cdr24s8e.pdf

- Cleaning proceeds from clean areas to dirty areas - isolation rooms are cleaned last (after other rooms are cleaned). Refer to your institutional policies and procedures for cleaning isolation rooms.
- Particular attention is paid to the cleaning of frequently touched areas such as call bells, side rails, telephones, over bed tables, light switches, door handles, etc and should include areas frequently touched by staff.
- Contaminated hard surfaces and fixtures in bathrooms are washed with detergent and water using a single-use cloth, and then disinfected.
- Mop heads and cleaning cloths are bagged and laundered after cleaning the room.

Once the resident/client is no longer on additional precautions, his/her room will require a terminal clean.

Terminal Cleaning

- Terminal cleaning should be done after other rooms are cleaned. Follow facility-based policies and procedures for terminal clean.
- Proper removal and disposition of personal protective equipment is important following terminal cleaning.

Cleaning Procedures for Other Materials

The following applies to isolation rooms or contaminated items in common areas:

- Vinyl covered furniture or mattresses must be maintained in good repair and will need to be thoroughly cleaned with detergent and hot water then disinfected with an appropriate solution.
- Soft furnishings or cloth-covered mattresses are thoroughly cleaned with detergent and hot water. For disinfection they should be thoroughly steam cleaned.
- Contaminated carpets are cleaned with detergent and hot water and disinfected with an appropriate solution or steam cleaned using water at a minimum of 60° Celsius.

Laundry

- Laundry protocol is the same as usual. Laundry processes are to always have IPC practices in place for handling contaminated laundry.

Food Services

- Dishes – regular dishes are recommended, but must be returned from ill resident/clients' rooms directly into the dishwashing area of the kitchen for immediate cleaning and disinfection. Disposable dishes are not required.

Proper hand hygiene must follow cleaning.

Refer to Region/Facility Infection Control Manual for specific procedures.

Additional Precautions

In addition to Routine Practices, Additional Precautions might be necessary during times of expected illness and during an outbreak.

Additional Precautions (formerly referred to as Transmission-Based Precautions) are used in addition to routine practices for residents/clients documented or suspected to be colonized or infected with a specific organism for which additional measures, beyond Routine Practices/Standard Precautions, are recommended to interrupt transmission. The type of required additional precautions is determined by the mode of transmission of the organism/disease.

The three modes of transmission on which these precautions are based are:

- Contact;
- Droplet;
- Airborne.

Droplet/Contact/Airborne Precautions are required to prevent illness from entering the facility and to control the transmission within the facility.

Refer to Region/Facility Infection Control Manual or:

- Public Health Agency of Canada: "Routine Practices and Additional (Transmission Based) Precautions for Preventing the Transmission of Infection in Healthcare"[4] or;
- "Health Canada Infection Control Guidelines: Hand Washing, Cleaning, Disinfection and Sterilization in Health Care".[5]

More information on Additional Precautions can be found in the corresponding respiratory or enteric control measures sections. Additionally, see attachments below for details of specific precautions to use with various organisms:

- Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities.
- Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities.

[4] http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s4/index.html
[5] http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98pdf/cdr24s8e.pdf

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Protocol – Limiting the Spread

In addition to the environmental management aspects, effective containment in long term care (LTC) facilities depends on the management of:

1. Clients/Residents.
2. Staff.
3. Visitors.
4. Facility Programs and Services.

Management of Clients/Residents

Isolation of Cases

Confine (isolate) symptomatic residents/clients to their rooms during the period of communicability. Refer to the documents below for further information on communicability:

- Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities.
- Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities for the specific pathogen.
- Where possible, symptomatic individuals should be isolated in a single room.
- Individuals infected with the same organism may be cohorted in specific areas of a facility or multi-bed rooms but should not share rooms with residents/clients who are immunocompromised.
- Place infection prevention and control (IPC) signage on the room door indicating the precautions required.

Of particular interest to integrated facilities:

- The movement of residents/clients diagnosed with, or suspected to be infected with, an infectious illness should be restricted to essential diagnostic tests and therapeutic interventions, and if the illness is respiratory to wear a mask if tolerated. Also provide instruction on how to perform respiratory hygiene.

Admissions, Discharges and Transfers of Residents/Patients

- No admissions to, or transfers from, an affected wing/facility should occur for the duration of an outbreak unless required for essential diagnostic tests and therapeutic interventions/appointments.
- In extenuating circumstances, where an admission or transfer back to an outbreak facility may be required, consultation with the Medical Health Officer (MHO)/Infection Control should occur prior to the admission.[1]

Communication:

- If a transfer is essential, the receiving facility should always be notified prior to a transfer that the individual is coming from a facility that is experiencing an outbreak and should also indicate whether the individual is asymptomatic, has or is recovering from the infection.
- In extenuating circumstances, where an admission may be required, consultation with the MHO/IPC personnel should occur prior to the admission. The resident/client and/or family would be informed of the outbreak and the potential risk of exposure and illness to the resident/client and should all be in agreement to proceed with the admission.

- Other individuals who access services in the facility (e.g., outpatient therapy, home care clients – bathing, etc.) should be restricted for the duration of an outbreak unless service is considered essential and cannot be rescheduled to another facility.

[1] The general principle is to not permit transfers back to a facility but where transfers to ER or hospital have been made for essential medical treatment during an outbreak. The resident may be transferred back on an exceptional basis with permission from Infection Control and the MHO.

Individuals with symptoms of the outbreak, who are admitted from the community to a LTC facility on an exceptional basis during a nosocomial outbreak (with permission from Infection Control and the MHO), will be considered as part of the outbreak and the decision to terminate the outbreak will include these cases.

Management of Staff

The management of staff, and other personnel who provide services in a long-term care facility, is an important component in the implementation of outbreak control measures and requires careful consideration and planning. Immunization or chemoprophylaxis may be a recommended measure to prevent and control the outbreak. The causative organism will determine if this measure is necessary.

The following steps should be taken to decrease the spread of the infectious agent in the facility:

- Cohorting essential personnel
- Excluding symptomatic personnel
- Developing policies for the management of non-essential personnel

The combination of the steps above should balance the protection of staff and residents/clients from the infectious agent, without compromising staffing levels that would place residents/clients and employees at increased risk.

Communication:
- Where concerns about staffing levels exist as a result of recommendations for staff cohorting and exclusion, facility management should discuss alternative recommendations with Human Resources and consult the MHO.

Communication:
Facility managers should ensure that staff restrictions have been communicated to:
- Other facility managers.
- Directors.
- Human Resources.
- Scheduling.
- Staff.

Direct Patient Care Personnel

As soon as an outbreak is identified, health care workers (HCWs) providing direct care to residents should:

- Be cohorted to provide care for either infected or non-infected patients within the wing/facility, if possible. They should also be cohorted to the wing/facility for the duration of the outbreak.

Other Facility Staff

As soon as an outbreak is identified, facility staff that **do not** provide direct care to residents should:

- Minimize their contact with isolated individuals and should ensure that appropriate personal protective equipment (PPE) and IPC precautions are utilized when contact occurs.

Employees Working in More Than One Facility

If an individual is required to work in another facility, it should only occur:

- After the maximum incubation period for the organism[2] has passed from the time of their last exposure in the facility;
- If the individual is asymptomatic.

Facilities should discuss these situations with the MHO/IPC personnel.

Facility managers are responsible for reassigning shifts so employees are restricted to working in one facility during an outbreak.

[2] Where no organism has been identified, the MHO/IPC personnel will provide recommendations on the time period for the individual to return to work in another health care facility. This recommendation will be based on the epidemiologic characteristics of the outbreak and the surveillance data available in Saskatchewan.

Management of Non-Facility Regional Staff, External Professionals and Service Providers

As soon as an outbreak is identified, health care professionals (Physiotherapy, Occupational Therapy, Laboratory, Speech Language Pathology, Home Care, Podiatry, etc.) and other personnel/service providers who are not employees of the facility, but regularly provide services or access supplies within the facility, should be informed that there is an outbreak in the facility. These personnel should be excluded from the facility for the duration of the outbreak except for instances where they are required to:

- Provide essential therapeutic services to residents that cannot be postponed without adversely affecting the health of the resident; these individuals should minimize their contact with isolated individuals and should ensure that appropriate PPE and IPC precautions are utilized when contact occurs;
- Provide essential services (maintenance, etc.) to maintain the safe operation of the facility;
- Access supplies for the provision of essential care in the community.

Management of Volunteers and Students

In principle, non-essential volunteers and students should be excluded from the facility for the duration of the outbreak except in the instances where facility m anagement and IPC personnel/MHO have mutually identified exceptions.

Communication:

- As soon as an outbreak is identified, volunteers who are not employees of the facility should be informed that there is an outbreak in the facility.
- Students and their preceptors should be informed that there is an outbreak in the facility.

If a volunteer or student is permitted to work in an outbreak facility, they should:

- Minimize their contact with isolated individuals and ensure that appropriate PPE and infection control precautions are utilized when contact occurs.

Management of Visitors during Outbreaks

The MHO, in consultation with IPC personnel will provide recommendations for visitor restrictions and visitor exclusions during an outbreak in a LTC/Integrated health care facility. The management of visitors to a LTC/Integrated health care facility during an outbreak will depend on a number of factors including the features of the outbreak and the suspected causal organism. The recommendations will initially be based on the epidemiologic properties of the suspected organism and refined once a specific causative organism has been identified. Ensuring the safety of residents/clients, employees and the public is also an important consideration in the decision to restrict visitors. During outbreaks, staff shortages combined with increased health care needs of residents/clients, make it difficult to ensure that the education regarding IPC measures and the PPE required can be provided for all visitors.

In general, efforts to limit individuals visiting the affected unit/ward/facility during an outbreak should be considered. Depending on the extent of the outbreak, it may be preferable to initially close the unit/ward/facility to all visitors while the entire complement of outbreak measures are implemented and until nosocomial transmission is reduced. Ill visitors should not be permitted in the facility except in exceptional circumstances on compassionate grounds.

Visitors should be encouraged to postpone visits wherever possible and while closure may not be required in large urban facilities, in smaller rural settings visitors often see several residents/clients during any given visit and can serve as a vehicle for transmission and the continued introduction of the organism into the facility. In these settings, visitors should be restricted to visit only one resident. Controlling the outbreak and protecting employees, residents/clients and the public must be balanced with the emotional hardship to both the residents/clients and the relatives that may be caused with prolonged closures.

Visitors should not participate in any social activities in the affected unit/ward/facility that may be occurring during an outbreak. For most outbreaks, social activities will be suspended. Visitation by outside groups (e.g., entertainers, meetings, community groups, etc.) shall not be permitted. Also, visitation of multiple residents/clients should be restricted.

Visiting Permitted on Compassionate Grounds

- IPC personnel should be consulted regarding individuals who must visit terminally ill or palliative residents/clients.
- Visitors who have symptoms of a respiratory or enteric infection should not visit patients unless it is essential.
- Visitors shall be advised of the potential risk of acquiring illness while visiting the facility.
- Visitors should be instructed on general IPC measures (e.g., hand hygiene, etc.) and how to prevent transmission of the specific organism. Visitors should also be instructed on the specific IPC measures and the PPE required.
- Visitors need to be informed that their visit must be restricted to their family member and that ill residents/clients should be visited in their room only. Visitors should also be informed that they are not to enter or visit the rooms of other residents/clients and should exit the facility immediately after visiting their family member.
- Visitors who are coughing or sneezing that cannot be excluded from the facility (palliative/compassionate care visiting) should be provided with masks.
- When visiting is permitted for compassionate reasons, consideration should be given to maintaining a one metre spatial separation between the visitors and the resident/client with a viral respiratory tract infection.

Communication:

- Family members/visitors should be aware of this visitor restriction policy, prior to an outbreak.
- Family members of ill residents shall be contacted and advised of their relative's illness.
- The facility should have a procedure or policy for notifying immediate family members or next of kin that an outbreak is occurring at the facility.
- The facility should post outbreak notification signs and other appropriate signage at all entrances to the facility during the outbreak.
- Information on visitor restrictions should be placed on the health region's web site.
- Health care facilities may choose to inform local media outlets (e.g., newspapers and/or local radio stations) of the visitor restrictions during an outbreak.

Management of the Facility Programs/Services

A review of all activities conducted within the outbreak facility/wing should occur. Strong consideration should be given to the suspension of all non-essential activities. The extent of the suspension will depend on the specific characteristics of the facility, the causative organism, and the extent of the outbreak and the success of the initial IPC measures.

Many respiratory infections can be transmitted before an individual develops symptoms. Activities that bring together community members and LTC residents/clients during an outbreak should be restricted to prevent the ongoing introduction of infections from the community and spread of the facility outbreak to the public and subsequently to other health care settings.

Initially, the suspension of all non-essential activities in the facility/wing should be considered until the outbreak is under control or the outbreak is declared over. This may include:

- Outside groups coming into the facility for non-essential activities and meetings;
- Personal services (hair salon, aesthetician, etc.);
- Community events or meetings within the facility (craft and bake sales, pot lucks, birthday parties, breakfast clubs or cooking groups, aquasize, aerobics, weights, etc.);
- Day care (children);
- Adult day programs;
- Pet therapy.

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Respiratory Protocol – Introduction

The Generic Protocols – Introduction; Prevention and Control; and Limiting the Spread, provide the overall principles and guidelines for outbreak prevention and management.

This *Generic Respiratory Protocol* includes information that is specific to Infectious Respiratory Illness. It is important to refer to the *Generic Protocol* for supplementary information.

This protocol has been developed to address outbreaks of any infectious respiratory illness *other than influenza*. If during the investigation of a respiratory outbreak, influenza is highly suspected or is lab-confirmed, refer to your Regional or Local Influenza Outbreak Protocol for more information.

Infectious respiratory diseases, including colds, influenza and pneumonia, are major causes of illness, absenteeism, lost productivity and death. Upper respiratory tract infections, such as common colds, last less than a week and rarely result in secondary complications. Lower respiratory tract infections such as influenza, pneumonia and bronchitis can lead to serious secondary complications. In Canada, pneumonia and influenza together are the leading cause of death from infectious disease and are the sixth leading cause of death overall. Influenza and community-acquired pneumonia account for 60,000 hospitalizations and 8,000 deaths annually. Each year, between 4,000 and 8,000 Canadians die of influenza and its complications, depending on the severity of the season.

