

Shannex Health Care

Best Practice Guidelines

Outbreak Management for Influenza
and Gastrointestinal Infection

May 2006

Revised April 2007

Best Practice Guidelines for Outbreak Management

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Best Practice Guidelines for Outbreak Management

1.0 Guidelines Overview

1.1 Introduction

Effective management of an outbreak can present many challenges for the interdisciplinary team and residents of nursing homes. There are several key aspects to an effective outbreak management program:

- Early identification and institution of interventions to prevent the spread of infection
- Effective communication strategy
- Interdisciplinary involvement

The purpose of the best practice guidelines is to:

- Help our homes prevent influenza, gastrointestinal and tuberculosis outbreaks
- Assist in the early detection of outbreaks
- Provide guidance in the investigation, management and evaluation of an outbreak.

Although these guidelines were developed primarily for the early detection and management of influenza and gastrointestinal infection outbreaks, the principles and procedures may be modified to fit any type of outbreak situation. The guidelines are divided into two main sections: prevention and outbreak management.

1.2 Goals and Objectives of the Best Practice Guidelines for Outbreak Management:

Goal #1: Provide guidelines to prevent influenza and gastrointestinal outbreaks by preventing the spread of infection between residents and between employees, volunteers, visitors and our residents, thereby reducing resident morbidity and mortality associated with these conditions.

Objective #1: Outline a surveillance system that aids in the early detection of influenza and gastrointestinal infections in residents, employees and volunteers.

Objective #2: Outline strategies for the prevention of outbreaks.

Objective #3: Outline the education strategies for the prevention of outbreaks.

Objective #4: Outline the annual influenza vaccine campaign for residents and employees.

Goal #2: Provide guidelines related to the screening of residents and employees for Tuberculosis on admission and new hire, respectively.

Goal #3: Provide guidelines for the timely identification of an outbreak and a description of strategies to be implemented to contain an influenza or gastrointestinal outbreak.

Objective #1: Provide an overview of the responsibilities of each interdisciplinary team member during an outbreak.

Objective #2: Outline a process for communication to the interdisciplinary team, Public Health, residents and families and other key stakeholders during an outbreak.

Objective #3: Outline the process for the collection of specimens.

Objective #4: Outline an evaluation process.

1.3 Operational Definition of Terms

Advanced Nursing Skill: skills performed by a Registered Nurse that are beyond entry-level nursing competence.

CDC: refers to the U.S. Department of Health and Human Services Centre for Disease Control and Prevention. There are a number of their publications, guidelines and recommendations referenced throughout this best practice guideline.

Cleaning: the removal of soil from utensils with water and soap or chemical solution. Cleaning can remove but does not generally kill microorganisms. Examples include: resident drapes and windows.

Cluster: Two or more cases of Acute Febrile Respiratory Illness occurring within 48 to 72 hours, in residents who are in close proximity to each other (Nova Scotia Department of Health, 2005).

Disinfection: the elimination of many or all microorganisms. For example cleaning resident washrooms.

Gastrointestinal Infection: bacterial, viral or parasitic infections of the gastrointestinal tract, resulting in diarrhea and vomiting. The elderly are more susceptible to these types of infections, and often do poorly because of their age and comorbidities. These guidelines are applicable to all types of gastrointestinal outbreaks.

Gastrointestinal Outbreak: a sudden increase of gastrointestinal symptoms over the normal background rate of the community. Two or more cases of confirmed gastrointestinal infection in a nursing home resident is considered an outbreak.

Hand Hygiene: “A general term that applies to either hand washing, antiseptic hand wash, antiseptic hand rub, or surgical hand antisepsis” (CDC, 2002).

Hand washing: “Washing hands with plain (i.e., non-antimicrobial) soap and water (CDC, 2002).

Infection Control Designate: Nursing manager with recognized expertise in infection control who coordinates the prevention, containment, management and evaluation strategies during and following an outbreak. In the absence of the Infection Control Designate, the available nursing manager or responsibility nurse assumes these responsibilities.

Influenza: Influenza is a viral infection that affects the bronchial tubes and lungs. It is: “an acute viral disease of the respiratory tract characterized by fever, headache, myalgia, prostration, coryza, sore throat and cough.” (Nova Scotia Department of Health, 2005). The influenza season in Canada generally runs from October to April, causing outbreaks in many localized areas. According to Health Canada (2003), it is estimated that 10-25% of Canadians contract influenza each year, with approximately 500 to 1500 people dying from complications related to influenza, such as pneumonia, most of who are seniors. Influenza also has a significant social and economic impact. Therefore it is critically important that nursing homes have guidelines for the prevention as well as the containment of influenza outbreaks.

Influenza-Like Illness (ILI): “Any two of the following: fever (a single temperature of $\geq 38^{\circ}\text{C}$ taken at any site), chills, new headache or eye pain, myalgia, malaise or loss of appetite, sore throat, new or increased cough”. It should be noted that “Influenza cases may not meet the ILI case definition, especially in the elderly. Fever may or may not be present or there may just be a general decline in function or a worsening of an underlying chronic condition.” (Nova Scotia Department of Health, 2005)

Influenza Outbreak: a sudden increase of Acute Febrile Respiratory Illness cases over the normal background rate of the community. Two or more cases of confirmed influenza by any testing methods in a nursing home resident is an outbreak.

Neighbourhood: A discrete grouping of resident rooms with a centralized nursing station and servery. At AEC there are two neighbourhoods with one centralized nursing station. Therefore for the purposes of this best practice guideline neighbourhood refers to the entire floor at AEC (one nursing station, one servery and the two neighbourhoods).

Surveillance: “ongoing systematic collection, collation, analysis and interpretation of data; and the dissemination of information to those who need to know in order that action be taken. (WHO Definition)” (Regional Niagara Public Health Department, 2004)

Tuberculosis: a mycobacterial infection caused *Mycobacterium tuberculosis*, an acid-fast bacillus. It is most commonly transmitted through the airborne route, with an infected individual forcefully expiring through coughing, sneezing, singing, or playing an instrument, and another individual inhaling the bacteria.

2.0 Care Recommendations – Primary Prevention and Influenza Season Preparation

Care Recommendations	Rationale
<i>2.1 Prevention Strategies</i>	
<p>Overview of Prevention Strategies</p> <p><i>Influenza:</i> According to the CDC, strategies for the prevention and control of influenza include “influenza vaccination for persons at high risk for complications, immunization of health-care personnel, respiratory hygiene/cough etiquette programs, Standard Precautions (see Appendix A), and restriction of ill visitors and personnel.” Employees and volunteers are to practice these prevention strategies as appropriate.</p> <p>Respiratory hygiene and cough etiquette: According to the Center for Disease Control (CDC) (2004e), “the following measures to contain respiratory secretions are recommended for all individuals with signs and symptoms of a respiratory infection.</p> <ul style="list-style-type: none"> • Cover the nose/mouth when coughing or sneezing; • Use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use; • Perform hand hygiene...after having contact with respiratory secretions and contaminated objects/materials”. 	<p>The influenza vaccine has been found to be effective in reducing the incidence and transmission of influenza in the nursing home, as well as its associated complications. Immunization of employees has been shown to reduce the morbidity and mortality of residents in nursing homes. Respiratory hygiene/cough etiquette programs and Standard Precautions reduce the spread of droplets from the infected individual to others.</p>
<p><i>Gastrointestinal Infections:</i> Strategies for the prevention and control of gastrointestinal infections include Standard Precautions, good hand hygiene, restriction of ill visitors, and personnel and housekeeping routines. Employees and volunteers are to practice these prevention strategies as applicable.</p>	<p>Standard Precautions and good hand hygiene reduce the spread of infection from infected individuals to others and the physical environment where it can be contracted by susceptible individuals.</p> <p>Restriction of ill visitors and personnel can help prevent the spread of influenza and gastrointestinal infection from the community into the nursing home.</p>

Care Recommendations	Rationale
<i>2.1 Prevention Strategies (con't)</i>	
<p>All employees practice proper infection control techniques at all times. This includes:</p> <ul style="list-style-type: none"> • covering mouth and nose when sneezing or coughing • hand hygiene – should be performed using soap and water, with alcohol gel as an adjunct when soap and water are unavailable: <ul style="list-style-type: none"> ○ When arriving on the neighbourhood at the beginning of the shift and before leaving at the end of the shift ○ Before direct contact with a resident ○ After direct contact with a resident and between residents ○ Before performing invasive procedures (use soap and water <u>and</u> alcohol gel) ○ After contact with secretions/excretions ○ After contact with objects which are known or suspected to be contaminated with secretions/excretions ○ Immediately upon removal of personal protective equipment, including gloves ○ Between procedure on the same resident to prevent the spread of infection from one area of the body to another ○ Before preparing, handling or serving food ○ Before eating a meal ○ Before feeding a resident ○ After using toilet ○ Before and after break ○ See Appendix A for information related to hand hygiene and standard precautions • use of personal protective equipment (see Appendix B) as needed such as: <ul style="list-style-type: none"> ○ Gowns ○ Gloves ○ Masks or respirator ○ Goggles or face shield • proper disposal of soiled items such as garbage and laundry, • etc. 	<p>It is everyone's responsibility to practice infection control techniques. These techniques help to prevent the spread of infection between residents and between employees and residents.</p> <p><i>Alcohol gel:</i> The use of alcohol gel is not effective if hands are visibly soiled. In this case the use of soap and water is the procedure of choice.</p> <p>Applying small volume (e.g. ≤ 0.5 ml) is not more effective than washing your hands with soap and water. The ideal amount of alcohol gel to use is not known but hands should not feel dry after being rubbed together for 10-15 seconds. If they do then the staff member did not use enough alcohol gel.</p> <p>The use of alcohol gel is indicated prior to performing an invasive aseptic procedure such as urinary catheter insertion. As well as before and after contact with residents who have antimicrobial-resistance organisms (e.g. MRSA, VRE, etc.).</p>

Care Recommendations	Rationale
<i>2.1 Prevention Strategies (con't)</i>	
All employees follow policy and equipment-specific procedures for cleaning and disinfecting equipment (see cleaning and disinfecting policy in the Infection Control Manual).	Disinfecting equipment helps to eliminate most microorganisms and prevent their spread between residents.
Support services manager/designate ensures all washrooms are equipped with soap and paper towels. Alcohol gel is placed in each dining area and designated areas on the neighbourhood.	To ensure that individuals visiting the facility have access to soap and alcohol gel. Use of these cleaning agents reduce the number of bacteria on the skin and therefore reduce the spread of infections. The use of alcohol gel increases the compliance with proper hand hygiene.
Support Services Manager/designate ensure alcohol gel is available at the front desk for visitors to use upon entering and exiting the building.	Helps to prevent the spread of infection between the community and the nursing home.
<i>2.2 Education</i>	
<i>2.2.1 General Public</i>	
Infection Control Designate ensures hand hygiene in service information is posted in all public washrooms.	The posting of information on proper hand hygiene techniques may increase the knowledge of proper hand hygiene technique and thereby increase compliance with these standards.
A sign is posted at the front door year-round by the Infection Control Designate asking visitors with influenza or gastrointestinal infections not to visit the nursing home until they are symptom-free.	These helps increase public awareness and prevent the spread of infection from the community into the nursing home where residents, because of their age and comorbidities, are more frail and vulnerable to infection.