Mortality rates from pneumonia associated with nursing homes range from 5% to 44%; it is the leading infectious cause of death in long term care (LTC) facility residents. Seniors with nursing home-acquired pneumonia have higher rates of in-hospital mortality than patients hospitalized with community-acquired pneumonia.

During the winter months, a number of organisms that cause lower respiratory tract infections are circulating at the same time. It can be difficult to distinguish between an influenza infection and other viral respiratory infections. In Saskatchewan, the following *non-influenza* respiratory viruses are frequently isolated in specimens submitted to the Saskatchewan Disease Control Laboratory (SDCL):

- Parainfluenza virus types 1, 3 and 4;
- Respiratory syncytial virus (RSV);
- Adenovirus;
- Human metapneumovirus (hMPV);
- Enteroviruses.

The risk of morbidity and mortality related to respiratory infections is higher for residents/clients living in institutional settings, particularly in LTC facilities, which are closed communities where many older, frail individuals with chronic illnesses live for prolonged periods.

All facilities and their health care providers should maintain ongoing surveillance for infectious respiratory illnesses and recognize that the keys to respiratory outbreak management and control are:

- Early recognition of respiratory illness that could be infectious;
- Early implementation of individual IPC measures;
- Eearly recognition of an outbreak;
- Prompt reporting of the outbreak;
- Prompt collection of laboratory specimens;
- Prompt institution of outbreak control measures;
- Evaluation of the success of the control measures;
- Communication.

Pre-Season Planning and Prevention

Respiratory outbreaks can occur at any time throughout the year but they occur more frequently from November to April (during influenza season). Prior to the onset of influenza season, all facilities should:

- Review regional policies and procedures for management of respiratory outbreaks and influenza outbreaks ensuring active involvement of staff in the review process;

- Identify a lead individual to coordinate surveillance, pneumococcal and influenza immunization for residents, influenza immunization for staff, and outbreak prevention and management activities;
- Implement the influenza immunization program for staff and residents;
- Maintain lists of staff and residents who have had the annual influenza immunization and ensure the list is readily accessible by the nursing/medical staff should an outbreak occur;
- Encourage family, visitors, and others to receive annual influenza immunization.

The Ontario Ministry of Health and Long Term Care (2006) indicates the best practice in surveillance and infection prevention and control (IPC) for infectious respiratory illness consists of the following:

1. Immunization – Influenza (for staff and residents) and Pneumococcal (for residents) vaccination.
2. Case Finding/Surveillance.
3. Preventive Practices.
4. Reporting.
5. Evaluation.

Additional details of these functions are included in the Generic Protocol – Introduction.

Immunization

It is the responsibility of the direct care staff to minimize the risk to residents/clients and provide the highest standard of care. Receiving the annual influenza immunization is considered part of this responsibility.

Influenza immunization has been shown to reduce the mortality and morbidity of residents/clients under the care of immunized staff and reduce worker absenteeism during the influenza season. It has been shown to be 50-60% effective in preventing hospitalization and 85% effective in preventing death in elderly persons living in LTC facilities.

Influenza Immunization – Staff and Residents

Influenza vaccine should be administered annually to all residents, staff and physicians who work in the LTC facility. Any new staff or residents that come to the facility during the influenza season (typically November to April) should also have their immunization status assessed and be provided with the vaccine as required. Refer to your regional policy, and the Saskatchewan Immunization Manual[1] for information on influenza immunization.

Pneumococcal Immunization – Residents

Pneumococcal vaccine should be provided to residents who have not previously received this vaccine. *This can be done at any time during the year*. Admission procedures for new residents should ensure that history of pneumococcal immunization is determined and vaccination is offered if necessary. Pneumococcal vaccine is given once to individuals aged 65 or older, residents of LTC facilities and for those at high risk. Re-immunization 5 years after the initial immunization should be considered for those at highest risk of invasive disease. Refer to Chapter 10: Biological Products in the Saskatchewan Immunization Manual[1] for additional information on specific immunizations.

Case Finding/Surveillance

All facilities and their health care providers should maintain ongoing surveillance for infectious respiratory illnesses and recognize that the keys to respiratory outbreak management and control are:

- Early recognition of respiratory illness that could be infectious;
- Early recognition of an outbreak.

Refer to Generic Respiratory Protocol – Declaration of an Outbreak for more details.

[1] http://www.ehealthsask.ca/services/manuals/Pages/SIM.aspx.

Outbreak Management

Managing infectious respiratory illnesses promptly and effectively ensures that morbidity and mortality are minimized. One of the most important first steps for front-line health care employees is to ensure that residents/clients with infectious respiratory illnesses are promptly placed on contact and droplet precautions. Staff should use the Attachment – Outbreak Checklist to focus their initial action.

Ensuring resident/client safety and providing a safe workplace for employees by implementing effective IPC measures is the responsibility of everyone in all health care facilities. *The Occupational Health and Safety Act, 1993* requires that employers "ensure, insofar as is reasonably practicable, the health, safety, and welfare at work of all of the employer's workers." The *Act* also requires that workers "take reasonable care to protect his or her health and safety and the health and safety of other workers." Facilities must also educate their health care workers, residents/clients, and the public about their personal responsibility for respiratory disease prevention.

Efficient and effective communication plans should be in place to deliver messages to stakeholders regarding early identification of outbreaks of respiratory illness. Refer to Generic Protocol – Introduction for Outbreak Management Team Roles, Membership and Expectations.

The following protocol sections should be used to guide the management of respiratory outbreaks in LTC facilities:

- Section 9-31 Generic Protocol – Introduction
- Section 9-32 Generic Protocol – Prevention and Control
- Section 9-33 Generic Protocol – Limiting the Spread
- Section 9-41 Generic Respiratory Protocol – Introduction
- Section 9-42 Generic Respiratory Protocol – Declaration of an Outbreak
- Section 9-43 Generic Respiratory Protocol – Investigation
- Section 9-44 Generic Respiratory Protocol – Control Measures
- Section 9-45 Generic Respiratory Protocol – Terminating Outbreak Status

If influenza has been lab confirmed in the facility, staff should refer to their regional influenza outbreak policies for additional information that is specific to the management of influenza outbreaks.

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Respiratory Protocol – Declaration of an Outbreak

It is imperative to institute individual contact and droplet precautions immediately for any individual experiencing symptoms suggestive of an infectious respiratory illness without waiting for laboratory confirmation or additional cases to occur.

Reporting a Respiratory Outbreak

Long Term Care (LTC) facilities must report suspected and apparent respiratory outbreaks to local or regional Infection Prevention and Control (IPC) personnel and the Medical Health Officer (MHO), as per regional protocol, as soon as possible[1].

A **respiratory outbreak** is defined as follows:

- Two (2) or more cases of infectious respiratory illness in residents/clients in one geographic area (i.e. unit/floor/facility) within a 72-hour period[2].

Infectious respiratory illness is a term used to describe a wide range of respiratory illnesses prior to laboratory confirmation of a particular organism. Infectious respiratory illness is defined as:

- New or worsening cough;
- Fever > 38° Celsius[1], or a temperature that is abnormal for that individual;
- Additional symptoms may include myalgia, runny nose, sore throat, and headache.

(Adapted from PICNet – BC, 2007)

[1] Section 19 of the Saskatchewan Disease Control Regulations requires hospitals, health centers, and special care homes to report to the MHO within 24 hours of becoming aware of an outbreak.
[2] The incubation period for some organisms is longer than a couple of days and so the cases may not cluster in a 72-hour period. If two or more cases occur over a 7-day period, Infection Control and the MHO should be notified.

It is possible that an outbreak may be occurring that does not fit the definition above. Sporadic cases that do not meet the definition of an infectious respiratory illness may occur, and if there are one or two residents/clients with severe or unusual symptoms, it is better to err on the side of caution and discuss the situation with IPC personnel and the MHO. Incremental outbreak measures can then be introduced to prevent the progression to an outbreak.

Communication:

- Outbreaks should be reported **as soon as possible** (within 24 hours) to the facility manager and your Regional Outbreak Team.
- Call during reasonable hours; it is not usually necessary to call in the middle of the night.
- The MHO will determine whether illness within a facility constitutes an outbreak and will make recommendations regarding the implementation of outbreak control measures.

Declaring an Outbreak

The MHO is responsible for declaring an outbreak of respiratory illness when the criteria for a respiratory outbreak (as defined on page 1) are met. The MHO will require the following information to determine if an outbreak should be declared:

- Number of ill residents and/or staff;
- Total number of residents of the facility;
- Symptoms of illness – major and minor;
- Date of onset of illness in the first ill individual and all subsequent ill individuals;
- Location of ill individuals within the facility.

The MHO, or designate, will assign the outbreak number. This number must be used on the lab requisition forms, line listings, etc.

The format of the outbreak numbering system should be assigned as follows:
<health region 3-4 letter acronym> - <four digit calendar year> - <three digit sequential number beginning at 001> (e.g., SCHR-2007-001).

If influenza is identified, the MHO will also be responsible for making the recommendations for antiviral prophylaxis; for more information, refer to your regional Influenza Outbreak Protocol.

Communication:
Key information to be communicated to the MHO during the outbreak includes:

- If there have been deaths related to the illness;
- Commonalities in the individuals, (e.g., pre-existing pathology);
- Number of residents transferred to acute care facilities;
- Infection control interventions implemented;
- If specimens have been collected/sent for laboratory diagnosis;
- If social/education events are planned for the staff or residents of the facility;
- Ongoing status (number of cases and severity of illness).

Communication (Weekends and After Hours):

- It is the responsibility of the health region to ensure that the MHO who is providing weekend or "after hours" coverage has been updated on the status of any current outbreaks, including the outbreak numbers.
- The MHO providing coverage should provide an update to the regional designate once their coverage period is complete.

Communication:
Reporting to Saskatchewan Ministry of Health is an important function. Regional Public Health will send an Initial report to the Saskatchewan Ministry of Health. See Attachment – Outbreak Notification and Report form. The following elements must be documented on the form:

- Initial notification report date;
- Health Region;
- Outbreak number;
- Type of outbreak (e.g., respiratory or enteric);
- Type of Healthcare Facility;
- Facility name, location, and floors/units affected;
- Onset date of index case;
- Date outbreak reported to Health Region;
- Date outbreak declared;
- Date facility closed if different from date outbreak declared;
- Laboratory findings (submit via an updated notification report as soon as organism is known); and
- Person preparing report, contact phone number and job designation.

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities Generic Respiratory Protocol – Investigation

Laboratory Investigation

The goal of the laboratory investigation during outbreaks is to identify the cause of the outbreak, not to confirm the diagnosis in every single case. After a laboratory diagnosis is made for the outbreak, management of subsequent cases is, with a few exceptions, guided by symptoms.

Specimen Collection

- Restrict sampling in institutional outbreaks to the first five cases meeting the case definition of respiratory illness.
- Once an etiological agent has been identified, there is no value in continuing to send specimens as this only serves to increase turn around time at the laboratory as they deal with increased numbers of specimens.

  Exceptions:
  Consideration should be given to further laboratory testing in these circumstances:
  - in large institutions, if the outbreak spreads to additional wings or floors, Public Health may ask the facility to submit specimens from a sample of the initial cases from the new wings/floors;
  - for individuals with significant illness whose symptoms are not consistent with the outbreak organism; therefore, do not meet the case definition, particularly at the end of an outbreak;
  - to allow for timely initiation of antiviral prophylaxis when an influenza outbreak is suspected.

- Collect specimens within 48 hours of the onset of symptoms in the individual.
- Use the outbreak number assigned by the Medical Health Officer (MHO), or designate, on the laboratory requisition. The facility name should also be included on the requisition. Specimens that do not have an outbreak number may not be tested as a priority, or testing may be delayed.

Specimens for Virology

Nasopharyngeal swabs are the preferred specimens for the investigation of respiratory outbreaks because recovery of an adequate sample from throat swabs is less likely.

- Collect nasopharyngeal specimens using the nylon-fibre flocked swabs or small Dacron-tipped metal shaft swabs. Cut off the tip of the swab and the last centimetre of the shaft and insert this into the virus transport medium.
- Collect throat swabs using the large Dacron-tipped plastic-shaft swabs. Cut off the tip of the swab and the last centimetre of the shaft and insert this into the virus transport medium.

Specimens for Bacteriology

Submit sputum specimens for bacterial culture if pneumonia is suspected.

- Keep specimens refrigerated until packed and shipped to Saskatchewan Disease Control Laboratory (SDCL) or the local laboratory as per the usual specimen handling process. Refer to the SDCL Compendium of Tests or the local Laboratory Manual for details on the labelling, packing and transportation of refrigerated specimens (e.g., where transportation time is greater than one hour, specimens must be kept cool using ice packs).

Communication - Submitting Specimens on Weekends

- Specimens received after hours will be processed on the next working day, unless the MHO has made prior arrangements with the SDCL/ Regional Laboratory to process specimens on an urgent basis.

- Supply the following information on each requisition. See Attachment – Lab Requisition Samples:

    1. Symptoms;
    2. Date of onset;
    3. Time and date of collection;
    4. Name of facility;
    5. Outbreak number;
    6. Name of resident;
    7. Date of birth (DOB);
    8. Health Services Number (HSN); and
    9. Name of ordering physician or nurse practitioner.

Communication

- If telephone results are required, provide the name and contact number.
- SDCL will communicate lab results to the sending laboratory/facility and ordering physician.
- The MHO/Public Health Services receive copies of all results for requisitions with an outbreak number from the testing laboratory (SDCL/other Regional Laboratories).

Epidemiological Investigation

The most compelling reason to investigate a recognized outbreak of disease is that exposure to the source(s) of infection may be continuing. Identifying and eliminating the source of infection can prevent additional cases.

Specific aspects that are to be considered include:

- The extent of the outbreak in terms of person, place and time;
- The etiological agent, the source, the propagation mechanisms, and contributing factors.