Care Recommendations	Rationale
2.2.2 Residents	
<p><i>For Influenza Prevention:</i> Nursing staff teach residents prevention strategies such as respiratory hygiene and cough etiquette. This would include:</p> <ul style="list-style-type: none"> ▪ Using a tissue to cover your mouth and nose when you sneeze or cough and immediately placing the tissue in a waste receptacle. If you don't use a tissue, sneeze into your upper sleeve and not your hands. ▪ Clean your hands after you cough, sneeze or blow their nose and often throughout the day. You may use soap and water or also use alcohol gel. 	<p>Since influenza is spread from one individual to another by droplets, proper prevention strategies to minimize the spread should be taught to residents and visitors. People can contract the influenza virus by breathing in these droplets or through droplets landing directly on the eyes. The influenza virus has also been found on the hands of people with influenza and the surfaces they touch.</p> <p>Proper hand hygiene reduces the spread of microorganisms. Hand hygiene is the key method to protect you from contracting and spreading the virus.</p>
<p><i>For gastrointestinal infection:</i> Registered staff teach the resident the correct way to perform hand hygiene, particularly:</p> <ul style="list-style-type: none"> ▪ After using the washroom. ▪ Before preparing, handling and serving food. ▪ Before eating meals. 	
2.2.3 All Employees	
<p>Facility designate provides hand hygiene inservices throughout the year with special emphasis immediately prior to influenza season (see Appendix A for hand hygiene information).</p>	<p>Gastrointestinal and influenza outbreaks can happen throughout the year and correct hand hygiene is one of the best methods for preventing the spread of infection. Influenza infections are more common between October and April of each year.</p>
<p>Self-study inservices are offered to all employees regarding the signs and symptoms of influenza-like illness and gastrointestinal infection, and the difference between the cold and influenza. (See Appendix C for copy of this package). All employees are to review the inservice package for Standard Precautions and hand hygiene at least yearly.</p>	<p>Education is the first step in changing practice.</p>

Care Recommendations	Rationale
2.2.3 All Employees (con't)	
<p>Nurse manager/designate inservice all employees on the correct use of personal protective equipment (PPE) including the correct method to don and remove PPE. An overview for donning and removing PPE is available in Appendix B. The PPE video is available in all Shannex nursing homes.</p>	<p>Personal protective equipment, when donned and removed correctly can help reduce the spread of infection. However employees can contaminate themselves or their residents if personal protective equipment is not properly donned and removed correctly.</p>
2.2.4 Registered Staff	
<p>Registered staff are provided with education by the Infection Control Designate related to:</p> <ul style="list-style-type: none"> • Influenza vaccine policy and forms (see Appendix D) • Advanced Nursing Skills package related to the administration of the influenza vaccination – RNs only (see Appendix D) • Influenza-like illness criteria • Correct completion of the surveillance report (see Appendix E for a sample of the influenza and gastrointestinal infection surveillance reports for residents and employees) • Information regarding the location of swabs and the correct method for collecting, storing and transporting nasopharyngeal swabs (see Appendix F for the procedure for collecting nasopharyngeal swabs). 	<p>Registered staff have a significant role to play in the assessment, implementation and evaluation of infection control programs.</p> <p>Only Registered Nurses who have been deemed competent to perform the Advanced Nursing Skill of vaccination administration can administer the influenza vaccine.</p>

Care Recommendations	Rationale
<p data-bbox="201 233 657 264"><i>2.3 Influenza Vaccine for Residents</i></p> <p data-bbox="201 270 862 741">Infection Control Designate coordinates the influenza vaccine campaign for residents residing in the nursing home. The dates for providing the influenza vaccine to staff and residents are recommended by Public Health. All residents are encouraged to obtain the influenza vaccination unless there are documented contraindications. The Nova Scotia Department of Health sets a yearly target for resident vaccinations which we try to achieve. The number of residents vaccinated each year is forwarded to the Public Health Department. All new admissions are screened to determine their vaccination status.</p> <p data-bbox="201 783 867 1220">The vaccine is obtained from the Public Health Department and the cold chain is maintained during transport and storage at the facility. The medication fridges used to store the vaccine are kept at an optimal temperature of 2-8°C and are connected to the facility generator in case of power outage. Registered staff monitor the temperature of the medication fridge on their neighbourhood on a daily basis. If the temperature is found to be outside of this range the maintenance department is notified and an alternate location for storing the vaccine is selected.</p>	<p data-bbox="893 270 1511 814">Residents of a nursing home are at high risk of contracting influenza. In this population, who are generally elderly, the death rate from influenza can be high without proper immunization. Vaccination is the primary measure to prevent influenza, limit transmission, and prevent complications from influenza in long-term care facilities (CDC, 2005). The influenza virus mutates/changes from year to year with different strains causing infections each year. Also the influenza vaccine is only effective for four to six months in the elderly but can be effective for up to 12 months in healthy adults. Therefore the vaccine must be provided on a yearly basis.</p> <p data-bbox="893 821 1503 999">The influenza vaccine has been available since the 1940's. The benefits of the influenza vaccine outweigh the risks. Annual vaccination has not been shown to cause any long term health problems.</p> <p data-bbox="893 1005 1516 1514">The moment you receive the influenza vaccine your body begins building antibodies to the vaccine. This process generally takes up to ten to fourteen days, however this may take longer in the elderly. If you are exposed to the influenza virus the antibodies will minimize the risk of infection or reduce the severity of the symptoms. The vaccine has been found to be 90% effective in preventing influenza in healthy young adults. In the elderly the vaccine is not as effective in preventing infection but has been found to be very effective in preventing complications requiring hospitalization and causing death.</p>

Care Recommendations	Rationale
<p><i>2.3 Influenza Vaccine for Residents (con't)</i></p> <p>Contraindications to the vaccine: The influenza vaccine should not be given to residents with a severe egg allergy, who have previously had an anaphylactic reaction to an influenza vaccine or to Thimerisol (found in contact lens solution), or who developed Guillan-Barre within 6-8 weeks of a previous influenza immunization. Registered staff should check with the resident's attending physician before giving the influenza vaccine to a resident presenting with a high fever or an acute infection.</p>	<p>Individuals who have allergic reactions to eggs should not receive the vaccine because "The vaccine is made from fragments of inactivated influenza viruses, grown in fertilized hens' eggs and then purified." (Health Canada, 2003). Even if the influenza vaccine is not completely effective in preventing the onset of influenza-like illness, those individuals who are vaccinated:</p> <ul style="list-style-type: none"> • have milder symptoms and infections; • develop fewer complications; • less likely to require hospitalization • less likely to die from complications to influenza
<p>Residents must have a signed Consent to Treatment Record indicating their willingness to receive the influenza vaccine. The Consent to Treatment asks residents or family/responsible party to make informed choices related to several therapeutic actions. Registered staff are to check and confirm the resident's Consent to Treatment on the health care record to ensure they have consent to administer the vaccine. If the Consent to Treatment is not signed the registered staff explains the record to the resident and/or family/responsible party, including the risks and benefits of the influenza vaccination and encourages them to complete it. Residents who have not signed a Consent to Treatment and have not next of kin, and are not competent to make this decision are referred to the nursing home Administrator.</p>	<p>There are seven criteria for determining the resident's ability to provide informed consent:</p> <ol style="list-style-type: none"> 1. Competence to understand and to decide 2. Voluntary decision making 3. Disclosure of material information (risks and benefits, alternatives, etc.) 4. Recommendation of a plan 5. Comprehension of the terms in 3 and 4 6. Decision in favour of a plan 7. Authorization of the plan <p>Please Note: A resident and/or responsible party can only give informed consent if all of these conditions are met.</p> <p>Steps to Obtaining Informed Consent:</p> <ol style="list-style-type: none"> 1. Determine the individual's competence to make decisions by using the above criteria. 2. Provide the resident and/or family/responsible party with the necessary information to make an informed choice. Review the consent form itself and explain all choices. This review should include the risks and benefits, alternatives and implications of their decision. 3. Allow ample opportunity to have questions answered prior to the resident/responsible party making a decision. 4. Support them in their choice. 5. Document all discussions in the progress notes and/or on applicable record.

Care Recommendations	Rationale
2.3 Influenza Vaccine for Residents (con't)	
<p>Administration of the influenza vaccine is an Advanced Nursing Skill. Only registered nurses who have been deemed competent to perform this Advanced Nursing Skill can administer the vaccine. Follow the influenza vaccine policy and Advanced Nursing Skill information for the proper procedure for administering the vaccine (see Appendix D). Documentation should be completed as outlined in the policy.</p>	
<p>The nursing staff should monitor their residents who received the influenza vaccine for the following side effects every shift during the first 48 hours:</p> <ul style="list-style-type: none"> • Soreness at injection site – occurs in about 33% of people. Generally mild and can last a couple of days. Acetaminophen (analgesic) may help reduce soreness. • Fever, fatigue and muscle aches – Occurs within six to 12 hours. May last a couple of days. Less prominent if previously received the vaccine. ▪ “Oculo-respiratory syndrome” - red eyes, cough, wheezing, chest tightening, difficulty breathing or sore throat may develop. Results from additive in the vaccine, not the vaccine itself. Should be reported to Public Health (not mandatory). ▪ Allergic/anaphylactic reactions are rare ▪ Guillain-Barre syndrome (GBS) is rare (1 in 1 million chance) <ul style="list-style-type: none"> ○ Autoimmune disease attacks nervous system. ○ Results in weakness and abnormal sensations. ○ Most people fully recover from this syndrome. 	<p>Less than 2% of people who receive the vaccine have influenza-like symptoms for 24-48 hours following their vaccine. Most have no symptoms at all. It is important to note that these side effects are not known to decrease the effectiveness of the vaccine.</p> <p>Monitoring residents on a daily basis for side effects of the influenza vaccine allows for timely management of symptoms.</p>

Care Recommendations	Rationale
<i>2.4 Influenza Vaccine for Employees</i>	
<p>Infection Control Designate coordinates the influenza campaign for employees during the suggested dates obtained from Public Health. Facility volunteers are encouraged to participate in the annual vaccination campaign. Employees are provided education related to influenza on a yearly basis and strongly encouraged to have their influenza vaccine. The Nova Scotia Department of Health sets a yearly target for employee vaccinations which we try to achieve.</p>	<p>Research has demonstrated that immunizing employees with influenza vaccine prevents the spread of influenza within the facility. Elderly, frail residents mount a weaker response to the influenza vaccine and therefore vaccinating employees can result in fewer resident hospitalizations and deaths. Studies have shown up to a 70% reduction in lost days from work because of respiratory illness in employees who receive the influenza vaccine. This is a saving of approximately \$39.23 for every employee vaccinated.</p>
<p>The Infection Control Designate has the employee sign a consent form prior to administering the vaccine.</p>	<p>Steps to Obtaining Informed Consent:</p> <ol style="list-style-type: none"> 1. Provide the employee with the necessary information to make an informed choice. Review the consent form, as well as the risks and benefits, alternatives and implications of their decision. 2. Allow ample opportunity to have questions answered prior to the employee making a decision. 3. Support them in their choice. 4. Document all discussions on the appropriate employee record.
<p>The number of employees and volunteers vaccinated each year is forwarded to the Public Health Department by the Infection Control Designate. Employees who receive the vaccine from a health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status. The Infection Control Designate keeps a record of all employees vaccinated and maintains the record for a period of two years.</p> <p>The Infection Control Designate follows the influenza vaccine policy and Advanced Nursing Skills information for the proper procedure for administering the vaccine. Documentation should be completed as outlined in this policy (see Appendix D).</p>	

Care Recommendations	Rationale
<i>2.5 Signs and Symptoms of Influenza and Gastrointestinal Infection</i>	
<p><i>Influenza:</i> Signs and symptoms of influenza-like illness include (must have at least two of the following):</p> <ul style="list-style-type: none"> ▪ Fever >38°C (can be taken at any site) – may or may not be present ▪ Chills ▪ New headache or eye pain ▪ Myalgia (muscular aching) ▪ Malaise (tiredness) or loss of appetite ▪ Sore throat ▪ New or increased dry cough <p>The table comparing influenza with the common cold can be found in Appendix C.</p> <p><i>Gastrointestinal Infection:</i> Must have at least 1 of the following:</p> <ul style="list-style-type: none"> • Vomiting - two or more episodes in a 24 hour period with no evidence of a non-infectious cause. • Diarrhea – 2 or more loose or watery stools above what is normal for the resident within a 24 hour period and no evidence of a non-infectious cause (i.e. Medication induced). <p>Must have BOTH of the following:</p> <ul style="list-style-type: none"> • Stool culture positive for a pathogen (e.g. Salmonella, Shigella, E. coli 0157:H7, Campylobacter) or a toxic assay positive for C-Diff and • At least one symptom or sign compatible with gastrointestinal tract infection (nausea, vomiting, abdominal pain or tenderness, diarrhea). 	<p>Understanding the signs and symptoms of influenza or gastrointestinal infection is the first step in early detection. It is also important to understand the difference between influenza and the common cold as they often are confused.</p> <p>It should be noted that the clinical presentation of influenza in a fully immunized elderly resident may be different than the typical signs and symptoms.</p>
<i>2.6 Resident Monitoring</i>	
<p>During the influenza season of November to April the nursing staff continually assess their residents for signs and symptoms of influenza-like illness. Surveillance should also be enhanced when there are reports of influenza within the local community.</p>	<p>Surveillance of residents and employees for signs and symptoms of influenza and gastrointestinal infection: nursing staff monitor the residents for influenza-like illness. Early detection allows the team to institute infection control measures to minimize or prevent the spread of the infection to others.</p>

Care Recommendations	Rationale
2.6 Resident Monitoring (con't)	
Throughout the year the nursing staff continually assess their residents for signs and symptoms of gastrointestinal infection.	
2.7 Employee Monitoring	
<p>The Occupational Health Nurse/designate monitor employees' absences for signs and symptoms of influenza or gastrointestinal infection symptoms.</p> <p>Volunteer Monitoring: Volunteers are to report their signs and symptoms of illness to the Recreation and Volunteer Coordinator who determines their appropriateness to visit the facility.</p> <p><i>Influenza:</i> Employees with active influenza symptoms are encouraged by the Occupational Health Nurse/designate to contact their physician for antiviral medication, particularly if the strain of the virus causing the outbreak is not well matched with the vaccine.</p>	<p>Early detection is the key to early institution of infection control precautions, which can reduce the spread of infection throughout a long term care facility.</p> <p>The Center for Disease Control (CDC) also recommends the use of prophylaxis antiviral medications in employees at high risk of serious complications from influenza in the event of an outbreak. This is only required for the two-weeks after vaccination, which is the time needed to build antibodies following the influenza vaccination. If the employee cannot receive the influenza vaccine, they may require antiviral medications for a period of 6-8 weeks while the influenza is active in the community.</p>
<p>Employees are informed by the Occupational Health Nurse/designate that they are to remain away from the workplace for three to five days after the onset of symptoms. All volunteers are informed by the Recreation and Volunteer Coordinator to remain away from the facility for three to five days after the onset of symptoms.</p> <p><i>Gastrointestinal Infection:</i> All employees and volunteers are informed by the Occupational Health Nurse/designate or Recreation and Volunteer Coordinator respectively to remain away from the nursing home until they have no episodes of vomiting or diarrhea for 24 hours.</p>	<p>Employees and volunteers are asked to stay away for 3-5 days after the onset of symptoms because this is the time when the virus is shed more readily, increasing the risk of infecting other individuals during close contact.</p> <p>Once the employee or volunteer has had two formed stools they are no longer considered to be infectious. This generally occurs within 24 hours following their last episode of vomiting and diarrhea.</p>

Care Recommendations	Rationale
<i>2.8 Influenza Season Preparation</i>	
<p>Prior to the influenza season, nursing staff obtain serum creatinine and weights as well as the date of birth and attending physician for each resident in the nursing home. These results are tabulated and forwarded to the nurse manager by the end of September. Creatinine levels taken in the previous 12 months or more are acceptable if the resident's clinical condition is stable, but within 6 months is preferable. This is dependent on the resident's condition (e.g., change in condition since last bloodwork or kidney disease). Once collected, this information is forwarded to the contract pharmacy.</p>	<p>This clinical information is needed by the pharmacy to calculate each resident's creatinine clearance and appropriate dose of antiviral medication in the event of an outbreak.</p>
<p>The Infection Control Designate follows the Influenza Season Preparatory Record to prepare for the influenza season (See Appendix G). This record is maintained by the Infection Control Designate for a period of seven years.</p>	<p>Ensures that all steps in the preparation process are complete and ensures the facility has the supplies needed for the influenza season.</p>
<p>Occupational Health Nurse/designate will monitor employee absences throughout the outbreak. Departmental Managers may be designated to contact employees to track the number of employees exhibiting symptoms during an outbreak.</p>	<p>Surveillance: during an outbreak it is essential that an accurate listing of affected employees be kept. This may necessitate departmental managers contacting employees directly regarding their restrictions preventing them from coming to work.</p>
<i>2.9 Tuberculosis Screening: Resident</i>	
<p>The registered nurse obtains and transcribes an order for a two-step tuberculin skin test and emergency care medication (e.g. epinephrine) for all newly admitted residents unless there is documentation of a previous positive skin test or a history of tuberculosis (see Appendix H for policy and records).</p>	<p>To determine baseline reference and current tuberculin status of residents and prevent an outbreak of Tuberculosis in the nursing home.</p>

Care Recommendations	Rationale
<i>2.9 Tuberculosis Screening: Resident (con't)</i>	
<p>Residents must have a signed Consent to Treatment Record indicating their willingness to receive the two-step tuberculin skin test. Registered staff are to check and confirm the resident's Consent to Treatment on the health care record to ensure they have consent to conduct the test. If the Consent to Treatment is not signed the registered staff explains the record to the resident and/or family/responsible party and encourages them to complete it. Residents who have not signed Consent to Treatment, are not competent to make this decision, and have not next of kin are referred to the nursing home Administrator (see page 15 for details on obtaining informed consent)</p>	
<p>The Tuberculin solution is obtained from the Public Health Department and the cold chain is maintained during transport and storage at the facility. The medication fridges used to store the solution are kept at an optimal temperature of 2-8°C and are connected to the facility generator in case of power outage. Registered staff monitor the temperature of the medication fridge on their neighbourhood on a daily basis. If the temperature is found to be outside of this range the maintenance department is notified and an alternate location for storing the solution is selected.</p>	
<p>Completion of the Two-step tuberculin skin test is a Advanced Nursing Skill. Only registered nurses who have been deemed competent to perform this Advanced Nursing Skill can conduct the test. Follow the tuberculin and Advanced Nursing Skill information for the proper procedure for administering the vaccine. Documentation should be completed as outlined in this policy (see Appendix H for the policy and record and the Advanced Nursing Skill information).</p>	

Care Recommendations	Rationale
<i>2.9 Tuberculosis Screening: Resident (con't)</i>	
<p>In the rare case of an adverse event, the registered nurse is to administer emergency medications as ordered and call 911. They then document the resident's symptoms and interventions provided in progress notes. The registered nurse completes a resident incident report and forwards to nurse manager.</p>	
<p>The registered nurse reads site after 48-72 hours and palpates for induration, interpreting and measuring in millimeters. The registered nurse documents results (actual number in mm) in on 'Resident Immunization Administration Record'. If induration equal to or greater than 10 mm (positive), notifies physician of results. If induration less than 10 mm (negative), completes the second step of the tuberculin skin test in 7-14 days.</p>	
<i>2.10 Tuberculosis Screening: Employee</i>	
<p>The Occupational Health Nurse obtains a standing order for the two-step tuberculin skin test and emergency medication (epinephrine) in the case of adverse reaction/event for all newly hired employees unless there is documentation of a previous positive skin test or a history of tuberculosis (see Appendix H for policy and records).</p>	<p>To determine baseline reference and current tuberculin status of employees and prevent an outbreak of Tuberculosis in the nursing home.</p>
<p>See page 21 for the process of maintaining cold storage of the tuberculin solution.</p>	

Care Recommendations	Rationale
<i>2.10 Tuberculosis Screening: Employee (con't)</i>	
<p>The Occupational Health Nurse obtains the employee's medical history in relation to tuberculosis and skin testing. If there is documentation of a negative 2-step tuberculin skin test in last calendar year, only 1-step test will be performed. If there is documentation of negative 2-step tuberculin skin test in previous three months, a skin test is not required. Supporting documentation must be provided by employee.</p>	
<p>The Occupational Health Nurse obtains a signed consent from employee on 'Employee Consent Form – Two-Step Tuberculin Skin Test' (see Appendix H).</p>	<p>Steps to Obtaining Informed Consent:</p> <ol style="list-style-type: none"> 1. Provide the employee with the necessary information to make an informed choice. Review the consent form, as well as the risks and benefits, alternatives and implications of their decision. 2. Allow ample opportunity to have questions answered prior to the employee making a decision. 3. Support them in their choice. 4. Document all discussions on the appropriate employee record.
<p>Completion of the Two-step tuberculin skin test is an Advanced Nursing Skill. Only registered nurses who have been deemed competent to perform this Advanced Nursing Skill can conduct the test. If competent to perform the skill, the Occupational Health Nurse (OHN) meets with the new Employee immediately after hire and administers step 1 of tuberculin skin test. The OHN carries epinephrine with a needle and syringe while performing the procedure in case of an adverse event. The OHN follows the tuberculin Advanced Nursing Skill information for the proper procedure for administering the vaccine. Documentation is completed as outlined in the policy (see Appendix H for the policy and record and Advanced Nursing Skill information). The OHN provides employee with an Employee Tuberculin Test card, as applicable.</p>	