A systematic approach to explore the commonalities of both affected and unaffected individuals is needed. Through this investigation one can hopefully determine what the contributing factors are: environmental, behavioural, and/or administrative.

Even if an outbreak is basically over by the time the epidemiologic investigation begins, investigating the outbreak may still be warranted for many reasons. The results of the investigation may bring forth recommendations to prevent similar outbreaks in the future or to support the interventions that have been or will be put in place.

While investigation is typically carried out by Public Health, it is dependent on the cooperation and participation of facility residents, staff and administration in providing information.

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Respiratory Protocol – Control Measures

The Generic Protocol – Prevention and Control section outlines routine measures that are important in the prevention and control of outbreaks. This section highlights additional information on control measures that are specific to infectious respiratory illness.

With the identification of a single individual with undiagnosed acute respiratory illness that could be infectious, it is imperative that individual contact/droplet precautions be instituted immediately without waiting for laboratory confirmation or additional cases to occur.[1] Early consultation is encouraged, particularly if there are one or two residents/clients with severe or unusual symptoms.

Routine practices/standard precautions must always be used, regardless if the resident/client is ill. In addition to the components of routine practices/standard precautions listed in the Generic Protocol – Prevention and Control, the supplementary measures below should be implemented.

Additional Precautions

Additional precautions are used for residents documented or *suspected* to be colonized or infected with a specific organism. Such measures, beyond Routine Practices/Standard Precautions, are recommended. The type of additional precautions required is determined by the mode of transmission of the organism/disease and are designed to interrupt transmission of the organism. The three modes of transmission on which these precautions are based are *contact, droplet, and airborne.*

Contact and Droplet Precautions

- Contact and droplet precautions are recommended in all respiratory outbreaks.
- The regional/facility Infection Control Manual will include additional information about contact and droplet precautions.

[1] Individuals with respiratory illness who are admitted to the facility from the community when there is no facility outbreak will remain on individual precautions until they are no longer considered infectious.

- Refer to the Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities, for additional information on specific organisms.

Contact Precautions[2]

- Provide resident/client with a private room, door can remain open (if private room is unavailable, cohorting residents/clients likely to be infected with the same agent, and using precautions between contacts with residents/clients, is permissible).
- Gloves (clean, non-sterile) should be used at all times when in the residents/clients' room.
- Gowns should be worn at all times when in the residents/clients' room.
- Any communal or shared health care equipment must be cleaned and disinfected after each use.
- Perform hand hygiene after removing gown and gloves and after leaving the room.

Droplet Precautions

- A surgical/procedure mask covering the worker's nose and mouth should be worn if working within two meters of the resident.
- Protective eyewear is recommended when providing direct care within two meters of the resident.
- Remove personal protective equipment after leaving the room and dispose in either a hands-free waste receptacle (if disposable) or in a separate receptacle to go for reprocessing (if reusable).

[2] Canada Communicable Disease Report (CCDR), July 1999 - Infection control guidelines: Routine practices and additional precautions for preventing the transmission of infection in health care.

- Perform a Point of Care Risk Assessment to determine the necessity of using higher level protection when performing an aerosol-generating medical procedure (AGMP)[3] – see Airborne Precautions below.

Airborne Precautions[4]

- When the infectious agent is known to be airborne, health care workers and visitors should wear respiratory protective devices while inside the resident/client's room and when performing cough-inducing and aerosolizing procedures.
- Residents/clients should be in one of the following rooms (with the door closed) in order of preference:
  - a private negative pressure room (if available);
  - a private room (standard pressure);
  - cohort residents/clients with the same disease after consultation with IPC personnel.
- When performing an AGMP, use an N95 respirator (fit-tested and National Institute for Occupational Safety and Health (NIOSH) certified), and:
  - limit the number staff in the room where AGMPs are performed;
  - reduce, to the greatest extent possible, the use of AGMPs (e.g., nebulizer therapy, open airway suctioning, etc.);
  - use closed suction systems whenever possible;
  - perform AGMPs in negative pressure rooms (airborne isolation rooms) whenever possible – as an alternate, consider using a single room;
  - if conducting an AGMP on a suspect ILI case, all individuals in the room should wear an N95 respirator.

[3] Aerosol-generating medical procedures (AGMPs): any procedure carried out on a patient that can induce the production of aerosols of various sizes, including droplet nuclei. Examples include: non-invasive positive pressure ventilation (BIPAP, CPAP); endotrachial intubation; respiratory/airway suctioning; high-frequency oscillatory ventilation; tracheostomy care; chest physiotherapy; aerosolized or nebulized medication administration; diagnostic sputum induction; bronchoscopy procedure; autopsy of lung tissue.
[4] Canada Communicable Disease Report (CCDR), July 1999 - Infection control guidelines: Routine practices and additional precautions for preventing the transmission of infection in health care.

- The following guidelines must be followed when using a surgical/procedural mask or N95 respirator:
    - must be used only once (masks must be removed carefully by the straps and ties to prevent self-contamination and discarded after each resident/client contact);
    - must be changed if it becomes wet or soiled (from the wearer's respiration or through an external splash);
    - must cover both the nose and the mouth;
    - must be discarded immediately after use into an appropriate, preferably hands-free waste receptacle;
    - must never dangle around the neck;
    - hand hygiene must be performed before donning and after removing the respiratory protection and after leaving the case's room;
    - avoid touching the item as much as possible (to prevent damaging the filter).

Additional restrictions may be placed on residents/clients, staff and/or the facility during an outbreak. It is important to be aware of these restrictions and adhere to the recommendations. Generic Protocol – Limiting the Spread outlines the restrictions and provides background information to provide the support for these actions.

Environmental Cleaning

Refer to Generic Protocol – Prevention and Control for review of outbreak cleaning process. Compliance with daily, terminal and isolation cleaning procedures are important to controlling the spread of respiratory illnesses. No change in cleaning product is necessary for respiratory outbreaks at this time.

The Medical Health Officer (MHO), in consultation with the facility and outbreak team, is responsible for declaring the outbreak over and will advise the facility when the institutional outbreak measures can be discontinued.

Discontinuing Individual Infection Control Measures

Individual infection control precautions can be discontinued when the individual is no longer considered infectious. The period of communicability is unique for each specific causative organism identified during the outbreak. For more respiratory information, see the Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities. Where no organism has been identified, the MHO/Infection Prevention and Control (IPC) personnel will provide recommendations on the criteria and time period for ending individual respiratory precautions. This recommendation will be based on the symptom profile, the epidemiologic characteristics of the outbreak and the surveillance data available in Saskatchewan.

Discontinuing Institutional Outbreak Measures

In general, the institutional outbreak measures in a specific outbreak situation will be declared over by the MHO when there have been no further cases (since the resolution of symptoms in the last case) and nosocomial transmission has ceased. This will be based on the epidemiologic properties (incubation period/period of communicability) for the specific causative organism identified during the outbreak. For more information, see the Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities. Where no organism has been identified, the MHO will base this decision on the symptom profile, the epidemiologic characteristics of the outbreak and the surveillance data available in Saskatchewan.

Sporadic cases of infectious respiratory illness occur frequently and at the conclusion of an outbreak these cases may need to be considered separately from the outbreak. In some instances, despite the presence of sporadic cases, the MHO will declare an outbreak over provided that other outbreak termination criteria have been met.

Communication:

- Facility managers should ensure that the following have been informed that the outbreak has been declared over:
  - other facility managers;
  - IPC personnel;
  - Directors;
  - Human Resources;
  - Scheduling;
  - all others not listed above that were on the initial notification list.

Communication:

- A final report of the outbreak is to be completed and shared with the outbreak team and Saskatchewan Ministry of Health. The finalized outbreak summary report must be submitted to the Ministry of Health **within 30 days of end of outbreak**. See Attachment – Outbreak Notification and Report form.

Saskatchewan Health Provincial Laboratory

Virology Requisition

Place Provincial Laboratory number sticker here

Patient's Name & Address (required - print clearly)
B. PATIENT
A1 - LTC HOME
REGINA S4S 5W6

Patient PHN

Birthdate: 10 10 1910

Gender: ☐ Male ☒ Female

Does patient presently live on a First Nation reserve ?
☐ No ☐ Yes → if yes, name of reserve:

Sending Location Phone #: 789-9999

Hospital ID, Ward or Room#: LTC, WEST WING, Room 4

Patient type: ☒ In ☐ Out

Diagnosis: LRTI

Collection Date: 01 02 08

Medication

Collection Time: 10 15

Physician name (include initials): ~~DR.~~ J. BLOW

Physician MCIB#

Return Address (Doctor/Clinic/Hospital)
ALBERT ST.
REGINA
OUTBREAK # ABC-08-0010

In addition to mail/courier, please copy to: Dr.'s Name MILO

☐ Fax (___) ___-_____ AND ☒ Phone report 789 9999

Please ensure that requisition and specimens are properly labelled.

This area for Provincial Lab purposes only

Symptoms

☐ Fever	☐ Conjunctivitis	☐ Stomatitis
☐ Headache	☒ Rhinitis	☐ Sore throat
☐ Meningitis	☒ Cough	☐ Photophobia
☐ Encephalitis	☐ Rash	☐ Nausea/Vomit
☐ Abdominal pain	☐ Diarrhea	☐ Muscle weakness
☐ Hypoesthia	☐ Flu-like	☐ Pneumonia
☐ Pericarditis	☐ Lymphadenditis	☒ Bronchitis

☐ Other (specify) _____

Specimen Source

☐ Stool	☐ Auger suction	☒ Throat
☐ Urine	☐ CSF	☐ Cervix
☐ Penis	☐ Vagina	

☐ Stool for Clostridium difficile Toxin Assay

☐ Other (specify) _____

Other Information

Date of illness onset 01-02-08

6 RESIDENTS + 1 STAFF-
NOW SYMPTOMATIC

Health 13-54 12/03

Outbreaks in Long Term Care and Integrated Facilities
Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Adenovirus	Humans	Respiratory tract infections. In young infants can cause significant mortality.	Varies. Most infections last from a few days to a week. Severe respiratory infections may last longer. Pneumonia can last anywhere from 2–4 weeks.	2–14 days	Most communicable during the first few days of acute illness but viral shedding can occur for months.	Person to person contact, aerosols, and fomites.	• Droplet and contact precautions for duration of hospitalization for children. • Droplet and contact precautions until resident/patient asymptomatic for 24–48 hours. • Health care workers reporting illness are excluded from work for up to 24–48 hours after their symptoms resolve or as directed by the MHO. • Hand hygiene should be emphasized.
Human Metapneumovirus (hMPV)	Humans	Symptoms vary from being asymptomatic, to mild upper respiratory tract symptoms, to severe bronchiolitis and pneumonia.	Mean average 4.4 days.	Estimated to be 3–5 days	The period of viral shedding has not been determined.	Person to person contact, and droplet.	• Droplet and contact precautions for at least 7 days or until resident/patient is asymptomatic for 24–48 hours. • Health care workers reporting illness are excluded from work for up 24–48 hours after their symptoms resolve or as directed by the MHO. • Hand hygiene should be emphasized.

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Influenza A or Influenza B	Humans are primary reservoirs. Birds and swine are likely sources of new subtypes thought to emerge through genetic reassort-ment.	Fever, cough, headache, mylagia, prostration, and sore throat.	Varies but generally 2–7 days.	1–3 days	In adults 3–5 days. In children up to 7 days.	Close contact and aerolized droplets.	• Droplet and contact precautions are in place until the resident is at least 5 days post-onset of symptoms. • Droplet and contact precautions are in place for 7 days after the onset of symptoms with children. • Ill immunized health care workers are allowed to return to work 5 days after symptom onset or at MHO's discretion. • Non-immunized health care workers are not allowed to work in an outbreak facility unless they have commenced the approved antiviral medication for influenza. Discussions will need to occur with IC and MHO. • Hand hygiene should be emphasized.
Parainfluenza Types 1, 2, 3, 4	Humans	Major cause of laryngotracheo-bronchitis (croup), upper respiratory tract infections, pneumonia & bronchiolitis.	Varies. 5 days up to 3 weeks.	1–10 days	Shortly before onset of disease and for the duration of active disease.	Oral contact, droplet spread and fomites.	• Droplet and contact precautions until resident/patient asymptomatic for 24–48 hours. • Health care workers reporting illness are excluded from work for up to 24–48 hours after their symptoms resolve or as directed by the MHO. • Hand hygiene should be emphasized.

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Pertussis (Whooping Cough)	Humans	Begins as mild upper respiratory tract (catarrhal stage) infection and progresses to paroxysms of cough (paroxysmal stage) characterized by inspiratory whoop and frequently followed by vomiting.	Symptoms wane over weeks to months (convalescent stage).	Usually 7–10 days with a range of 5–21 days.	Infected individuals are most contagious during the catarrhal stage and the first 2 weeks after cough onset. Communicability ends within 5 days of initiation of effective microbial therapy.	Close contact, aerosolized droplets.	• Droplet precautions are in place for 5 days after initiation of effective microbial therapy. If antimicrobial therapy is not given in older individuals, then Droplet and Contact precautions are used until 3 weeks after the onset of paroxysms. Factors affecting the length of communicability include age, immunization status or previous episode of pertussis and appropriate antimicrobial therapy.
Respiratory Syncytial Viruses (RSV)	Humans	Acute respiratory tract infections, bronchiolitis and pneumonia.	Varies - up to 8 days but can be longer.	2–8 days but 4–6 days is most common.	From onset of symptoms and for duration of illness.	Person to person contact, aerosols and fomites.	• Droplet and contact precautions for duration of hospitalization for children. • Droplet and contact precautions for at least 7 days or until resident/patient asymptomatic for 24–48 hours. • Health care workers reporting illness are excluded from work for up to 24–48 hours after their symptoms resolve or as directed by the MHO. • Hand hygiene is essential. RSV can survive on hands for a half-hour or more and may survive in the environment for many hours.

[1] Lifting Individual Precautions - when the recommendation to lift individual infection control precautions is made in consultation with your Infection Control Practitioner/MHO, an enhanced cleaning of the room is recommended before the resident is allowed to leave the room and staff discontinues PPE.