Care Recommendations	Rationale
<i>2.10 Tuberculosis Screening: Employee (con't)</i>	
<p>In the rare case of adverse event, the Occupational Health Nurse (OHN) administers emergency medication as ordered by physician and calls 911. The OHN then completes a Staff Incident Report.</p>	
<p>The Occupational Health Nurse documents the results (actual number in mm) on the 'Occupational Health Department Two-Step Tuberculin Skin Test' record including:</p> <ul style="list-style-type: none"> ▪ The injection site and date for reading results ▪ Generic or trade names of the Tuberculin solution and dose ▪ Lot number of the vial ▪ Adverse events/emergency care (if applicable). 	
<p>The Occupational Health Nurse (OHN) reads the site after 48-72 hours and palpates for induration. Interprets and measures in millimeters. The OHN documents the results (actual number in mm) on 'Occupational Health Department Two-Step Tuberculin Skin Test' record and, if applicable, employee tuberculin skin-testing card.</p> <p>If induration is equal to or greater than 10 mm (positive), the OHN refers the employee to their family physician for assessment prior to returning to work. The OHN advises scheduling department to remove the employee from all booked shifts until cleared to return to work by the OHN. The employee is then required to provide documentation of the physician assessment or a copy of the chest x-ray report to OHN. The OHN completes further follow-up with physician as required. Once the employee has been cleared to return to work the OHN completes the 'Occupational Health Department Two-Step Tuberculin Skin Test' record indicating clearance obtained and notifies scheduling.</p> <p>If induration less than 10 mm (negative), the OHN completes the step 2 of the tuberculin skin test 1 to 4 weeks later.</p>	<p>Employees with a positive tuberculin skin-test are unable to work in the facility until it has been determined by a physician that they do not have active tuberculosis.</p>
<p>All associated documentation including the Consent Form is filed by the Occupational Health Nurse on the employee's medical file.</p>	

3.0 Care Recommendations – Management of Outbreak

Care Recommendations	Rationale
<i>3.1 Identification of Outbreak</i>	
If the registered staff note signs and symptoms of influenza-like illness or gastrointestinal infection, document assessment findings, interventions and evaluation in the resident's progress notes, change of shift report and on the 24-hour report.	Documentation on the progress notes, change of shift report and the 24-hour report provide for timely communication to all members of the interdisciplinary team of changes in resident health status.
Interdisciplinary team reviews the 24-hour reports and nursing staff review change of shift reports to identify residents exhibiting symptoms of influenza-like illness or gastrointestinal infection. If an outbreak is suspected, immediately institute the Communication Plan (see Appendix I) and the Checklist for Suspected Outbreak Situations (see Appendix J)	Early detection allows for early implementation of infection control measures which can help to prevent the spread of infection
Registered staff contact the appropriate nurse manager or the Responsibility Nurse (if nurse manager unavailable) if they notice two or more residents exhibiting signs and symptoms of influenza or gastrointestinal infection within 48-72 hours on the same neighbourhood.	Two or more residents on the same neighbourhood exhibiting symptoms within 48-72 hours of each other may be indicative of a cluster and should be treated as an outbreak until otherwise notified.
<i>3.2 Specimen Collection</i>	
<p><i>Influenza:</i></p> <p>Registered staff are directed by Infection Control Designate/nurse manager or the responsibility nurse to collect nasopharyngeal swabs in the case of two or more residents exhibiting influenza-like illness (ILI), to a maximum of four to six residents. These samples are sent to the virology lab at the local hospital using proper sample handling techniques in order to determine the organism causing the outbreak. (See Appendix F for correct nasopharyngeal swabbing technique). The Infection Control Designate/designate contacts Public Health to inform them that swabs have been sent.</p>	Nasopharyngeal swabs are the only method to obtain a definitive diagnosis of influenza.

Care Recommendations	Rationale
<p><i>3.2 Specimen Collection (con't)</i></p> <p><i>Gastrointestinal infection:</i> Registered staff are directed by Infection Control Designate/nurse manager or the responsibility nurse to collect stool samples for culture and sensitivity and viral studies in the case of two or more (up to six) residents exhibiting gastrointestinal symptoms using the appropriate storage container with enteric transport. These samples are then sent to the laboratory at the appropriate hospital in order to determine the organism causing the outbreak. See Kozier, Erb, et al. (2000) page 867 for the correct method of stool specimen collection. Ensure the specimen container is labeled and the requisition is completed correctly. Place the facility name – Gastrointestinal Outbreak – Stat – at the top of the requisition. Refrigerate in specimen fridge which maintains an optimal temperature of 2-8°C. Send the sample to the virology laboratory within 72 hours of collection. Once the specimen is collected, the registered staff should notify the Infection Control Designate/manager/responsibility nurse who will then contact Public Health.</p>	<p>Stool specimens allow for the differential diagnosis of the cause of the gastrointestinal infection and possible treatment options.</p>
<p>Registered staff on the neighbourhood containing the specimen fridge check its temperature each day to ensure it remains between 2-8°C. If the temperature is found to be outside of this range the maintenance department is notified and an alternate location is selected to store specimens.</p>	
<p>Other lab tests may be conducted as directed by the attending physician or Medical Officer of Health.</p>	

Care Recommendations	Rationale
<p data-bbox="201 233 526 264"><i>3.3 Isolation Precautions</i></p> <p data-bbox="201 268 850 632">Place the resident on isolation precautions immediately (see Appendix K, L, M, N, O, P, Q, and R, for an overview of isolation precautions for registered staff, personal care workers/continuing care assistants, laundry, culinary services, housekeeping, maintenance, recreation staff and volunteers and the occupation health nurse departments respectively), including for meals, when symptoms of influenza-like illness or gastrointestinal infection are identified.</p> <p data-bbox="201 674 748 705">According to the CDC, employees should:</p> <ul data-bbox="228 709 862 1619" style="list-style-type: none"> <li data-bbox="228 709 846 814">▪ Wear gloves if hand contact with respiratory secretions, bodily fluids, and potentially contaminated surfaces is anticipated. <li data-bbox="228 819 862 924">▪ Wear a disposable gown if soiling of clothes with respiratory secretions or bodily fluids is anticipated and discard upon exiting the room. <li data-bbox="228 928 850 1033">▪ Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident. <li data-bbox="228 1037 862 1220">▪ Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn. <li data-bbox="228 1224 829 1360">▪ When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water. <li data-bbox="228 1365 824 1438">▪ If hands are not visibly soiled, use alcohol-based hand rub or soap and water. <li data-bbox="228 1442 857 1619">▪ With influenza, wear a mask when entering the resident's room and when providing care within three feet of the resident. Remove the mask immediately upon exiting the room and discard in the waste receptacle provided. 	<p data-bbox="893 268 1511 520">Influenza is transmitted from person to person via large droplets that are laden with the virus. They are generated when the person sneezes or coughs and can travel up to three feet. Isolating symptomatic residents in their rooms reduces the likelihood that they will transmit the virus to another person.</p> <p data-bbox="893 525 1487 667">Gastrointestinal infections can be spread from person to person through direct contact, therefore limiting the movement of affected residents can reduce the spread of infection.</p> <p data-bbox="893 709 1503 961">Gown and gloves can help to prevent the contamination of hands and uniforms, reducing the spread of the virus to other residents. According to Health Canada (1999), the influenza virus can survive long enough on surfaces to be then picked up on the hands of staff.</p>

Care Recommendations	Rationale
<p><i>3.3 Isolation Precautions (con't)</i></p> <ul style="list-style-type: none"> ▪ With influenza, have the resident wear mask and discard immediately upon reentering the room if it is necessary for the resident to move from his/her room. ▪ Wash hands after removing your Personal Protective Equipment. ▪ Use red laundry bags to collect laundry for affected residents and leave in resident room until full or at a minimum daily. Place a garbage bag in the red linen bag to prevent seepage of infected fluids. ▪ Use red garbage bags during an outbreak for: <ul style="list-style-type: none"> ○ incontinent products during a gastrointestinal outbreak; or ○ garbage containing respiratory fluids during an influenza outbreak. <p>Please note: CDC recommends the use of private rooms for residents with suspected or confirmed influenza, however this is not practical in some homes with the limited number of private rooms and the negative impact that a move can have on a resident.</p> <p>Residents sharing semi-private rooms are both placed on isolation. The privacy curtain may be used to help prevent the spread of infection to the unaffected resident.</p>	<p>Influenza is spread through droplets and the infected person can spread to another individual if they are within three feet. Procedure (paper) masks provide only few minutes protection and should be changed after this time or when wet with secretions. It should be noted that no research studies have shown that the use of masks by either the infectious person or the care provider prevents the transmission of the virus.</p> <p>The use of red linen and garbage bags assists the interdisciplinary team in identifying potentially infected materials, allowing them to pay particular attention when handling these items.</p>
<p>All employees should ensure that garbage is immediately placed in a red garbage bag and never allowed to touch the floor or other furniture in the room. The garbage bag is changed by the housekeeping staff a minimum of once per shift. One employee collects the garbage in the affected resident's room and brings it to the door of the room where a second (clean) employee holds a second garbage bag allowing the full bag to be inserted. The "clean" bag is held in such a way as not to contaminate the hands and uniform of the "clean" employee. The employee on the outside of the room folds the garbage bag over her/his hands to prevent them from coming into direct contact with the contaminated garbage.</p>	