[2] If ongoing nosocomial transmission is occurring additional cleaning procedures may need to be put in place. Discuss with Infection Control.

Outbreaks in Long Term Care and Integrated Facilities
Attachment – Long Term Care Respiratory Outbreak Infection Control Measures

Please see the following pages for the Long Term Care Respiratory Outbreak Infection Control Measures.

SAMPLE
Regional Health Authority

Long Term Care
Respiratory Outbreak Infection Control Measures

Facility: _____ **Date**: _____

Address: _____

Contact Person(s): _____ **Phone #** _____

Note: With the identification of a single resident/client with undiagnosed acute respiratory illness that could be infectious, it is imperative that individual additional precautions be instituted immediately without waiting for lab information or for additional cases to occur.

Plan and prepare for respiratory outbreaks with the facility outbreak team each season to ensure supplies are updated and available.

		Met	Not Met	Comments
1. Notification/Communication				
1.1	Contact Public Health (-). After hours and weekends (-) Public Health assigned Outbreak Number: _____			
1.2	Contact local/regional Infection Prevention and Control (IPC) personnel LTC (-)			
1.3	Notify staff, Director/Manager, Infection Control Outbreak Team, etc. about outbreak and put infection control measures in place			
1.4	Notify groups coming into facility such as VON, Home Care, etc			
1.5	Request fact sheets from Public Health Services/IPC as needed			
1.6	Fax line list to Public Health/Infection Control			
2. Entrances				
2.1	Sign at entrance to discourage visiting if visitor has an illness			
2.2	Sign at entrance to advise visitors of respiratory illness			
2.3	Place approved hand gel at all entrances for visitor use			
3. Maps				
3.1	Site map update			
4. Residents				
4.1	Isolate in single room; may cohort in specific area those with same organism			
4.2	Nasopharyngeal specimens with completed requisitions to the lab, maximum of 6 residents. Include outbreak number. Refer to 9-43 Generic Respiratory Protocol - Investigation			

		Met	Not Met	Comments
4.3	Update line listings daily and fax or e-mail to Public Health/IPC by p.m.			
4.4	Confined to room (if possible) for _____ days[1] from onset of symptoms (see Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities). Consult with Public Health/Infection Control before lifting precautions.			
4.5	Meals in their room - tray service for 5 days from onset of symptoms (may vary depending on organism).			
4.6	Diligence in handwashing and use of alcohol hand gel for all residents including wanderers.			

5. Staff				
5.1	Update line listings for ill staff daily and fax or e-mail to Public Health/IPC by p.m.			
5.2	Signage regarding contact/droplet precautions if have direct contact with resident posted.			
5.3	Diligence in handwashing and use of alcohol hand gel			
5.4	Sink, liquid soap, and paper towels available for handwashing			
5.5	Cohort staff to work only on affected area			
5.6	Cohort staff to have breaks separate from staff in unaffected areas			
5.7	No food at nursing stations			
5.8	Staff to disinfect common use items before re-use (e.g: stethoscopes). Ideally dedicate equipment for ill residents.			
5.9	If providing direct care, do not attend meetings held outside facility			
5.10	Ill staff off work _____ days[1] from onset of symptoms – consult with Public Health/IPC/Employee Health/Occupational Health (see Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Respiratory Infections in LTC Facilities). Staff should consult with Public Health/IPC/Occupational Health designate prior to returning to work.			
5.11	Staff to notify their other employers about outbreak – ideally, current staff remain working in affected facility only during outbreak. Staff working in multi-sites discuss with Public Health/IPC/Occupational Health prior to working in another facility.			
5.12	Non-facility staff, professionals, service providers are informed of the outbreak. Provide only essential therapeutic services use appropriate personal protective equipment (PPE), and follow infection control measures.			

[1] If organism is unknown, 5 days may be used for this timeframe

		Met	Not Met	Comments
5.13	Volunteers/students should ideally be excluded. Discuss with LTC ICP, Manager. If allowed to work, use appropriate PPE, follow infection control measures, and minimize contact with isolated residents			

6. Enhanced Cleaning (2 times per day) – Contact Person: _____				
6.1	Staff and public bathrooms (sinks, taps, and toilets)			
6.2	Hand rails/stair rails			
6.3	Call lights/bed rails/lifts			
6.4	Light switches/elevator buttons/door handles			
6.5	Water fountains			
6.6	Wheel chairs/walkers			
6.7	Commodes/boosters/bed pans			
6.8	Dining room chairs, chair arms and table tops after each setting			
6.9	Telephone and desk at Nursing Station			
6.10	Hand contact areas of transportation vehicles			
6.11	Disinfectants: • quaternary ammonium compounds • 0.5% Accelerated Hydrogen Peroxide Solution			

7. Laundry – Contact Person: _____				
7.1	Soiled linen and clothes handled minimally – no rinsing			
7.2	Soiled linen and clothes bagged in room and sent to laundry - leak proof bag			
7.3	Laundry staff use gloves and long sleeved cloth gown to handle soiled linen. Place gown into the machine once soiled linen is in washing machine			
7.4	Launder in hot water, commercial bleach, longest cycle and machine dry			

8. Kitchen/Food Services – Contact Person: _____				
8.1	Refrigeration/cooling/thawing (must be 4°C/40°F or lower)			
8.2	Hot holding (must be 60°C/140°F or higher)			
8.3	Thermometer available to monitor food and equipment temperatures			
8.4	Handwashing facilities (sink, liquid soap and paper towels) available for staff			
8.5	Dishwasher temperatures being maintained and monitored			

8.6	Dining room tables, chairs, and chair arms cleaned and disinfected between settings			
8.7	Ice Machines: (1) Bulk ice machines with a scoop are to be shut off, emptied, sanitized and left un-used (2) Automatic ice dispensing machines require sanitization of high contact areas as per routine			
8.8	Cohort dietary staff. Food preparation staff are not to have contact with ill residents			
8.9	Dishes are to be put into dishwasher immediately. Disposable dishes are not required.			

9. Garbage – Contact Person: _____				
9.1	Garbage to be tied and removed to garbage containers. (Do not leave garbage bags on the floors)			
9.2	Garbage container outside premises to have lid that is closed and secure			
9.3	Inside garbage to have a foot release lid on containers or be open			

10. Activities (to cancel if necessary) – Contact Person: _____				
10.1	Food related (cooking, potlucks, birthday parties, etc.)			
10.2	Hand contact activities (dancing, cards, bingo, crafts, folding linen, etc)			
10.3	Visiting groups			
10.4	Hair Salon			
10.5	Occupational therapy/physio			
10.6	Pet therapy			
10.7	VON care (foot care)			
10.8	Chapel			
10.9	Hot tubs/whirlpools used for several residents at one time			
10.10 Day	care (children)			
10.11 Day	program			
10.12 Outings				
10.13	Outside meetings held in facility			

11. Visitors				
11.1	Visitors are asymptomatic; visitors with symptoms do not enter the facility (unless compassionate or exceptional circumstances).			
11.2	Restrict visitation of multiple clients			

		Met	Not Met	Comments
11.3	Visitors practice hand hygiene, use appropriate PPE, and follow IPC measures			
12. Admissions/Transfers				
12.1	Admissions to wing/facility only after discussion with MHO/IPC. Transfers from affected wing/facility to another facility are limited to urgent/emergent situations – inform receiving facility of outbreak.			
12.2	Advise receiving facility RE: outbreak and whether or not resident symptomatic			
12.3	Advise family of resident RE: outbreak and potential risk			

13. Closure of Facility as per MHO Recommendations		**Y**	**N**	**Date: _____**
13.1	Date facility reopened:	Date: _____		
14. Post-Outbreak Review				
14.1	Recommendations made for improved management of future outbreaks if necessary.			

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Enteric Protocol – Introduction

The Generic Protocols – Introduction; Prevention and Control; and Limiting the Spread provide the overall principles and guidelines on outbreak prevention and management.

This *Generic Enteric Protocol* includes information that is specific to infectious enteric illness. It is important to refer to the *Generic Protocol* for supplementary information.

Long Term Care (LTC) facilities and hospitals are commonly the settings for outbreaks. They may occur suddenly and involve a large number of persons within a few days or they may develop gradually and slowly spread throughout the health care institution. Risk factors in LTC settings include the close proximity of ill residents/clients and staff in close living quarters and the decreased personal hygiene among some residents/clients due to incontinence, immobility, or reduced alertness. Gastroenteritis in LTC residents/clients can lead to more serious illnesses and complications, such as dehydration, debilitation, hospitalization, and death.[1]

In the LTC setting, it is not unusual for residents/clients to have gastrointestinal symptoms (e.g., bowel care, new medications, gallbladder disease, etc.). Care must be taken to recognize symptoms that may be related to infectious causes, which could be the early signs of an impending outbreak.

It is important to try to prevent gastrointestinal disease outbreaks by adhering to hand hygiene standards, implementing appropriate food handling procedures, and ensuring appropriate handling of contaminated linens and patient excreta.[2]

Surveillance is a key element in preventing and controlling outbreaks of enteric illnesses. All facilities and their health care providers should maintain ongoing surveillance for infectious enteric illnesses and recognize that the keys to enteric outbreak management and control are:

- Early recognition of enteric illness that could be infectious;
- Early implementation of individual infection prevention and control (IPC) measures;

[1] Maryland Department of Health and Mental Hygiene
[2] Massachusetts Department of Public Health, Division of Epidemiology and Immunization

- Early recognition of an outbreak;
- Prompt reporting of the outbreak;
- Prompt collection of laboratory specimens;
- Pprompt institution of outbreak control measures;
- Evaluation of the success of the control measures;
- Communication.

Pre-Season Planning and Prevention

Enteric outbreaks can occur at any time throughout the year but they occur more frequently in the winter months. All facilities should complete the following prior to the winter months:

- Review regional policies and procedures for management of enteric outbreaks ensuring active involvement of staff;
- Identify a lead individual to coordinate surveillance and outbreak prevention and management activities.

The Ontario Ministry of Health and Long Term Care (2006) includes the following as a framework for preventing enteric illnesses and outbreaks:

1. Case Finding/Surveillance.
2. Preventive Practices.
3. Reporting.
4. Evaluation.

Additional details of these functions are included in the Generic Protocol – Introduction.

Case Finding/Surveillance

Early identification of cases can assist in abating an outbreak. All health care settings should ensure that they have the ability to promptly identify cases of enteric illness and to detect clusters or outbreaks. A key component of case identification is also ensuring that case status is communicated to nursing staff, physicians, and local or regional IPC personnel. Public health must be notified when the causal agent of an enteric illness is a reportable disease, when there is suspicion that the illness is foodborne, or there is an outbreak or cluster of gastroenteritis in any health care facility.

Outbreak Management

Managing enteric outbreaks promptly and effectively ensures that morbidity and mortality are minimized. One of the most important first steps for front-line health care employees is to ensure that residents/clients with infectious enteric illnesses are promptly placed on contact precautions. Staff should use the Attachment – Outbreak Checklist to focus their initial action.

Ensuring resident/client safety and providing a safe workplace for employees by implementing effective infection prevention and control measures is the responsibility of all health care facilities. *The Occupational Health and Safety Act, 1993* requires that employers "ensure, insofar as is reasonably practicable, the health, safety, and welfare at work of all of the employer's workers." The *Act* also requires that workers "take reasonable care to protect his or her health and safety and the health and safety of other workers." Facilities must also educate their health care workers, residents/clients, and the public about their personal responsibility for enteric disease prevention.

Efficient and effective communication plans should be in place to deliver messages to stakeholders regarding early identification of outbreaks of respiratory illness. Refer to Generic Protocol – Introduction for Outbreak Management Team Roles, Membership and Expectations.

The following protocol sections should be used to guide the management of enteric outbreaks in long-term care facilities:

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Enteric Protocol – Declaration of an Outbreak

It is imperative to institute individual contact precautions immediately for any individual experiencing symptoms suggestive of an infectious enteric illness without waiting for laboratory confirmation or additional cases to occur. Additional precautions may be required depending on the organism or suspected organism.

Reporting an Enteric Outbreak

Long Term Care (LTC) facilities must report ***suspected*** enteric outbreaks to local or regional Infection Prevention and Control (IPC) personnel and the Medical Health Officer (MHO), as per regional protocol, as soon as possible.[1]

An **enteric outbreak** defined as follows:

- Two (2) or more residents/clients and/or staff members are exhibiting signs and symptoms of gastrointestinal illness[2] over a twenty-four (24) hour period.

Gastrointestinal illness is defined as:
- Two or more episodes of loose watery stool, above what are considered normal for the resident/client/staff member, in a 24-hour period, or
- Two episodes of vomiting in a 24-hour period, or
- One episode of vomiting and one episode of loose watery stool in a 24-hour period, or
- One episode of bloody diarrhea in a 24-hour period, or
- One episode of explosive diarrhea in a 24-hour period.

[1] Section 19 of the Saskatchewan Disease Control Regulations requires hospitals, health centers, and special care homes to report to the MHO within 24 hours of becoming aware of an outbreak.
[2] For which no other cause can be found for the symptoms - such as medication reaction, food intolerance, bleeding from hemorrhoids, etc.

It is possible that an outbreak may be occurring that does not fit the definition above. If you are concerned, it is better to err on the side of caution and discuss the situation with IPC personnel and the MHO. Incremental outbreak measures can then be introduced to prevent the progression to an outbreak.

Communication:

- Outbreaks should be reported **as soon as possible** (within 24 hours) to the facility manager and your Regional Outbreak Team.
- Call during reasonable hours; it is not usually necessary to call in the middle of the night.
- The MHO will determine whether illness within a facility constitutes an outbreak and will make recommendations regarding the implementation of outbreak control measures.

Declaring an Outbreak

The MHO is responsible for declaring an outbreak of gastrointestinal illness and will determine whether an outbreak is present when residents, clients and/or staff members exhibit signs and symptoms of infectious gastrointestinal illness consistent with the criteria above. The MHO will require the following information to determine if an outbreak should be declared:

- Number of ill residents/clients and/or staff;
- Total number of residents of the facility;
- Symptoms of illness – major and minor;
- Date of onset of illness in the first ill individual and all subsequent ill individuals;
- Location of ill individuals within the facility.

The MHO or designate will assign a sequential number to the outbreak and that number must be used on the lab requisition forms, line listings, etc.

The format of the outbreak numbering system should be assigned as follows:
<health region 3-4 letter acronym> - <four digit calendar year> - <three digit sequential number beginning at 001> (e.g., SCHR-2007-001).

Communication:
Key information to be communicated to the MHO throughout the outbreak includes:

- If there have been deaths related to the illness;
- Commonalities in the cluster, e.g., pre-existing pathology;
- Number of residents transferred to acute care facilities;
- IPC interventions implemented;
- If specimens have been collected/sent for laboratory diagnosis;
- If social/education events are planned for the staff or residents of the facility;
- Ongoing status (number of cases and severity of illness).

Communication (Weekend and After Hours)**:**

- It is the responsibility of the health region to ensure that the MHO who is providing weekend or "after hours" coverage has been updated on any current outbreaks, including the outbreak numbers.
- The MHO providing coverage should provide an update to regional designate once their coverage period is complete.

Communication:
Reporting to Saskatchewan Ministry of Health is an important function. Public Health will send an initial report the Saskatchewan Ministry of Health. See Attachment – Outbreak Notification and Report Form. The following elements must be documented on the form:

- Initial notification report date;
- Health Region;
- Outbreak number;
- Outbreak category (e.g., respiratory or enteric);
- Type of Healthcare Facility;
- Facility name, location, and floors/units affected;
- Date of onset of first case;
- Date outbreak reported to Health Region;
- Date outbreak declared if different from date outbreak declared;
- Date facility closed;
- Laboratory findings (submit via an updated notification report as soon as organism is known);
- Person preparing report, contact phone number and job designation.

Laboratory Investigation

The goal of the investigation is to identify the cause of the outbreak, not to confirm the diagnosis in every single case. After a laboratory diagnosis is made for the outbreak, management of subsequent cases is guided by symptoms.

Specimen Collection

- Restrict sampling in institutional outbreaks to the first five to six cases of diarrhea.
- Once an etiological agent has been identified, there is no value in continuing to send specimens. This only serves to increase turn around time as the laboratory deals with increased numbers of specimens.
  Exceptions
  Consideration should be given to further laboratory testing in these circumstances:
  - In large institutions, if the outbreak spreads to further wings or floors, Public Health may ask the facility to submit specimens from a sample of the initial cases in the newly affected wing(s).
  - For individuals with significant illness who do not meet the case definition, especially at the end of an outbreak.

- Collect specimens within 48 hours of onset of symptoms in the individual.
- Use the outbreak number assigned by the regional public health office. The facility name should also be included on the requisition. Specimens that do not have an outbreak number may not be tested as a priority, or testing may be delayed.
- Do NOT submit stool specimens that are formed.

Specimens for Virology

During the fall and winter, when norovirus circulates more widely:

- Submit stool specimens for norovirus testing in **plain** containers. Indicate "norovirus" on the requisition.

- Do NOT submit specimens routinely for "viral studies":
  - If **norovirus has <u>not</u> been identified** as the cause of the enteric outbreak with the initial testing of cases, consider sending nasopharyngeal (flocked or small dacron swab) or throat swabs (large dacron swabs) for viral studies on one or two residents/clients, especially if profuse vomiting and diarrhea are not the primary symptoms. These specimens must be sent in viral transport medium, labelled with the same outbreak number as the enteric specimens. At other times of the year (late spring and summer), when norovirus is not as common, in addition to stool specimens for viral studies, submit throat swabs (large dacron swabs) for virus testing in viral transport medium and indicate "viral studies" on the requisition. Label all specimens (stool and throat swabs) with the same outbreak number.

<u>Specimens for Bacteriology</u>

- Stools for <u>Culture and Sensitivity (C&S)</u> - Ideally, during an outbreak all outbreak stool specimens should be sent directly to Saskatchewan Disease Control Laboratory (SDCL) for bacterial culture. Specimens should be collected in Cary-Blair transport medium.
- Stools for <u>Toxin Testing (including *Clostridium difficile*)</u> - In addition to the specimen sent for C&S, send a second specimen in a plain stool container.
  - If toxin testing AND virology are requested, submit one specimen in a plain container, using a virology requisition and indicating "norovirus and toxin testing."

<u>Food-Borne Disease Outbreak Specimens</u>

- <u>Stool Specimens</u> - If a food-borne outbreak is suspected, all stool specimens should be sent directly to the Saskatchewan Disease Control Laboratory (SDCL) as they perform tests on outbreak specimens for enteric pathogens that are not routinely detected in regional laboratories, including *Staphylococcus aureus, Clostridium perfringens,* and *Bacillus cereus*.

- Food Specimens - The facility must refrigerate suspected foods in the original packaging. The Medical Health Officer (MHO) will coordinate prior approval for the testing of food with SDCL. Once this has been arranged, the facility will be responsible for sending the specimens.

Communication:
- The MHO will make arrangements for testing of food specimens with SDCL, before specimens are sent in. Food samples will **only** be processed when an organism has been confirmed by SDCL in a human case.

- Keep all specimens (stool and food specimens) refrigerated until packed and shipped to SDCL or the local laboratory as per routine specimen handling process. Refer to SDCL Compendium of Tests or the local Laboratory Manual for details on the transport of refrigerated specimens (e.g., where transportation time is greater than 1 hour, specimens must be kept cool using ice packs).

Communication - Submitting Specimens on Weekends:
- Specimens received after hours will be processed on the next working day, unless the MHO has made prior arrangements with the SDCL/Regional Laboratory to process specimens on an urgent basis.

- Supply the following information on each. See Attachment – Lab Requisition Samples:

1. Symptoms
2. Date of onset
3. Time and date of collection
4. Name of facility
5. Outbreak number
6. Name of resident
7. Date of Birth (DOB)
8. Health Services Number (HSN)
9. Name of ordering physician or nurse practitioner

Communication:

- If telephone results are required, provide the name and contact number.
- SDCL will communicate lab results to the sending laboratory/facility and ordering physician.
- The MHO/Public Health Services receive copies of all results for requisitions with an outbreak number from the testing laboratory (SDCL/other Regional Laboratories).

Epidemiological Investigation

The most compelling reason to investigate a recognized outbreak of disease is that exposure to the source(s) of infection may be continuing. Identifying and eliminating the source of infection can prevent additional cases.

Specific aspects that are to be considered include:

- The extent of the outbreak in terms of person, place, and time;
- The etiological agent, the source, the propagation mechanisms, and contributing factors.

A systematic approach to explore the commonalities of both affected and unaffected individuals is needed. Through this investigation, one can hopefully determine what the contributing factors are: environmental, behavioural, and/or administrative.

Even if an outbreak is basically over by the time the epidemiologic investigation begins, investigating the outbreak may still be warranted for many reasons. The results of the investigation may bring forth recommendations to prevent similar outbreaks in the future or to support the interventions that have been or will be put in place.

While investigation is typically carried out by Public Health, it is dependent on the cooperation and participation of facility residents, staff and administration in providing information.

The Generic Protocol – Prevention and Control section outlines measures that are important in the prevention and control of outbreaks routinely. This section highlights additional information on control measures that are specific to infectious enteric illness.

With the identification of a single individual with undiagnosed acute enteric illness that could be infectious, it is imperative that individual contact precautions be instituted immediately without waiting for laboratory confirmation or for additional cases to occur. Early consultation is encouraged, particularly if there are one or two residents/clients with severe or unusual symptoms. Symptoms that may be present in individuals with infectious enteric illness include: diarrhea and vomiting, nausea, abdominal pain, fever, myalgia and headaches.

In addition to the components of routine practices/standard precautions listed in the Generic Protocol – Prevention and Control, these supplementary measures should be implemented:

1. Additional/Transmission-Based Precautions.
2. Special Considerations for Food Services and Food Preparation.
3. Additional Environmental Cleaning.
4. Special Considerations for Norovirus and *Clostridium difficile.*

Additional Precautions

Additional Precautions are used in addition to routine practices for residents/clients documented or *suspected* of being colonized/infected with a specific organism. The type of required additional precautions is determined by the mode of transmission of the organism/disease. The mode of transmission on which these enteric precautions are based is primarily *contact.*

Contact precautions are used in addition to routine practices for residents/clients with symptoms of enteric illness. Perform a Point of Care Risk Assessment (PCRA) to determine the necessary level of protection/precautions.

Contact Precautions[1]

- Any communal or shared health care equipment must be cleaned and disinfected after each use.
- Health care equipment must not be shared between residents/clients.
- Provide resident/client with a private room, door can remain open (if private room is unavailable, cohorting residents/clients likely to be infected with the same agent and using precautions between contacts with residents/clients is permissible).
- Gloves (clean, non-sterile) should be used at all times when in the resident/client room and while providing care.
- Gowns should be donned before entering and removed immediately before leaving resident/client's room.
- Perform effective hand hygiene after removing gown and gloves and after leaving the room.

The following droplet precautions must be added when the resident/client has projectile vomiting or explosive diarrhea:

- A surgical/procedure mask covering the worker's nose and mouth and protective eyewear if working within two meters of the resident/client or during clean up of emesis or feces.
- Eye or face protection should be removed after leaving the resident's/client's room and disposed of in either a hands-free waste receptacle (if disposable) or in a separate receptacle to go for reprocessing (if reusable).

Hand Hygiene

Some enteric infections form spores that cannot be killed by alcohol hand sanitizers (e.g., *C. difficile*). Ensure a strong emphasis on hand washing versus hand gel.

Of particular interest in enteric outbreaks is the possibility of Common Vehicle Spread.

[1] Canada Communicable Disease Report (CCDR), July 1999 - Infection control guidelines: Routine practices and additional precautions for preventing the transmission of infection in health care.

A common vehicle is a common item that can spread an infectious agent to numerous people through a single source. Examples of common vehicles may be food, water and shared items. Additional measures may need to be implemented in instances of common vehicle spread.

Once the causative organism is known, the mode of transmission needs to be taken into consideration when determining the role of common vehicle in the spread of the outbreak. This information will be useful in determining what controls need to be implemented and what services and activities may need to be adapted or suspended.

Special Considerations for Food Services and Food Preparation

- Location of staff meals and breaks is decided in consultation with the Medical Health Officer (MHO) and infection prevention and control (IPC) personnel.
- Staff must eat only in designated areas (not in charting or working areas).
- All items that cannot be cleaned (e.g., magazines) should be discarded.
- All tables and chair armrests are to be cleaned and disinfected after each seating.
- Ensure the hot holding carts that take the meals to the wings/floors are never close to the dirty dish area in the kitchen.
- Hot holding carts and dirty dishes trolleys are to be cleaned and sanitized[2] once returned to the kitchen.
- If food preparation staff develop any enteric symptoms, the MHO and IPC personnel must be consulted to discuss 'meals on wheels' and catering operations.
- Sometimes independent living residents/clients also eat at these facilities; care must be taken to ensure measures are in place to prevent illness in the independent living quarters.

[2] Accelerated hydrogen peroxide is the agent of choice for cleaning and sanitizing during Norovirus outbreaks.

If canteen services are available in the facility:

- All open candies and their scoops are to be removed from the canteen until the outbreak has been declared over.
- Do not allow staff to take food up to floors or wings with ill residents/clients and advise staff not to share food (going into the same bag with their hands, etc.).

Cleaning of Food Preparation Areas Contaminated with Vomit and/or Feces

The following measures accompany the processes outlined in the Additional Environmental Cleaning section below:

- Disinfect the area (including vertical surfaces).
- Dispose of any potentially contaminated food (food that has been handled by an infected person or food that may have been exposed to the aerosolized virus[3] by someone vomiting in close proximity). If there is any question regarding the safety of the food, discuss the situation with the Public Health Officer before using the food.
- Wash all contaminated dishes, utensils and trays in a commercial dishwasher that is capable of effectively sanitizing the dishes with hot water at a temperature of at least 82 degrees Celsius or with the use of effective chemical sanitizers. Be careful not to cross-contaminate dirty and clean dishes. Follow the standard operating procedures for handling dishware.

Refer to cleaning instructions below for detailed information.

[3] An enteric vvirus that has been aerosolized is of concern when it is ingested. An enteric virus is not transmitted through inhalation.

Additional Environmental Cleaning

Refer to Generic Protocol – Prevention and Control for standard cleaning processes during outbreaks. Additional cleaning during enteric outbreaks includes:

- Cleaning frequently touched areas (such as door handles and light switches) twice daily during an enteric outbreak.

Individuals, who clean up vomit or feces, are to minimize the risk of infection to themselves and others by:

- Wearing disposable gloves, a surgical mask and a water resistant gown/disposable apron;
- Using paper towels (or equivalent) to soak up excess liquid and transfer the towels and any solid matter into a plastic garbage bag;
- Cleaning the soiled area following routine facility practice, using a "single-use" cloth followed by disinfecting the contaminated area with a recommended disinfectant (see below);
- Removing disposable gloves, masks and aprons and placing into a garbage bag;
- Placing re-usable aprons/gowns into laundry bag;
- Washing hands thoroughly using soap and warm running water for at least 30 seconds.

Ice Machines

- Bulk ice machines with a scoop are to be shut off, emptied, sanitized and left unused on each unit/ward that has ill residents/clients on it until the outbreak is over. If ice is needed on these areas, it can be brought from the main kitchen.
- Automatic ice dispensing machines require sanitization of high contact areas as per routine. Refer to cleaning instructions below.

Disinfectant Dilution Instructions

0.5% Accelerated Hydrogen Peroxide Solution:[2]

- The 0.5% accelerated hydrogen peroxide solution requires a minimum contact time at a dilution of 1:16. The length of time varies with causative organism – refer to current sources for details on contact times.
- Accelerated hydrogen peroxide solutions should be mixed as the product and safety label specifies.