Care Recommendations	Rationale
3.3 Isolation Precautions (con't)	
<p>All staff are to follow the proper procedure for cleaning a spills of a potentially infectious nature (see Appendix S). When the housekeeping department is not present in the nursing home, the nursing staff is responsible for cleaning all spills of a potentially infectious nature. Outside of housekeeping hours, use the housekeeping cart that was made ready by the housekeeper to wipe up these spills. After each use, empty and clean/disinfect the bucket and change the mop head.</p>	
<p>Once the decision has been made that we are in an outbreak situation, close the doors of the neighbourhood and place notices on the doors to the neighbourhood alerting employees and visitors. Place the alcohol gel at all doorways to be used when entering and exiting the affected neighbourhoods. The doors to the neighbourhoods at AEC may remain open as closing them would limit the resident's access to the nursing station.</p>	<p>Reducing the flow of traffic through the neighbourhood has been found to reduce the spread of infection throughout the facility</p>
<p>Each department follows their outbreak checklist and ensures adequate supplies are available on all affected neighbourhoods (see Appendices L, M, N, O, P, Q, R, and T for the guidelines for Registered Staff, Personal Care Workers/Continuing Care Assistants, Laundry Department, Culinary Services Department, Housekeeping Department, Maintenance Department, Recreation Staff and Volunteers, Occupational Health Nurse, respectively) as well as the Guidelines for Deep Cleaning a Resident's Room following an Outbreak (see Appendix T).</p>	<p>These checklists provide an overview of the responsibilities for employees before, during and after an outbreak.</p>
<p><i>Influenza:</i> Interdisciplinary team keeps residents with symptoms in their rooms (i.e., isolated) until they have completed their course of antiviral medications (approximately 5 days) or until their symptoms have subsided (if they were unable to receive antiviral therapy). Residents receive their meals in their rooms. Registered staff inform nursing, laundry, housekeeping and dietary of the resident's status (as appropriate) and isolation precautions. All other residents are restricted to the</p>	<p>Adults can shed the influenza virus one day before symptoms appear and up to seven days after the onset of symptoms. Therefore keeping residents in their rooms while they exhibit active symptoms and receive antiviral therapy can help reduce the spread of infection.</p>

neighbourhood.	
Care Recommendations	Rationale
<i>3.3 Isolation Precautions (con't)</i>	
<i>Gastrointestinal Infections:</i> Residents are to remain on isolation until they have had no episodes of vomiting or diarrhea for 24-48 hours.	
Registered staff post a sign on the outside of each room of residents presenting with active symptoms, indicating visitors are to check with the nursing staff prior to entering the room. Visitors should be asked not to use the affected resident's washroom and should minimize their movement throughout the affected neighbourhood and home. They should be asked to wash their hands with soap and water before and after their visit and to use alcohol gel on entering and exiting the neighbourhood and facility.	Posting a sign on the outside of each affected resident's room allows the nursing staff an opportunity to review infection control guidelines with the visitors prior to entering the room.
All equipment brought into an affected resident's room must be immediately cleaned and chemically disinfected upon exiting the room (e.g. lifts, blood pressure machines, thermometers, glucometers, etc.) (See cleaning and disinfecting policy in the Infection Control Manual).	Disinfecting equipment helps to eliminate most microorganisms and prevent their spread between residents.
Isolation should only be maintained if it does not cause the resident undue stress or agitation and does not require the use of a chemical, physical or environmental restraint. When interventions fail to prevent dementia residents from remaining isolated in their rooms, the interdisciplinary team ensures their hands and wheelchair wheels are washed and every attempt is made to limit their movement to their neighbourhood. The nursing staff try to limit gathering of affected and non-affected residents in small areas.	The use of chemical, physical or environmental restraints to deter the movement of infected residents is inappropriate. Dementia residents can wander as part of their disease process and may be unable to comprehend the necessity of isolation. Therefore employees are responsible to try to limit interactions between residents which could result in the spread of infection. Maintaining cleanliness of their hands and wheelchairs can assist in reducing the spread of infection.
Minimize the movement of employees from affected areas to other areas of the nursing home. Employees who normally go to other neighbourhoods to assist with care should remain on their neighbourhood. Public area housekeepers should not provide services to the affected neighbourhood. These duties are assumed by the affected neighbourhood's housekeeper. This directive may be reassessed dependent on human	Limiting movement between neighbourhoods can reduce the risk of spreading the infection throughout the facility.

resources issues and the extent of the outbreak.	
Care Recommendations	Rationale
<i>3.4 Surveillance Reports</i>	
The use of the hair salon services is evaluated throughout the outbreak during their outbreak meetings. Residents from affected neighbourhoods should not visit the salon. Any change to hairdressing services is communicated to the hair dresser by the Director of Resident Care/designate.	
Registered staff prepares a neighbourhood Respiratory or Gastrointestinal Infection Surveillance Report. This is reviewed and updated on a daily basis by the neighbourhood team during change of shift report (see Appendix E for Resident Surveillance Reports). All employees are to immediately report current and new resident signs and symptoms to the registered staff.	A surveillance report provides a tracking tool for monitoring residents exhibiting symptoms. The surveillance report provides facility staff public health with an overview of the outbreak status within the facility. It assists in determining the origin and trends of the outbreak.
Occupational Health Nurse/designate prepares the Employee Surveillance report as indicated (see Appendix E for Employee Surveillance Report).	
Registered staff updates the surveillance report at least every shift to ensure up-to-date information on affected residents and their symptoms. This surveillance report is maintained on the neighbourhood for at least seven days after the last resident begins to exhibit symptoms. All surveillance reports are forwarded to the Infection Control Designate.	This surveillance report provides a running tally of those affected residents. Once compiled it provides the team with an overview of the number of residents and neighbourhoods affected and provides feedback to the interdisciplinary team on the success of the containment strategies.
Infection Control Designate reviews the surveillance report on a daily basis.	Identifies trends, new cases and changes needed to infection control practices.
<i>3.5 Communication Plan to the Interdisciplinary Team, External Stakeholders, and Family/Responsible Party (see Appendix I)</i>	
Infection Control Designate/Nurse manager/designate contacts Public Health Nurse to report symptoms and ask for further direction (Responsibility Nurse are to contact Public Health if a nurse manager is not available). The surveillance reports may be faxed to the public health nurse on request.	All potential outbreaks are reportable. The Public Health Department has the responsibility of determining if there is an outbreak in the facility, based on the information provided by the facility designate. The Public Health Department may use the surveillance reports to make this determination.

Care Recommendations	Rationale
<i>3.5 Communication Plan (con't)</i>	
In the case of an influenza outbreak, inform the consulting pharmacy as soon as possible of possible outbreak situation.	Pharmacy reviews information about the residents' creatinine clearance and prepares for the possible administration of antiviral medications (i.e. ensure adequate stock).
Registered staff/designate on the neighbourhood inform family/responsible party of affected resident's condition. Any significant change in resident's condition is communicated to the family/responsible party. The plan of action for the communication is done in conjunction with the Infection Control Designate/nurse manager to ensure a consistent, clear, non-alarming message is delivered to families.	Families/responsible parties are important members of the interdisciplinary team. They can assist in encouraging residents to remain on isolation. They should follow appropriate infection control techniques, such as hand hygiene, in order to reduce the spread of infection.
Registered staff/designate inform the family/responsible party of the restrictions to visiting. Families/responsible parties are kept up-to-date as requested throughout the outbreak by the registered staff on the neighbourhood.	It is advisable to contact families/responsible parties to inform them of the outbreak and allow them to determine if they wish to visit at this time. Some families may have health concerns which would prohibit them from visiting the facility during an outbreak.
Registered staff communicates information regarding residents' conditions and any new residents presenting with symptoms on the 24-hour report.	
Social Worker contacts Single Entry Access regarding facility outbreak status. External transfers/admissions are to be evaluated throughout the outbreak. When considering transfers and admissions attention should be given to the applicant's health and immunization status, as well as the resident's and family's wishes. Individual decisions regarding transfers and admissions will be made based on direction from the Public Health. The receiving agency and the transport personnel are to be informed of the outbreak and the resident's current status. In the case of a medical emergency, the resident will be transferred to hospital and the hospital and transport personnel are notified of the outbreak status. Resident attendance at appointments will be evaluated on an individual basis in consultation	During the outbreak, it is important that residents from the affected facility not spread the infection to another health care facility. The exception is when the resident requires a transfer to the hospital for medical attention. In which case the receiving hospital is notified so they can take whatever infection control measures are appropriate to their facility policy.

with the internal and external providers.	
Care Recommendations	Rationale
<i>3.5 Communication Plan (con't)</i>	
Infection Control Designate provides regular updates to the Medical Advisor.	
Infection Control Designate in the nursing home liaisons with the Public Health designate on a daily basis.	Provides an update on the progress of the outbreak and assists to determine any further action which should be taken by the Public Health Department in collaboration with the facility.
All employees on affected neighbourhoods are updated on the outbreak situation and the status of the residents at least daily.	Communication throughout the outbreak to all members of the interdisciplinary team and key stakeholders reduces anxiety and increases the likelihood that infection control measures will be followed.
Nurse manager/designate communicates with each family physician via fax informing them of the outbreak situation and that their resident has been ordered an antiviral medication by the Medical Advisor, if applicable (see Appendix U). No cosigning of this order is required by the family physician.	Family physicians should be notified of any significant changes in their residents' conditions such as the onset of an infectious disease.
<i>3.6 Outbreak Meetings</i>	
<p>Immediately upon declaring an outbreak, Infection Control Designate organizes and chairs daily interdisciplinary team meetings throughout the outbreak to review the following (See Appendix W for Outbreak Meeting Minutes):</p> <ul style="list-style-type: none"> • Surveillance report and outbreak status. • Recreation programs. • Staffing. • Specific departmental responsibilities (e.g., enhanced housekeeping duties). • Employee incidence. • Facility restrictions (e.g., family visits, employee movement, hair dressing services). • Communication plan for residents and families (See Appendix I). • Facility supply needs. • Transfers and admissions. 	These interdisciplinary team meetings are a vehicle for communication and information sharing between members of the interdisciplinary team and are critical to the management of the outbreak. The meeting minutes provide an outline for information to be collected and discussed during the meeting.