Hypochlorite (Bleach) Solution:

NOTE: Bleach is not a cleaner; therefore the area must be cleaned with hospital grade detergent before applying 1:50 bleach solution that is allowed to air dry (2-step process).

- The recommended level of 1:50 bleach solution is made by adding 1 part of household bleach (5.25% hypochlorite) to 50 parts water, or by mixing 1/3 cup bleach to 1 gallon of water, or by following the manufacturer's recommendations for bleach tablets. This will give a hypochlorite solution of approximately 1,000 parts per million (ppm). This concentration of bleach is the minimum recommended level known to be effective against viral gastroenteritis agents.
- Diluted bleach solutions must be prepared daily, as available chlorine will decrease over time in a diluted state. Test strips should be used periodically to ensure that the bleach solution strength is sufficient. Check with a regional Public Health Officer.
- A minimum contact time is required for a bleach solution to be effective. This contact time varies with the causative organism; refer to current sources for details on contact times.
- Note that hypochlorite is corrosive and may bleach fabrics.

Special Considerations Norovirus and *Clostridium difficile*

Recommended Disinfectants for Use in Housekeeping

In the event of an outbreak of norovirus or *Clostridium difficile*, housekeeping is notified, so they can prepare for additional cleaning requirements. Quaternary ammonium products are **not** effective against enveloped viruses (e.g. Norovirus) or spores (e.g. *Clostridium difficile*). Recommended disinfectants are listed below:

- Accelerated Hydrogen Peroxide can be used as the disinfectant and cleaner. There is documented evidence that a 0.5% Accelerated Hydrogen Peroxide (AHP) solution is effective in killing feline calicivirus (FCV), a surrogate for norovirus. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5149a2.htm.
- A prepared bleach solution with a dilution of 1 part bleach to 50 parts water is also effective in killing FCV.

Recommended Disinfectants for Use in Food Service Areas

- Accelerated Hydrogen Peroxide can be used as the disinfectant and cleaner.
- If using bleach as the disinfectant, a three-step process is necessary in food preparation areas.
    1. Clean area with hospital cleaner.
    2. Use 1:50 bleach solution on the area allowing the surface to air dry.
    3. Rinse the area with fresh water.
- See housekeeping section above for dilution instructions.

Outbreaks

Outbreaks in Long Term Care and Integrated Facilities
Generic Enteric Protocol – Termination of Outbreak Status

The Medical Health Officer (MHO), in consultation with the facility and outbreak team, is responsible for declaring an outbreak over and will advise the facility when the institutional outbreak measures can be discontinued.

Discontinuing Individual Infection Control Measures

Individual infection control precautions can be discontinued when the individual is no longer considered infectious. The period of communicability is unique for the specific causative organism identified during the outbreak. For more enteric information see the Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities. Where no organism has been identified, contact precautions can be removed for an individual 48 hours after all symptoms have resolved.

Discontinuing Institutional Outbreak Measures:

In general, the outbreak will be declared over by the MHO when there have been no further cases since the resolution of symptoms in the last case[1] and nosocomial transmission has ceased. The criteria will be based on the epidemiological properties (incubation period/period of communicability) for the specific causative organism(s) identified during the outbreak. For more information, see the Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities.

Where no organism has been identified, the MHO will base this decision on the symptom profile, the epidemiologic characteristics of the outbreak and the surveillance data available in Saskatchewan.

[1] In the exceptional circumstance where a patient has prolonged diarrhea, consider other causes for this prolongation of symptoms. They may need to be considered separately from the other cases and in some instances the MHO will declare an outbreak over provided that other criteria for ending the outbreak have been met.

Communication:

- Facility managers should ensure that the following have been informed that the outbreak has been declared over:
  - Other facility managers;
  - IPC personnel;
  - Directors;
  - Human Resources;
  - Scheduling;
  - All others listed above that were on the initial notification list.

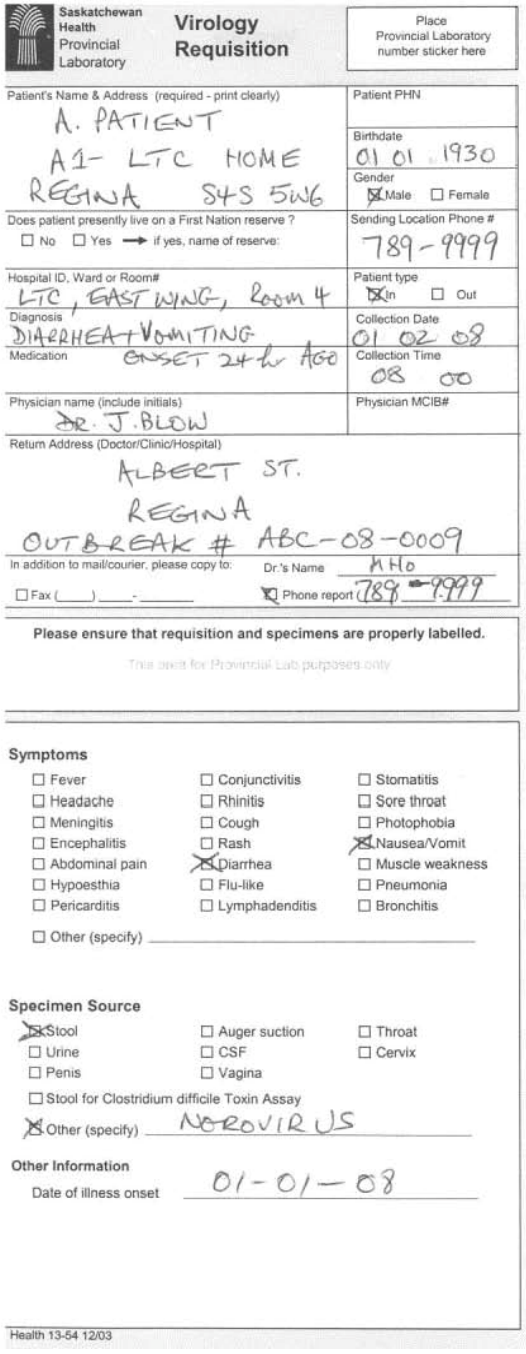
Communication:

- A final report of the outbreak is to be completed and shared with the outbreak team and Saskatchewan Ministry of Health. The finalized outbreak summary report must be submitted to the Ministry of Health **within 30 days of end of outbreak**. See Attachment – Outbreak Notification and Report form.

Outbreaks in Long Term Care and Integrated Facilities
Attachment – Lab Requisition Samples (Enteric)

Reviewed: June, 2010

Section: 9-50



Saskatchewan Health Provincial Laboratory

Virology Requisition

Place Provincial Laboratory number sticker here

Patient's Name & Address (required - print clearly)
A. PATIENT
A1- LTC HOME
REGINA S4S 5W6

Patient PHN

Birthdate: 01 01 1930

Gender: ☒ Male ☐ Female

Does patient presently live on a First Nation reserve ?
☐ No ☐ Yes → if yes, name of reserve:

Sending Location Phone #: 789-9999

Hospital ID, Ward or Room#: LTC, EAST WING, Room 4

Patient type: ☒ In ☐ Out

Diagnosis: DIARRHEA + VOMITING

Collection Date: 01 02 08

Medication: ONSET 24 hr AGO

Collection Time: 08 00

Physician name (include initials): DR. J. BLOW

Physician MCIB#

Return Address (Doctor/Clinic/Hospital)
ALBERT ST.
REGINA
OUTBREAK # ABC-08-0009

In addition to mail/courier, please copy to: Dr.'s Name MHO

☐ Fax (___) ___-_____ ☒ Phone report 789-9999

Please ensure that requisition and specimens are properly labelled.

This area for Provincial Lab purposes only

Symptoms

☐ Fever	☐ Conjunctivitis	☐ Stomatitis
☐ Headache	☐ Rhinitis	☐ Sore throat
☐ Meningitis	☐ Cough	☐ Photophobia
☐ Encephalitis	☐ Rash	☒ Nausea/Vomit
☐ Abdominal pain	☒ Diarrhea	☐ Muscle weakness
☐ Hypoesthia	☐ Flu-like	☐ Pneumonia
☐ Pericarditis	☐ Lymphadenditis	☐ Bronchitis

☐ Other (specify) _____

Specimen Source

☒ Stool	☐ Auger suction	☐ Throat
☐ Urine	☐ CSF	☐ Cervix
☐ Penis	☐ Vagina	

☐ Stool for Clostridium difficile Toxin Assay

☒ Other (specify) NOROVIRUS

Other Information

Date of illness onset 01-01-08

Health 13-54 12/03

Saskatchewan Health
The Saskatchewan Disease Control Laboratory (Formerly The Provincial Laboratory)

Bacteriology Requisition

Place number sticker here

Patient's Name & Address (required - print clearly)
A. PATIENT
A1 – LTC HOME
REGINA S4S 5W6

Patient PHN

Birthdate: 01 / 04 / 1930

Gender: ☒ Male ☐ Female

Does patient presently live on a First Nation reserve ?
☐ No ☐ Yes → if yes, name of reserve:

Sending Location Phone #: 789-9999

Hospital ID, Ward, Room #: LTC, EAST WING, Room 4

Patient Type: ☒ In ☐ Out

Diagnosis: DIARRHEA + VOMITING

Collection Date: 10 / 02 / 08

Medication: ONSET 24 hr AGO

Collection Time: 08 00

Physician name (include initials): DR. J. BLOW

Physician MCIB#

Return Address (Doctor/Clinic/Hospital)
ALBERT ST.
REGINA

OUTBREAK # ABC-08-0009

In addition to mail/courier, please copy to: Dr.'s Name MHO

☐ Fax (____) _____ ☒ Phone report (789) 9999

Please ensure that requisition and specimens are properly labelled. (Name, DOB, PHN)

Specimen Source

☐ Eye	☐ Urethral	☐ Rectum*
☐ Ear	☐ Vaginal	☐ Groin*
☐ Throat	☐ Cervix	☒ Stool
☐ Sputum	☐ Penis	☐ CSF
☐ Bronchial aspirate/ Bronchial washing	☐ Naso-Pharyngeal	☐ Blood
	☐ Nares*	☐ Mouth

Wounds: ☐ Superficial wound ☐ Deep Wound ☐ Abscess
site: _____

Urine: ☐ Mid-stream ☐ in/out catheter ☐ Indwelling catheter
☐ Suprapubic/cystoscopy

☐ Gastric washing (TB only) ☐ Fluid (specify) _____

Other Information

Urine dipstick results

Nitrate	☐ Positive	☐ Negative
Leukocytes	☐ Positive	☐ Negative

Recent foreign travel
(Specify country and dates) _____

Tests Requested

☒ C & S	☒ Food-borne illness	☐ Parasitology
☐ Diphtheria	☐ Pertussis	☐ GC culture only
☐ Mycobacterium culture	☐ Bacterial vaginosis (Gram Stain only)	☐ Group B strep screen (vaginal & rectal)
☐ VRE screen*	☐ Ureaplasma/ Mycoplasma	☐ Trichomonas culture
☐ MRSA screen*	☐ Bacterial Identification	
☐ Legionella urine	☐ Other (specify) _____	

* Infection Control

Health 13-7 05/07

Outbreaks in Long Term Care and Integrated Facilities
Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Adenovirus (type 40 or 41)	Humans	Abrupt onset of vomiting, diarrhea, dehydration, low grade fever.	4–6 hours	3–10 days	Most infectious during acute symptoms; healthy adults may be carriers.	Fecal/oral or vomitus/oral, aerosol and fomites.	• Contact precautions until 48 hours after symptoms resolve – use mask and eye protection when assisting patients with explosive diarrhea or projectile vomiting. • Food handlers and health care workers are excluded until diarrhea has resolved or as directed by MHO.[3] • Hand hygiene should be emphasized.
Campylobacter species	Poultry and cattle.	Diarrhea, abdominal pain, malaise, fever, nausea and vomiting.	2–5 days	2–5 days	Throughout course of infection (up to 5 days with treatment). Individuals not treated with antibiotics excrete organisms for as long as 2-7 weeks.	Mainly undercooked chicken and pork, contaminated food and water, or raw milk, contact with infected pets.	• Contact precautions are required until stool pattern has returned to normal. • Food handlers and health care workers are excluded until diarrhea has resolved. Exclude asymptomatic convalescent stool-positive individuals only for those with questionable handwashing habits. [4] • Hand hygiene should be emphasized.
Clostridium difficile	Intestinal tract of humans and other animals. Soil, water, hay, sand.	Diarrhea, pseudo-membranous colitis.	Varies with each patient/ resident	Variable	Duration of shedding.	Direct and indirect contact (fecal/oral)	• Contact precautions until symptoms resolve for 72 hours. • Food handlers and health care workers are excluded until diarrhea has resolved or as directed by MHO.[3] • Enhanced environmental cleaning is recommended.[5] • Hand hygiene should be emphasized. Alcohol gel not recommended for hand hygiene.

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Clostridium perfringens	Soil; GI tract of healthy people and animals.	Mild disease of short duration; sudden onset abdominal cramping and diarrhea.	1 day or less	6–24 hours, usually 10–12 hours	Not directly transmitted from person to person.	Ingestion of contaminated food; usually inadequately heated or reheated meats or gravies.	• Standard precautions. • Food handlers and health care workers are excluded until diarrhea has resolved or as directed by MHO.[3] • Hand hygiene should be emphasized.
Escherichia coli 0157:H7	Cattle, deer, humans.	Range from mild non-bloody diarrhea to stools that are virtually all blood. Haemolytic uremic syndrome (HUS) in 2–7% of cases.	Typically less than a week, ranging from 3–8 days with a median of 3–4 days.	2–8 days	For duration of fecal excretion (7–9 days in adults and up to 3 weeks in one third of children).	Mainly contaminated food, undercooked beef, waterborne outbreaks documented. Person to person transmission can occur.	• Contact precautions for HUS continue until two negative stool specimens for *E. coli 0157:H7* or for 10 days from the onset of diarrhea. Otherwise, until the diarrhea has ceased. • Health care workers and food handlers are excluded from work until two negative stool specimens are obtained and diarrhea has resolved. Stool specimens must be taken at least 24 hours after diarrhea has resolved, they should be collected at least 24 hours apart and at least 48 hours after the termination of any antibiotic or antimicrobial treatment.4 • Hand hygiene should be emphasized.