Care Recommendations	Rationale
<i>3.6 Outbreak Meetings (con't)</i>	
<p>The interdisciplinary team should include:</p> <ul style="list-style-type: none"> • Nurse managers • Recreation and Volunteer Coordinator • Dietitian • Support services manager • Social worker • Occupational Therapist and Physiotherapist • Occupational Health Nurse • Others on invitation (scheduling coordinator, registered staff, Medical Advisor, Pharmacist, etc.) 	
<p>Infection Control Designate meets with the registered staff on the affected neighbourhoods every morning to review the surveillance report.</p>	
<p>The Infection Control Designate provides the administrator with daily updates following the meetings and updates the registered staff on the affected neighbourhoods who disseminates this information to the neighbourhood staff.</p>	
<i>3.7 Education during an Outbreak</i>	
<p>Infection Control Designate supply hand hygiene inservice information to the neighbourhood. Registered staff ensures that the hand hygiene procedure is posted in each affected resident's bulletin board in their room.</p>	<p>Information posted in the resident rooms may increase the compliance to hand hygiene of employees, residents and visitors.</p>
<p>If applicable, the infection control designate develops a handout for all employees identifying the infection control measures specific to the organism causing the outbreak.</p>	
<p>Inform families and visitors that no one is to visit when they are presenting with active symptoms and children are strongly encouraged not to visit during the outbreak. Visitors may be restricted, based on the discretion of the outbreak team. Signs are placed on the front door of the building and appropriate neighbourhood doors communicating this information. Notices are also posted in the delivery/service entrances.</p>	<p>Children are more susceptible to infection and may wish to refrain from visiting during the outbreak period. Visitor restriction can help to reduce the spread of infection.</p>

Care Recommendations	Rationale
<i>3.7 Education during an Outbreak (con't)</i>	
<p>Daily Education: ad hoc education is provided/arranged throughout the outbreak for employees in all departments by their departmental manager as indicated. This should include: hand hygiene (see Appendix A), isolation procedures and individual department roles and responsibilities as outlined in the employee's guidelines (See Appendices K, L, M, N, O, P, Q, and R), standard precautions (see Appendix A), donning and removing of personal protective equipment (see Appendix B) and others identified by management/employees.</p> <p>Recreation and Volunteer Coordinator provides/arranges appropriate education for volunteers related to hand hygiene, isolation procedures, standard precautions, the use of personal protective equipment and other related topics as needed.</p>	<p>Ensure the employees and volunteers have current and up-to-date information during the outbreak to assist them in preventing the spread of infection.</p>
<i>3.8 Department Specific Duties</i>	
<i>3.8.1 Nursing Staff (see Appendix K and L)</i>	
<p>All employees should ensure that dirty laundry is immediately placed in a laundry bag. Dirty Laundry should never be allowed to touch the floor or other furniture in the room. It is collected in the resident's room in a separate red laundry bag. The laundry bag is changed by the nursing staff a minimum of once a day. One employee collects the dirty laundry in the affected resident's room and brings it to the door of the room where a second (clean) employee holds a red linen bag allowing the full bag to be inserted. The "clean" linen bag is held in such a way as not to contaminate the hands and uniform of the "clean" employee. The employee on the outside of the room folds the laundry bag over her/his hands to prevent them from coming into direct contact with the contaminated laundry.</p>	<p>Placing dirty laundry on the floor contaminates the floor and employees entering and exiting the room can carry these infectious agents from one room to another, spreading an infection. Also when dirty laundry is placed on other surfaces it contaminates that surface, increasing the risk of others visiting the room unwittingly spreading the infection to other locations. Laundry should not be allowed to remain in the resident's rooms for longer than 24 hours as it can serve as a reservoir for infectious agents. Removing laundry bags from the affected resident's rooms in this manner reduces the risk of spreading the infection as the outside bag and the second employee does not become contaminated.</p>
<p>Disinfect the telephone at the nursing station at least twice per shift using Virox™ wipes.</p>	

Care Recommendations	Rationale
<i>3.8.1 Nursing Staff (see Appendix K and L) (con't)</i>	
<p>Ensure adequate supplies are on neighbourhood for the outbreak:</p> <ul style="list-style-type: none"> • Red linen bags • Red linen bags • Disposable gowns • Disposable masks • Disposable gloves • Alcohol gel – for medication cart, nursing station and entrance/exit doors to neighbourhood (if appropriate) 	
<p>Deliver personal laundry to the room of affected residents and put away.</p>	
<p>Once the outbreak is over, strip the bed for deep cleaning by the housekeeping department.</p>	
<p>Once deep cleaning is completed remake the resident's bed.</p>	
<i>3.8.2 Laundry (see Appendix M)</i>	
<p>The laundry staff pick up the soiled laundry from the affected neighbourhood after pick up from all other neighbourhoods. The laundry bin is to be covered with a clean fitted sheet during transport.</p>	<p>These steps help to reduce the opportunity of the virus to spread to other neighbourhoods in the building.</p>
<p>Once the laundry has been delivered to the laundry department from affected neighbourhoods the bins used for transport are cleaned and disinfected.</p>	
<p>Laundry delivery to affected neighbourhoods should be completed following delivery to all other neighbourhoods. Do not enter affected resident's rooms to deliver personal laundry. Nursing staff will place the personal laundry in the affected resident's room.</p>	

Care Recommendations	Rationale
<i>3.8.2 Laundry (see Appendix M) (con't)</i>	
<p>White linens should be delivered to the affected neighbourhood by the laundry department. This neighbourhood is last on the delivery schedule and the cart should be empty before returning to the laundry department. Once the cart is returned to the laundry department it is immediately cleaned and disinfected. At Harbourstone the laundry exchanges the laundry carts on the neighbourhood. Carts on the affected neighbourhood should be the last to be exchanged. All laundry returned to the affected neighbourhood's cart is considered contaminated and should be washed. The cart is then cleaned and disinfected</p>	
<i>3.8.3 Culinary Services (see Appendix N)</i>	
<p>Prepare meal trays for residents on isolation and ensure trays are immediately cleaned and disinfected through the dishwasher when removed from the affected resident's room. Check the temperature of the dishwasher three times daily as per facility routine and report any problems to supervisor immediately.</p>	
<p>Clean and disinfect the dining area and servery according to their job routine using D10. This chemical has a contact time of 10 minutes, unless otherwise directed by supervisor.</p>	
<p>Ensure clothing protectors are stored in their correct location in the cupboard.</p>	
<p>In the rare occasion that the stool sample indicates a food borne pathogen, the Infection Control Designate contacts the Manager of the Production Kitchen and the Servery Manager to conduct an investigation and establish a corrective action plan.</p>	
<i>3.8.4 Housekeeping (see Appendix O)</i>	
<p>Once the organism has been identified through laboratory testing, the housekeeping supervisor is notified. The supervisor will determine if the cleaner used by the housekeeping and servery staff is appropriate for the organism causing the</p>	<p>In order to kill the microorganism and prevent the spread of infection throughout the facility, cleaners should be selected based on the organism causing the outbreak</p>

outbreak.	
Care Recommendations	Rationale
<i>3.8.4 Housekeeping (see Appendix O) (con't)</i>	
<p>The housekeepers complete a daily cleaning of all surfaces in the resident's rooms. All surfaces and items within the reach of the resident should be cleaned daily with a cleaner that is appropriate to the infectious organism. Particular attention should be given to contact surfaces such as door and door handles, handrails, public washrooms, light switches, call bells, telephone, remote controls, side rails, faucets, toilet flushes, key pads, etc. Cleaning should be thorough, keeping in mind the following principles:</p> <ul style="list-style-type: none"> • Work from clean items/surfaces to dirty • Saturate the cleaning cloth with disinfectant by pouring directly onto the cloth. Never spray or squirt the chemical onto infected surfaces. • Change your mop head or cleaning cloth frequently. Avoid contaminating the clean cloth (e.g. don't double-dip your cloth into the cleaning solution). 	<p>Although there is no research evidence to support the transmission of the influenza virus via environmental surfaces, transmission may occur through direct and indirect contact with secretions.</p>
See the guidelines for cleaning a resident room, including the bathroom located in Appendix O)	
Complete additional cleaning to all contact surfaces such as handrails, door and door handles (especially soiled linen door/handle), public washrooms, key pads to neighbourhoods, phones and counters at the nursing station, etc. at least twice per day at the beginning and end of the shift.	
Prepare the housekeeping cart for the nursing staff to use after hours for cleaning up spills of body fluids.	
Garbage collection: collect garbage from affected neighbourhoods after collecting on all other neighbourhoods last and bring immediately to the trash compactor. Disinfect the garbage cart before returning it to the neighbourhood. At HEC, CEC and PEC disinfect the garbage collection bin on the neighbourhood on a daily basis.	

Care Recommendations	Rationale
<i>3.8.4 Housekeeping (see Appendix O) (con't)</i>	
<p>The housekeepers complete a daily cleaning of all surfaces in the resident's rooms. All surfaces and items within the reach of the resident should be cleaned daily with a cleaner which is appropriate to the infectious agent. Particular attention should be given to contact surfaces such as door and door handles, handrails, public and resident washrooms, light switches, call bells, telephone, remote controls, side rails, faucets, toilet flushes, key pads, etc. (see guidelines on page 113).</p>	
<p>Once the outbreak has been declared over or the resident has been taken off isolation, the resident room is carbolized/deep cleaned (see Appendix T for a description of how to carbolized/deep clean a resident room). Housekeepers should ensure all privacy or window curtains are cleaned and remove. For gastrointestinal outbreak discard the remainder of the roll of toilet paper in use. All rolls of paper towel and toilet paper in the resident's bathroom that are not in a covered dispenser should be discarded.</p>	<p>Deep cleaning helps prevent the re-infection of residents and the spread of infection.</p>
<i>3.8.5 Maintenance (see Appendix P)</i>	
<p>All employees complete maintenance request as per usual however slips from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood. Maintenance collects their requests from this location.</p>	
<p>Maintenance employees following normal operating procedures in relation to the tracking and prioritization of maintenance requests. However during an outbreak situation maintenance employees only complete those items on the affected neighbourhoods that are related to employees or resident safety. All other maintenance requests are catalogued for completion once the outbreak has been declared over.</p>	
<p>Maintenance to hang clean privacy curtain and window coverings after the outbreak is over and the</p>	

room has been deep cleaned.	
Care Recommendations	Rationale
<i>3.8.6 Recreation Staff and Volunteers (see Appendix Q)</i>	
Recreation and Volunteer Coordinator limit and/or postpone group recreation activities according to the direction from the interdisciplinary outbreak meeting. This is to be reviewed on a daily basis at the interdisciplinary team meeting depending on the pattern of illness, etc. Residents from affected neighbourhoods are prohibited from participating in large facility programs where they come into contact with residents from unaffected neighbourhoods. The recreation department may visit and conduct small group or one-on-one programs on affected neighbourhoods that do not require supplies and equipment such as verbal activities, sing-songs etc. as determined by the interdisciplinary team. Recreation activities with outside performers coming into the facility and residents visiting from other facilities should be reevaluated and possibly cancelled during the outbreak	
<i>3.9 Medication Management</i>	
<i>3.9.1 Influenza</i>	
The Infection Control Designate and Occupational Health Nurse discuss the possibility of re-offering the influenza vaccine to residents and employees who were previously unvaccinated.	
Once the recommendation has been received from the Public Health Department to begin administering chemoprophylaxis and/or treatment, contact the Medical Advisor to obtain an order for the antiviral medications. Order should be written to allow the Department of Health to provide the guidelines for timeframes (e.g., Start (antiviral) at (name of home) as per the guidelines from the Department of Health for Influenza 'A' for all residents as per Dr. _____ (Medical Officer of Health)).	The Public Health Department, notably the Medical Officer of Health, has the authority to declare an outbreak.
Nurse manager/designate to contact MSI for insurance coverage of the antiviral medication for each resident.	Antiviral medications may not be covered under the pharmacare system and require special funding letters to obtain approval.