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Norwalk Agent (NLV), Norovirus and Small Round Structured Virus (Calicivirus)	Humans	Self-limited mild to moderate disease, vomiting and diarrhea.	24–48 hours	12–48 hours	During acute symptoms and up to 48 hours after symptoms resolve.	Fecal/oral or vomitus/oral, aerosol and fomites, other documented sources include water, and food (particularly shellfish and salads).	• Contact precautions until 48 hours after symptoms resolve – use mask and eye protection when assisting patients with explosive diarrhea or projectile vomiting. • Enhanced environmental cleaning is recommended.[5] • Direct health care workers reporting illness are excluded from work for at least 48 hours after their symptoms resolve or as directed by the Medical Health Officer (MHO).[3] • Food handlers reporting illness are to remain off work until 72 hours after symptoms resolve or as directed by the MHO. • Hand hygiene should be emphasized.
Rotavirus	Probably humans.	Abrupt onset of vomiting and diarrhea and rapid dehydration, low grade fever.	4–6 days	24–72 hours	During acute symptoms and shed in feces up to 8 days after symptoms subside.	Fecal/oral or vomitus/oral, aerosol and fomites.	• Contact precautions until 48 hours after symptoms resolve – use mask and eye protection when assisting patients with explosive diarrhea or projectile vomiting. • Food handlers and health care workers are excluded until diarrhea has resolved or as directed by MHO.[3] • Hand hygiene should be emphasized.

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Salmonella species	Domestic and wild animals including poultry, swine, rodents and pets. Humans.	Sudden onset headache, fever, abdominal pain, diarrhea, nausea and sometimes vomiting .	Several days to several weeks	Usually 12–36 hours, may be from 6–72 hours S. typhi 5–28 days.	Throughout course of infection – several days to several weeks. A carrier state can occur and persist for months.	Ingestion or handling of contaminated food derived from infected animals or contaminated by feces of infected person or animal and fecal/oral route.	• Contact precautions until diarrhea has ceased. • Health care workers and food handlers are excluded until two negative stool cultures are obtained and diarrhea has resolved. Stool specimens must be taken at least 24 hours after diarrhea has resolved, they should be collected at least 24 hours apart and at least 48 hours after the termination of any antibiotic or antimicrobial treatment. • Carriers should be reviewed by the MHO before being allowed to return to work as a food handler.[4] • Hand hygiene should be emphasized.

Agent	Reservoir	Symptoms	Duration of Symptoms	Incubation Period	Period of Communicability	Route of Transmission	Infection Control Measures [1, 2]
Shigella species	Humans	Diarrhea, fever, nausea vomiting and cramps. Illness ranges from mild to severe.	4–7 days	Usually 1–3 days, but ranges from 12–96 hours; up to 1 week for *S. dysenteriae*.	During acute symptoms and until agent is not longer present in feces – usually within 4 weeks after illness. Asymptomatic carriers may transmit infection; the carrier state may persist for months or longer (although rarely).	Direct or indirect fecal/oral transmission. Infection may occur after the ingestion of contaminated food or water as well as from person to person.	• Contact precautions until diarrhea has ended and bowel pattern has returned to normal. • Health care workers and food handlers are excluded from work until two negative stool specimens are obtained and diarrhea has resolved stool specimens must be taken at least 24 hours after diarrhea has resolved, they should be collected at least 24 hours apart and at least 48 hours after the termination of any antibiotic or antimicrobial treatment.[4] • Hand hygiene should be emphasized.
Staphylococcus aureus (entero-toxigenic)	Humans cows, dogs and fowl.	Abrupt onset nausea, cramps, vomiting & sometimes diarrhea.	1–2 days	30 minutes to 8 hours, usually 2–4 hours.	N/A	Ingestion of food containing staphylococcal enterotoxin; usually foods handled without subsequent cooking.	• Standard precautions. • Food handlers and health care workers are excluded until diarrhea has resolved or as directed by MHO.[3] • Hand hygiene should be emphasized.

[1] Lifting Individual Precautions - when the recommendation to lift individual infection control precautions is made in consultation with your Infection Control Practitioner/MHO, an enhanced cleaning of the room is recommended before the resident is allowed to leave the room and staff discontinues PPE.

[2] If ongoing nosocomial transmission is occurring, additional cleaning procedures may need to be put in place. Discuss with Infection Control.

[3] Health Canada. Prevention and control of occupational infections in health care: an infection control guideline. Canada Communicable Disease Report 28S1, 1-264. 2002. See http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/02pdf/28s1e.pdf

[4] Control of Communicable Diseases Manual, 18th Edition David L. Heymann, MD Editor

[5] Use of 0.5% hydrogen peroside or a 1000-ppm bleach solution (after cleaning) will need to be implemented for environmental cleaning. Recommended twice daily cleaning of hand contact items. Public Health Agency of Canada – MSDS infectious substances: http://www.phac-aspc.gc.ca/msds--ftss/index.html

Outbreaks in Long Term Care and Integrated Facilities
Attachment – Long Term Care Enteric Outbreak Infection Control Measures

Please see the following pages for the Long Term Care Enteric Outbreak Infection Control Measures.

SAMPLE
Regional Health Authority

Long Term Care
Enteric Outbreak Infection Control Measures

Facility: _____ **Date**: _____

Address: _____

Contact Person(s): _____ **Phone #** _____

Note: With the identification of a single resident/client with undiagnosed acute enteric illness that could be infectious, it is imperative that individual additional precautions be instituted immediately without waiting for lab information or for additional cases to occur.

Plan and prepare for enteric outbreaks with the facility outbreak team each season to ensure supplies are updated and available.

		Met	Not Met	Comments
1. Notification/Communication				
1.1	Contact Public Health (-). After hours and weekends (-) Public Health assigned Outbreak Number: _____			
1.2	Contact Infection Prevention and Control (IPC) personnel LTC (-)			
1.3	Notify staff, Director/Manager, Infection Control Outbreak Team, etc. about outbreak and put infection control measures in place			
1.4	Notify groups coming into facility such as VON, Home Care, etc			
1.5	Request fact sheets from Public Health Services/Infection Control as needed			
1.6	Fax line list to Public Health/Infection Control			
2. Entrances				
2.1	Sign at entrance to discourage visiting if visitor has an illness			
2.2	Sign at entrance to advise visitors of enteric illness			
2.3	Place approved hand gel at all entrances for visitor use			
3. Maps				
3.1	Site map update			
4. Residents				
4.1	Isolate in single room; may cohort in specific area those with same organism			
4.2	Stool specimens (C&S and virology) with completed requisitions to the lab, maximum of 6 residents. Include outbreak number. See 9-53 Generic Enteric Protocol – Investigation for details.			
4.3	Update line listings daily and fax or e-mail to Public Health/IPC by p.m.			

		Met	Not Met	Comments
4.4	Confined to room (if possible) and for 48 hours after symptoms subside (this may vary depending on causative organism – see Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities)			
4.5	Meals in their room - tray service during illness and for 48 hours after symptoms subside			
4.6	Diligence in handwashing and use of alcohol hand gel for all residents including wanderers.			

5. Staff				
5.1	Update line listings for ill staff daily and fax or e-mail to Public Health/IPC by p.m.			
5.2	Signage regarding contact precautions if have direct contact with resident or environment posted.			
5.3 Droplet	precautions (surgical/procedure mask and eye protection) if within 2 meter of resident with projectile vomiting, explosive diarrhea, or during clean up of emesis or feces.			
5.4 PPE	readily available			
5.5	Diligence in handwashing NOTE: Some enteric infections form spores that can not be killed by alcohol hand sanitizers (e.g. *C. difficule*). Ensure a strong emphasis on hand washing versus hand gel			
5.6	Sink, liquid soap, and paper towels available for handwashing			
5.7	Cohort staff to work only on affected area			
5.8	Cohort staff to have breaks separate from staff in unaffected areas			
5.9	No food or drinks at nursing stations			
5.10	Staff to provide dedicated equipment for ill residents. If this is not possible, disinfect common use items before re-use (e.g: stethoscopes) – have cleaning supplies/wipes readily available.			
5.12	If providing direct care, do not attend meetings held outside facility			
5.13	Ill staff off work for 48 hours after symptoms subside (may vary depending on causative organism – see Attachment – Reference Table of Agents Commonly Responsible for Outbreaks of Enteric Infections in LTC Facilities). Staff should consult with Public Health/IPC /Employee Health/Occupational Health designate prior to returning to work.			
5.14	Staff to notify their other employers about outbreak – ideally work in 1 facility during outbreak. Staff working in multi-sites discuss with Public Health/IPC/Occupational Health prior to working in another facility.			

		Met	Not Met	Comments
5.15	Non-facility staff, professionals, service providers are informed of the outbreak. Provide only essential therapeutic services, use appropriate PPE, and follow IPC measures.			
5.16	RE: Volunteers/students: (a) it is preferable they be excluded; discuss with LTC ICP, Manager (b) if allowed to work, use appropriate PPE, infection control measures, minimize contact with isolated residents			

6. Enhanced Cleaning (2 times per day) – Housekeeping Contact: _____				
6.1	Resident's bathroom (sink, taps, and toilet)			
6.2	Staff and public bathrooms (sinks, taps, and toilets)			
6.3	Hand rails/stair rails			
6.4	Call lights/bed rails/lifts			
6.5	Light switches/elevator buttons/door handles			
6.6	Water fountains			
6.7	Wheel chairs/walkers			
6.8	Commodes/boosters/bed pans			
6. 9	Dining room chairs, chair arms and table tops after each setting			
6.10	Telephone and desk at Nursing Station			
6.11	Hand contact areas of transportation vehicles			
6.12	If explosive vomiting, clean surrounding contaminated area			
6.13	Concentration and contact time of disinfectants varies with causative organism. Acceptable Disinfectants: • 0.5% Accelerated Hydrogen Peroxide Solution • Hypochlorite (Bleach) Solution _____ concentration **Enhanced cleaning following a Norovirus outbreak being declared over.**			
6.14	Remove non-essential items in ill resident's room (clean, then store); discard any used items that cannot be cleaned (ie: magazines, playing cards, etc.)			

7. Laundry – Contact Person: _____				
7.1	Soiled linen and clothes handled minimally – no rinsing			
7.2	Soiled linen and clothes bagged in room and sent to laundry - leak proof bag			
7.3	Laundry staff use gloves and long sleeved cloth gown to handle soiled linen. Place gown into the machine once soiled linen is in washing machine			
7.4	Launder in hot water, commercial bleach-like product, longest cycle and machine dry			

		Met	Not Met	Comments
8. Kitchen/Food Services – Contact Person:				
8.1	Refrigeration/cooling/thawing (must be 4°C/40°F or lower)			
8.2	Hot holding (must be 60°C/140°F or higher)			
8.3	Thermometer available to monitor food and equipment temperatures			
8.4	Handwashing facilities (sink, liquid soap and paper towels) available for staff			
8.5	Dishwasher temperatures/sanitizer concentrations being maintained and monitored			
8.6	Dining room tables, chairs, and chair arms cleaned and disinfected between settings			
8.7	Ice machines: (1) Bulk ice machines with a scoop are to be shut off, emptied, sanitized, and left un-used (2) Automatic ice dispensing machines require sanitization of high contact areas as per routine			
8.8	Dishes are to be put into dishwasher immediately. Disposable dishes are not required.			
8.9	Keep holding carts that take meals to wings/floors away from dirty dish area in kitchen			
8.10	Clean, sanitize hot holding carts and dish trolleys			
8.11	Dispose of any contaminated food/food that has been handled by infected person or exposed to aerosolized virus by someone vomiting in close proximity			
8.12	Canteen services: remove all open candies and their scoops			

9. Garbage – Contact Person:				
9.1	Garbage to be tied and removed to garbage containers. (Do not leave garbage bags on the floors)			
9.2	Garbage container outside premises to have lid that is closed and secure			
9.3	Inside garbage to have a foot release lid on containers or be open			

		Met	Not Met	Comments
10. Activities (to cancel if necessary) – Contact Person: _____				
10.1	Food related (cooking, potlucks, birthday parties, etc.)			
10.2	Hand contact activities (dancing, cards, bingo, crafts, folding linen, etc)			
10.3	Visiting groups			
10.4	Hair Salon			
10.5	Occupational therapy/physio			
10.6	Pet therapy			
10.7	VON care (foot care)			
10.8	Chapel			
10.9	Hot tubs/whirlpools used for several residents at one time			
10.10 Day	care (children)			
10.11 Day	program			
10.12 Outings				
10.13	Outside meetings held in facility			

11. Visitors				
11.1	Visitors are asymptomatic; visitors with symptoms do not enter the facility (unless compassionate or exceptional circumstances).			
11.2	Restrict visitation of multiple clients			
11.3	Visitors practice hand hygiene, use appropriate PPE, and follow IPC measures			

12. Admissions/Transfers				
12.1	Admissions to only after discussion with MHO/IPC. Transfers from affected wing/facility to another facility are limited to urgent/emergent situations – inform receiving facility of outbreak.			
12.2	Advise receiving facility RE: outbreak and whether or not resident symptomatic			
12.3	Advise family of resident RE: outbreak and potential risk			

13. Closure of Facility as per MHO Recommendations		**Y**	**N**	**Date: _____**
13.1	Date facility reopened:	Date: _____		
14. Post-Outbreak Review				
14.1	Recommendations made for improved management of future outbreaks if necessary.			

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Please see the following pages for the Use of Oseltamivir (Tamiflu®) for the Management of Influenza Outbreaks in Special Care Homes.

IMPORTANT

In preparation for Influenza season each fall, the manager of the Special Care Home should:

1. Have the creatinine clearance for each resident calculated.
2. Have the community pharmacist confirm the oseltamivir dosage based on the creatinine clearance results.
3. Ensure processes are in place to facilitate timely access to oseltamivir for treatment or prophylaxis in the event an Influenza outbreak is declared by the Medical Health Officer.

Use of Oseltamivir (Tamiflu®) for the Management of Influenza Outbreaks in Special Care Homes

Purpose:
To endorse the Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) guidelines on the use of antivirals for influenza in the management of outbreaks in Special Care Homes.

To define the process for reimbursement to pharmacies for oseltamivir prescriptions when provided to residents of special care homes during an influenza outbreak.

Background:
The National Advisory Committee on Immunization (NACI) provides national guidance on influenza vaccinations (http://www.phac-aspc.gc.ca/naci-ccni/). NACI recommendations inform the Ministry of Health's provincial influenza immunization strategy.

AMMI Canada produces guidelines on the use of antivirals for influenza (http://www.ammi.ca/guidelines/). Surveillance of antimicrobial resistant patterns contributes to the evidence for the recommendations for the use of specific antivirals in the treatment and prophylaxis of influenza. The Ministry of Health supports the AMMI Canada guidelines.

The United States' Centers for Disease Control and Prevention (CDC, 2020) identifies the elements of a multi-faceted approach in preventing transmission of influenza viruses and other infectious agents within healthcare settings, including in long-term care facilities:

1. Influenza Vaccination
2. Influenza Testing[1]
3. Infection Prevention and Control Measures
4. Antiviral Treatment
5. Antiviral Chemoprophylaxis

During influenza outbreaks in these settings, antiviral medications[2] for prophylaxis are used to control an outbreak in the facility and not exclusively for the benefit of the individual resident. Chemoprophylaxis is combined with antiviral treatment of ill persons plus other measures to control outbreaks of influenza in special care homes.

[1] Influenza and COVID-19 cannot be reliably differentiated on clinical symptoms due to the range of overlapping respiratory and systemic symptoms.
[2] Peramivir (an intravenous neuraminidase inhibitor [NAI]) and baloxavir marboxil (a virus replication inhibitor distinct from NAIs) were licensed in Canada in 2017 and 2020 respectively, but neither are marketed and neither are approved for managing influenza outbreaks in Special Care Homes.

Expectations for General Infection Control Measures:
Special care homes have appropriate infection prevention and control programs. Refer to Outbreaks in Integrated and Long-term Care Facilities for general infection prevention and control measures as well as other existing policies and guidelines.

Definitions:
The Public Health Agency of Canada *FluWatch* definitions apply to this policy (http://www.phac-aspc.gc.ca/fluwatch/index-eng.php)

Eligibility Criteria:
Population Health Branch (PHB) is responsible for the program.
Reimbursement for **oseltamivir**[3] drug coverage will be provided:

- when influenza is lab-confirmed;
- when a Medical Health Officer (MHO) has declared an outbreak;
- when routine and additional infection prevention and control measures are implemented;
- for treatment (5 days) of symptomatic residents in the areas/wards the MHO has designated as having an outbreak; and
- for prophylaxis (10 days) of all asymptomatic residents located in the areas/wards the MHO has designated as having an outbreak.

Use of oseltamivir outside of the above criteria is the responsibility of the Saskatchewan Health Authority (SHA).

Additional considerations:

- If new cases continue to develop >48 hours after initiation of prophylaxis, further investigation is warranted (Hota, 2007).
  - ➢ The Ministry of Health must be notified of extensions (i.e. repeat prescriptions) for ongoing outbreaks. NOTE: All extensions are subject to audit for appropriateness of use.

Exclusions:

- Reimbursement for costs of oseltamivir during outbreaks in special care homes, or similar institutions, in First Nations communities is the responsibility of Health Canada.
- The Ministry will not cover the use of zanamivir, peramivir or baloxavir marboxil under this program.
- Oseltamivir prescribed to employees in the facility is the responsibility of the individual or the SHA.
- Antiviral prophylaxis or treatment for in-hospital patients is the responsibility of the SHA.

[3] Zanamivir is approved for this indication, however is not covered by the Ministry of Health. Neither Peramivir nor baloxavir marboxil are approved for managing influenza outbreaks in Special Care Homes

Oseltamivir is listed as a drug benefit under the Ministry of Health's Drug Plan. Reimbursement to pharmacies is made through the Saskatchewan Drug Plan online computer system.

Step 1: Declaration of an Influenza Outbreak

- The MHO is responsible for notifying the Ministry of Health immediately of suspected and confirmed outbreaks as per the Guide for Completing the Outbreak Notification and Summary Report
- The MHO is responsible for declaring an outbreak; lab confirmation of influenza is required prior to initiating oseltamivir.

Step 2: Implementation of Oseltamivir Use

- In consultation with the attending physician or the employees in charge at the facility, the MHO determines if it is appropriate for oseltamivir to be used for outbreak control and will make recommendations as necessary.
- The facility employees create an "eligibility list" including the names and health registration numbers of the residents of the facility who meet the eligibility criteria to receive oseltamivir prophylaxis or treatment. **The eligibility list is sent to the pharmacy that provides services to the special care home for reference.**
- Once the MHO has recommended oseltamivir use for the outbreak, the patient's attending physician makes the decision as to whether any individual resident is *treated* or provided *prophylaxis*. The physician is responsible for determining the dosage for each patient for whom the drug is prescribed. The physician(s), who are responsible for prescribing oseltamivir, should be made aware of this protocol and consult the product monograph[4] for more detailed information.
- The employee(s) designated by the facility communicate with and obtain prescriptions for oseltamivir for the residents from their physician(s). The facility should have a consent procedure for residents in place.

Step 3: Notification of the Ministry of Oseltamivir Use

The MHO is responsible for notifying the Saskatchewan Drug Plan and Extended Benefits Branch, Ministry of Health of oseltamivir use within 48 hours using the Tamiflu Approved for Influenza Outbreak form.

> The completed form shall be sent to the Saskatchewan Ministry of Health by:
> - E-mail – dpeb@health.gov.sk.ca
> - Indicate "Tamiflu Approved for Outbreak" in the e-mail subject line.

[4] http://www.rochecanada.com/portal/ca/consumer_information_2?siteUuid=re7234008&paf_gear_id=45200024&pageId=re7603370&synergyaction=show&paf_dm=full&nodeId=1415-e9b8c703199f11e08386d584fa6c0793

The following is used for accounting purposes:

- The name of the Special Care Home and city of the facility;
- The date oseltamivir was started;
- Number of beds in the facility's outbreak unit; and
- The name of the pharmacy.

Step 4: Monitoring the Outbreak

The MHO is responsible for communicating with the facility during the outbreak to track success of control measures and determine an end date for the outbreak and an end date for the use of oseltamivir. If new cases continue to arise more than 48 hours after initiation of treatment and prophylaxis, further investigation is warranted. A decision about the ongoing use of oseltamivir should be based on results of the investigation.

- Individuals who have completed a 5-day treatment course should not be given additional doses of oseltamivir.
- Residents who have recovered from laboratory confirmed influenza infection during the outbreak do not require oseltamivir prophylaxis.

Step 5: Payment of Oseltamivir

Eligible residents of Special Care Homes will pay $0.00 co-payment for a prescription for oseltamivir when prescribed and used in the management of an influenza outbreak approved by the MHO. Pharmacies should refer to the Drug Plan Pharmacy Information Bulletin for specific details regarding the billing procedure.

References:

Aoki, F. Y., Allen, U. D., Stiver, H. G. Evans, G. A. (2019). The use of antiviral drugs for influenza: A foundation document for practitioners – Update 2019. Retrieved October, 2022 from Use of antiviral drugs for seasonal influenza: Foundation document for practitioners—Update 2019 (utpjournals.press).

Aoki, F.Y., Papenburg, J., Mubareka, S., Allen, U. D., Hatchette, T. F., and Evans, G. A. (2022). 2021-2022 AMMI Canada guidance on the use of antiviral drugs for influenza in the COVID-19 pandemic setting in Canada. Retrieved October, 2022 from https://jammi.utpjournals.press/doi/full/10.3138/jammi-2022-01-31.

Hota, S. & McGreer, A. (2007). Antivirals and the control of influenza outbreaks. *Clinical Infectious Diseases. 45: 1362-8* (15 November). Retrieved November, 2012 from http://cid.oxfordjournals.org/content/45/10/1362.full

Centers for Disease Control and Prevention. (2020). Interim guidance for influenza outbreak management in long-term care and post-acute facilities. Retrieved October 2022 from https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm

Centers for Disease Control and Prevention. (2011). Antiviral agents for the treatment and chemoprophylaxis of influenza. *Morbidity and Mortality Weekly Report (*MMWR*). 60(RR01); 1-24,* January 21. Retrieved November, 2012 from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6001a1.htm.

Appendix 1 - Checklist of Eligibility Criteria

- ❑ Laboratory confirmation of influenza received.
- ❑ Infection prevention and control measures implemented.
- ❑ 5 day treatment initiated for all symptomatic cases within the affected unit/wing.
- ❑ 10 day prophylaxis initiated for residents within the affected unit/wing.
- ❑ If additional cases continue to occur 48 hours after oseltamivir initiation, additional investigation completed:
  - Additional specimen collection for other infections and influenza virus susceptibility testing.
  - Review of other infection prevention and control measures.
- ❑ Notify the Ministry of all extensions of the use of oseltamivir for outbreaks lasting longer than 10 days. NOTE: All extensions are subject to audit for appropriateness of use.

Revisions

Date	Change
Oct 2022	Added elements of multi-faceted approach for influenza outbreak prevention from CDC. Included footnote acknowledging the overlapping and indistinguishable clinical presentations between COVID-19 and influenza. Added footnote acknowledging peramivir and baloxavir marboxil as other antivirals, however these are not approved of outbreak response. Removed the requirement to obtain CMHO approval for antiviral extension for ongoing outbreaks and replaced with statement that extensions are subject to audit for appropriateness. Updated references.

Quick Reference for Saskatchewan Ministry of Health Use of Oseltamivir (Tamiflu) for the Management of Influenza Outbreaks in Special Care Homes – General Process

FACILITY
Surveillance identifies cases of influenza like illness in facility.

↓

Medical Health Officer (MHO)
Local MHO declares an Influenza Outbreak and immediately notifies the Ministry of Health as per Disease Control Regulations using the Outbreak Notification & Summary Report.

- Send outbreak number to Roy Romanow Provincial Laboratory (RRPL)
- Determines if oseltamivir is appropriate in managing the outbreak

↓

FACILITY
Facility compiles and sends a legible list of residents on the affected unit/ward to the pharmacy that provides services to facility.

***E-mail completed Tamiflu Approved for Outbreak form which includes:**

- the outbreak number;
- the name of the Special Care Home;
- the city of the Special Care Home;
- the name of the pharmacy;
- the date oseltamivir was started; and
- the number of beds in the Special Care Home's outbreak unit.

Add "Tamiflu Approved for Outbreak" to e-mail subject line.

MHO
Notifies the Drug Plan of oseltamivir use via email dpeb@health.gov.sk.ca
Indicate "Tamiflu Approved for Outbreak" in the e-mail subject line.

MOST RESPONSIBLE PROVIDER
Determine if each individual in affected unit requires prophylaxis or treatment.

↓

PHARMACY
Pharmacy fills prescriptions. Full cost covered by the Ministry of Health:

- The Drug Plan (DPEBB) will reimburse the pharmacy electronically;

↓

The Ministry of Health covers prescription costs for:

- 10-day course for prophylaxis
- 5-day course for treatment

Outbreak over

NO → Local MHO conducts further investigation and notifies the Ministry of the extension of prophylaxis.

YES – no further action

NOTE: All extensions are subject to audit for appropriateness of use.

Reviewed October 13, 2022

Quick Reference for Saskatchewan Ministry of Health Use of Oseltamivir (Tamiflu) for the Management of Influenza Outbreaks in Special Care Homes – Information for Pharmacies

This document should be used in conjunction with the *Quick Reference for Saskatchewan Ministry of Health Use of Oseltamivir (Tamiflu®) for the Management of Influenza Outbreaks in Special Care Homes – General Process*.

ELIGIBILITY

The Ministry of Health will reimburse a pharmacy for the full amount of individuals' prescription of oseltamivir when used for an influenza outbreak declared by the Local Medical Health Officer (MHO) in a Special Care Home and when used within the following parameters:

- Prophylaxis for residents in affected units/wards.
- Treatment for symptomatic residents in affected units/wards if started within 48 hours of symptom onset.

EXCLUSIONS

The Ministry of Health will not reimburse pharmacies for oseltamivir prescriptions for:

- Employees in the affected facilities.
- Patients in hospitals including long-term care residents in hospitals.
- Institutions in First Nations communities, as these are the responsibility of Health Canada.
- Patients who are eligible for coverage by Veterans' Affairs Canada (VAC). These should be billed directly through VAC.

FACILITY
Send list of eligible patients to local pharmacy once an outbreak has been declared by the MHO. This is not considered a prescription.

↓

MOST RESPONSIBLE PROVIDER
Determine if each individual in affected unit requires prophylaxis or treatment.

↓

PHARMACY
Fill prescriptions without delay. The list will be used to determine which residents are eligible.

↓

PHARMACY
Adjudicate Oseltamivir (Tamiflu®) claim online to the Saskatchewan Drug Plan. The resident copayment should be $0.00. Refer to the Drug Plan Pharmacy Information Bulletin for details.

Repeat prescriptions will only be approved for payment if the local MHO determines that a longer duration is required. NOTE: All extensions are subject to audit for appropriateness of use.

Tamiflu Approved for Influenza Outbreak

Complete this form when Tamiflu has been authorized by the Medical Health Officer for use in an Influenza Outbreak in a Special Care Home.

E-mail the completed form to: dpeb@health.gov.sk.ca
Subject Line: Tamiflu Approved for Use

Details

Outbreak Number:	
Special Care Home Facility Number:	
Special Care Home Name:	
Wing or Unit:	
City of Special Care Home:	
Name of Pharmacy:	
Date Oseltamivir Started:	
Number of beds in Special Care Home's outbreak unit:	

Medical Health Officer Authorizing Tamiflu Use:	
Medical Health Officer Phone Number:	

Date of Request for Tamiflu Extension:	
Reason for Tamiflu Extension:	

Approved by:	**Date Approved:**