Care Recommendations	Rationale
<p><i>3.9.1 Influenza Medication management (con't)</i></p>	
<p>Nurse manager holds a team meeting with the registered staff to inform them of the order to administer anti-viral medication and discuss implementation.</p>	
<p>A copy of this order is to be placed in the “Physician’s Orders” section of the health care record. The antiviral guidelines are provided by Public Health.</p>	<p>Placing the order in the “Physician’s Orders” section of the health care record allows for communication of the medical orders to all members of the team. The antiviral guidelines are based on the influenza status of the resident as well as their health history and comorbidities.</p>
<p>Residents receiving antiviral medications should be monitored by registered staff for the potential side effects of these medications and for infections by influenza viruses that are resistant to the antiviral agent at least every shift.</p> <p>Potential side effects from oseltamivir (Tamiflu) include:</p> <ul style="list-style-type: none"> ▪ Gastrointestinal such as nausea and vomiting – may be less severe if taken with food <p>Potential side effects from amantadine and rimantadine include:</p> <ul style="list-style-type: none"> ▪ Central nervous system side effects such as nervousness, anxiety, difficulty concentrating and lightheadedness (more likely with amantadine than rimantadine) ▪ Gastrointestinal side effects such as nausea and loss of appetite ▪ People with other comorbidities may experience more serious side effects such as delirium, hallucinations, agitation and seizures ▪ Side effects usually subside and diminish after one week. <p>Potential side effects from Zanamivir include (not currently covered in Nova Scotia):</p> <ul style="list-style-type: none"> ▪ Decreased respiratory function, bronchospasms, bronchitis, cough ▪ Diarrhea, nausea ▪ Sinusitis and nasal infections 	<p>The identification of side effects can result in a reevaluation/discontinuation of the medication or the need for other medications to manage the side effects.</p>

▪ Headache and dizziness	
Care Recommendations	Rationale
<i>3.9.1 Influenza Medication management (con't)</i>	
Nurse manager/designate contact consultant pharmacist regarding the order to begin antiviral medications and ensure all physicians' orders are sent to pharmacy and indicated in the policy for transcribing medical orders. Pharmacy provides a 10-day supply of antiviral medication for the initial stage of treatment.	There may be concerns regarding the availability of antiviral medications.
Pharmacy provides three labels for each resident who is to receive the antiviral medication for the following: 1. Medical Advisor order in the physician's order section of the health care record 2. Medication Administration Record 3. Locator card in the medication cart	These labels help to ensure that medications are administered appropriately.
If a resident, who was receiving prophylactic antiviral medication, exhibits active ILI symptoms, the Infection Control Designate /Registered Staff (under the direction of a Registered Nurse) contacts pharmacy to switch the resident to active treatment. The pharmacy will then send the appropriate medication supply and new labels for the: 1. Copy of the Medical Advisor's order in the physician's order section of the health care record 2. Medication Administration Record 3. Locator card in the medication cart	
Registered staff administer antiviral medication as ordered by public health and the Medical Advisor according to their professional practice standards.	
<i>3.9.2 Medication Management For both Influenza and Gastrointestinal Infection</i>	
Registered staff administer medications for symptom management as prescribed by the physician. Completes a medication review to identify medications that may worsen the resident's symptoms (e.g., in the case of GI infection may hold motility drugs, medications for constipation, etc.). Re-evaluate diabetic medications.	Registered staff have the requisite skills for medication administration. All medications require a physician's order.
Pharmacy delivers medications for affected neighbourhoods to the front desk. Deliveries are made to the nursing station on unaffected	

neighbourhoods.	
Care Recommendations	Rationale
<i>3.10 Management of Supplies</i>	
Registered staff ensure alcohol gel bottles are available and replenished in the following locations: <ul style="list-style-type: none"> • Each medication cart • At the nursing station • Neighbourhood entrance/exit (as appropriate). • Designated areas on the neighbourhood and the dining areas 	
Front office receptionist informs all visitors to use alcohol gel when they are signing in and out of the building.	
Delivery of nursing supplies such as stock medications, incontinence supplies and other nursing supplies should be organized to limit frequency.	
<i>3.11 Symptom Management</i>	
Registered staff notify the food services department indicating any change in diet or special resident needs. Residents who have gastrointestinal infections are placed on clear fluids for the first 24-48 hours of their symptoms. The registered staff notify the servery staff of the change in resident diet. Foods allowed on the a clear fluid diet include clear fruit juices (apple, cranberry or grape); low-pulp or pulp free juices (i.e. orange, lemonade), bouillon, consommé or clear broth, clear fruit flavored gelatin, frozen popsicles, and fruit flavored (peach and wild berry) Resource supplement.	The purpose of the clear fluid diet is to supply fluid, electrolytes and energy in a form that requires minimal digestion and stimulation of the GI tract.

Care Recommendations	Rationale
<i>3.11 Symptom Management (con't)</i>	
<p>If a clear fluid diet is required for more than 48 hours the Registered Staff are to consult the Dietitian to determine the need for clear liquid oral supplements.</p> <p>The clear fluid diet is followed by a transitional diet which contains both fluids and simple solids as tolerated until the resident symptoms have fully subsided (i.e. sandwich, soup, juice, pudding, milk, tea). Once the symptoms have fully subsided the resident is placed back on their usual diet.</p>	
<p>Elderly residents generally require 1500 ml of non-caffeinated fluid per day. During times of illness such as influenza or gastrointestinal infection, they require additional non-caffeinated beverages, unless contraindicated by conditions such as renal disease or congestive heart failure. Nursing and culinary employees work collaboratively to increase fluid intake, however fluids passes for affected residents are completed by the nursing staff. The interdisciplinary team is to encourage residents with symptoms to get plenty of rest.</p>	<p>Residents may benefit from extra fluids and rest during an infection. Residents are at increased risk of dehydration during gastrointestinal illness. Residents suffering from influenza generally have poor nutritional intake and therefore are encouraged to drink extra fluids.</p>
<i>3.12 Declaring the Outbreak Over</i>	
<p>The outbreak is declared over in consultation with the Medical Officer of Health. When the outbreak is considered over, the Medical Advisor writes an order to discontinue all antiviral prophylactic medications. Note: Typically the outbreak is not over until seven days following the date the last resident began exhibiting symptoms.</p>	
<p><i>Influenza:</i> Registered staff photocopy the order from the Medical Advisor that discontinued the prophylactic antiviral medication. The order is placed on the health care records of all residents who received the antiviral medication and transcribed according to the company policy.</p>	

Care Recommendations	Rationale
<i>3.12 Declaring the Outbreak Over (con't)</i>	
The Infection Control Designate communicates to the interdisciplinary team, visitors and family physicians that the outbreak is over (see Appendix V for letter to send to physicians).	
Registered staff/designate informs all residents and family members from the affected neighbourhood(s) that the outbreak is over either through direct phone contact or posting of information in the facility.	
The facility designate receives a letter from the Medical Office of Health indicating that the outbreak is over.	
<i>3.13 Evaluation</i>	
<p>The Infection Control Designate completes the outbreak report to include at least the following (see Appendix X for table of contents of the outbreak report):</p> <ul style="list-style-type: none"> • Number of residents and employees affected • Number of residents who presented with symptoms and their duration • Signs and symptoms presented • Number of specimens sent to the lab and their results • Ability/challenges/success in containing outbreak • Interventions implemented to contain the outbreak. Effectiveness of these interventions. • For influenza, number of residents and employees vaccinated against influenza. • Number of residents who received prophylactic and active treatment of antiviral medication. • Education done during the outbreak. • What went well? • What did not go well? • What improvements can be made for future outbreaks? 	Provides a vehicle to evaluate the effectiveness of the outbreak management strategies and what improvements can be made for future outbreaks.

Care Recommendations	Rationale
<i>3.13 Evaluation (con't)</i>	
<p>Outbreak Report (con't):</p> <ul style="list-style-type: none"> • How did this outbreak compare to previous outbreaks? • Was the communication plan effective? If not what are the recommendations to improve communication. • Overall analysis and recommendations. • What helpful feedback was received regarding the management of the outbreak from: <ul style="list-style-type: none"> ○ Interdisciplinary Team ○ Residents and Families ○ Volunteers ○ Visitors ○ Physicians ○ Pharmacy ○ Public Health/Medical Officer of Health 	
<p>Outbreak report is submitted to:</p> <ul style="list-style-type: none"> • Facility administrator • Executive Director Resident Care • Facility Director Resident Care <p>Outbreak report reviewed by:</p> <ul style="list-style-type: none"> • Director Resident Care at Resident Care Steering and Quality Council • Departmental managers at appropriate departmental meetings • Occupational health and Safety Committee • Corporate Risk management Committee 	

4.0 Evaluation Process for Best Practice Guidelines

4.1 Goals of the Best Practice Guidelines

Goal #1: Provide guidelines to prevent influenza and gastrointestinal outbreaks by preventing the spread of infection between residents and between employees, volunteers, visitors and our residents, thereby reducing resident morbidity and mortality associated with these conditions.

Objective #1: Outline a surveillance system that aids in the early detection of influenza and gastrointestinal infections in residents, employees and volunteers.

Objective #2: Outline strategies for the prevention of outbreaks.

Objective #3: Outline the education strategies for the prevention of outbreaks

Objective #4: Outline the annual influenza vaccine campaign for residents and employees.

Goal #2: Provide guidelines related to the screening of residents and employees for Tuberculosis on admission and new hire, respectively.

Goal #3: Provide guidelines for the timely identification of an outbreak and a description of strategies to be implemented to contain an influenza or gastrointestinal outbreak.

Objective #1: Provide an overview of the responsibilities of each interdisciplinary team member during an outbreak.

Objective #2: Outline a process for communication to the interdisciplinary team, Public Health, residents and families and other key stakeholders during an outbreak.

Objective #3: Outline the process for the collection of specimens.

Objective #4: Outline an evaluation process.

4.2 Target Group:

- Interdisciplinary team members including Nursing, Occupational Therapy, Physiotherapy, Recreation, Social Work, Dietitian, Occupational Health Nurse and Hospitality Services which includes Housekeeping, Laundry, Maintenance, Culinary departments, residents, families, visitors and volunteers.
- All Departmental Managers.

4.3 Best Practice Guideline Evaluation

Indicator	Structure	Process	Outcome
Objectives	To evaluate supports available in the organization to allow the interdisciplinary team to implement the outbreak management best practice guidelines.	To evaluate the change in practice in relation to preventing and managing both influenza and gastrointestinal infection outbreaks	To evaluate the impact of implementing the Best Practice for Outbreak Management.

Indicator	Structure	Process	Outcome
<p>Organization (Annual and as needed review of Best Practice Guidelines by organizational committee responsible for policy and procedures - Resident Care Steering Committee).</p>	<ul style="list-style-type: none"> ▪ Accessible Best Practice Guidelines for Outbreak Management on each neighborhood. ▪ Accessible resources for the interdisciplinary team to consult for ongoing support after the initial implementation period. 	<ul style="list-style-type: none"> ▪ Implementation of the communication plan, checklists, and surveillance reports to support the Best Practice Guidelines for Outbreak Management. ▪ Definitions and infection criteria are being used consistently between the nursing homes. ▪ Feedback from key stakeholders following the outbreak 	<ul style="list-style-type: none"> ▪ Number of outbreaks ▪ Number of residents affected ▪ Accreditation review in this aspect. ▪ Licensing review in this aspect. ▪ Analysis of outbreak reports. ▪ Employee participation in mandatory education ▪ Organization reputation directly reflecting care in this regard. ▪ Modifications made to the guidelines based on relevance and how current they are to clinical practice. ▪ Resident and family/ responsible party satisfaction.
<p>Organization (Annual and as needed review of Best Practice Guidelines by organizational committee responsible for policy and procedures - Resident Care Steering Committee). (con't)</p>	<ul style="list-style-type: none"> ▪ Education package developed and clear. ▪ Input from key stakeholders (e.g., pharmacy and the Medical Advisor) on the guidelines. ▪ Contracts with suppliers to facilitate timely delivery of necessary equipment and supplies during an outbreak 		

Indicator	Structure	Process	Outcome
<p>Enhanced Care Home/ Resident Completed in the Quarterly Risk Management Report, Outbreak Report and Resident Care Services Report</p>	<ul style="list-style-type: none"> ▪ Availability of the best practice guidelines on each neighborhood. ▪ Percentage of the interdisciplinary care team attending the education sessions on the best practice guidelines for outbreak management. 	<ul style="list-style-type: none"> ▪ Definitions and infection criteria are being used consistently within the nursing homes. ▪ Use of the communication plan, checklist for potential outbreak situations, the influenza season preparatory checklist and discipline specific outbreak checklists. ▪ Attendance at the daily outbreak meetings. 	<ul style="list-style-type: none"> ▪ Number of outbreaks ▪ Number of residents affected ▪ Number of neighbourhoods affected ▪ Evidence of the interdisciplinary documentation related to the best practice guidelines. ▪ Review of the outbreak report.
<p>Financial Costs</p>	<ul style="list-style-type: none"> • Financial support for the distribution and dissemination of the best practice guidelines • Moneys available to cover the costs for equipment and supplies as well as human resources related to the outbreak. 	<ul style="list-style-type: none"> • Acquire the necessary equipment, supplies and human resources throughout the outbreak. 	<ul style="list-style-type: none"> • Costs for additional employees, medications, equipment and supplies. • Analysis of the timeliness of receiving the equipment, supplies and human resources needed.

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6.0 Reference List

Canadian Centre for Occupational Health and Safety (2004). *Hand washing: Reducing the risk of common infection*. Retrieved from available website March 2, 2006:

http://www.ccohs.ca/ohsanswers/diseases/washing_hands.html?print.

Chicago Dietetic Association (2000). *Manual for clinical dietetics* (6th Ed.). American Dietetic Association: Chicago

Department of Health and Human Services Centre for Disease Control and Prevention (2005a). *Guidelines and Recommendations: Influenza control measures for preventing and of controlling influenza transmission in long-term care facilities*. Retrieved from website June 13, 2005: <http://www.cdc.gov/flu/professionals/infectioncontrol/longtermcare.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention (2005b). *Guidelines and Recommendations: Updated infection control measures for the prevention and control of influenza in health-care facilities*. Retrieved from website June 13, 2005: <http://www.cdc.gov/flu/professionals/infectioncontrol/longtermcare.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention. (2005c) *Antiviral drugs: Summary of side effects*. Retrieved from website June 13, 2005: <http://www.cdc.gov/flu/protect/antiviral/sideeffects.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention (2004a). *Cover you cough*. Retrieved from website June 16, 2005: <http://www.cdc.gov/flu/protect/covercough.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention (2004b). *Guidelines and recommendations. Influenza antiviral medications: 2004-05 interim chemoprophylaxis and treatment guidelines*. Retrieved from website June 13, 2005: <http://www.cdc.gov/flu/professionals/treatment/0405antiviralguide.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention (2004c). *Key facts about the flu: How to prevent the flu and what to do if you get sick*. Retrieved from website June 16, 2005: <http://www.cdc.gov/flu/keyfacts.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention (2004d). *Personal protective equipment (PPE) in healthcare settings*. Retrieved from website June 16, 2005: <http://www.cdc.gov/ncidod/hip/ppe/default.htm>.

Department of Health and Human Services Centre for Disease Control and Prevention (2004e). *Respiratory hygiene/Cough etiquette in healthcare settings*. Retrieved from website June 16, 2005: <http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>.

- Department of Health and Human Services Centre for Disease Control and Prevention (2002). *Guideline for hand hygiene in health-care settings: Recommendations of the healthcare infection control practices advisory committee and the HICPAC/SHEA/APIC/IDSA hand hygiene task force*. Retrieved from available website March 6, 2006: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.htm>.
- Health Canada (2003). *It's your health: The flu*. Retrieved from website June 23, 2005: <http://www.hc-sc.gc.ca/english/iyh/diseases/flu.html>.
- Health Canada (1999). *Infection control guidelines: Routine practices and additional precautions for preventing the transmission of infection in health care*. Retrieved from available website March 13, 2006: <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99pdf/cdr25s4e.pdf>.
- Johnson Diversey (2002). *Shannex Environmental Binder: Partners in Quality* (2nd Ed.): Author.
- Larson, E. (2001). Hygiene of the skin: When is clean too clean? *Emerging Infectious Diseases*, 7(2), 225-230.
- Ministry of Health and Long Term Care (2004). *Ontario best practice manual for prevention and control of Clostridium difficile within healthcare facilities*. Ontario: Provincial Infectious Diseases Advisory Committee: Public Health Division.
- Ministry of Health and Long Term Care (2005). *Preventing febrile respiratory illnesses: Protecting patients and staff*. Ontario: Provincial Infectious Diseases Advisory Committee: Public Health Division.
- National Institute for Clinical Excellence (2003). *Infection control: Prevention of healthcare-associated infection in primary and community-care*. London, England: Thames Valley University.
- Nova Scotia Department of Health (2006). *Emergency preparedness vaccine cold chain breakdown guidelines for use by vaccine providers*. Halifax, Nova Scotia: Author.
- Nova Scotia Department of Health (2005). *Guide to influenza control in long-term care facilities*. Halifax, Nova Scotia: Author.
- Nova Scotia Department of Health (2004). *Guide to influenza control in long-term care facilities*. Halifax, Nova Scotia: Author.
- Nova Scotia Department of Health (2001). *A guide to the investigation and management of enteric disease outbreaks in long term care (LTC) facilities*. Halifax, Nova Scotia: Author.
- Nova Scotia Department of Health (2000a). *Answering myths about influenza vaccine*. Retrieved from website June 23, 2005: <http://www.gov.ns.ca/health/downloads/influenzamyths.pdf>.

Nova Scotia Department of Health (2000b). *Health care worker (HCW) influenza immunization fact sheet*. Retrieved from website June 23, 2005:

<http://www.gov.ns.ca/health/downloads/influenzafacts.pdf>.

Partners for Infection Control (2001). *A guide to the investigation and management of respiratory disease outbreaks in long term care facilities*. Halifax, Nova Scotia: Nova Scotia Department of Health.

Public Health Services. *Nova Scotia Health Promotion. Important information about influenza and influenza vaccine*. Retrieved from available website June 23, 2005

Public Health Services and Nova Scotia Department of Health (2003). *Nova Scotia Communicable Disease Control Manual*. Retrieved from available website April 28, 2006: <http://www.gov.ns.ca/health/publichealth/>.

Regional Niagara Public Health Department (2004). *Outbreak management guidelines for health care facilities*. Niagara: Author.

Texas Department of Aging and Disability Services (2004). *Infection control practices: Quality matters: Infection control: C difficile*. Retrieved from available website March 2, 2006: <http://mqa.dhs.state.tx.us/qmweb/Cdif.htm>.

Texas Department of Aging and Disability Services (2003a). *Infection control practices: Quality matters: Infection control: Influenza*. Retrieved from available website March 2, 2006: <http://mqa.dhs.state.tx.us/qmweb/Influenza.htm>.

Texas Department of Aging and Disability Services (2003b). *Problem-oriented best practices: Quality matters: Infection control*. Retrieved from available website March 2, 2006: <http://mqa.dhs.state.tx.us/qmweb/InfControl.htm>.

Appendix A – Information Related to Standard Precautions, Hand Hygiene, and Isolation Procedures












Hand washing/Standard Precautions Inservice

Time Required: 10 minutes

Objectives	Content
<p>At the end of this session, participants will:</p> <ul style="list-style-type: none"> ▪ Understand the term “standard precautions” 	<p>Standard precautions are guidelines designed to protect all service providers, clients, and visitors from exposure to communicable diseases through the use of barriers and by using hand washing as the primary defense against the spread of disease.</p> <p>Protective barriers reduce the risk of exposure of skin and mucous membranes to potentially infectious materials. Examples of protective barriers include gloves, gowns, masks and protective eyewear.</p> <p>Standard Precautions combine Universal Blood and Body Precautions and Body Substance Precautions. These guidelines reduce the risk of contracting and transmitting infections related to blood-borne pathogens and pathogens from moist body substances, e.g. urine, feces, saliva, wound discharge, etc.</p> <p>Under standard precautions, every contact between a client and service provider can be a potential for transmission of disease. Standard precautions are intended to supplement rather than replace routine infection control practices, such as hand washing.</p>
<ul style="list-style-type: none"> ▪ Understand the general guidelines for standard precautions 	<p><i>Hand Washing</i></p> <ul style="list-style-type: none"> ▪ Hand washing is the key to preventing infection and must be done by all service providers and clients. (Review attached information on hand washing) <p><i>Gloves</i></p> <ul style="list-style-type: none"> ▪ Gloves should be worn when touching blood, body fluids (semen, vaginal secretions), secretions (saliva, tears, nasal secretions), excretions (urine, feces, sputum, vomitus), and items contaminated with these fluids. ▪ Gloves should be worn when touching mucous membranes and broken skin. ▪ Gloves are to be removed immediately after use, hands washed and new gloves used between client care or cleaning areas.

Objectives	Content
	<p><i>Gowns</i></p> <ul style="list-style-type: none"> ▪ Gowns are required when it is likely that clothing will be soiled from splashes or sprays of blood, body fluids, secretions or excretions. ▪ Wash hands immediately after removing the gown. <p><i>Masks, eye protections and face shields</i></p> <ul style="list-style-type: none"> ▪ Masks, eye protections and face shields should be worn to protect mucous membranes of the eye, nose and mouth only when the situation/procedure is likely to result in splashes or sprays of blood, body fluids, secretions or excretions. <p><i>Mouthpieces</i></p> <ul style="list-style-type: none"> ▪ Mouthpieces should be used when resuscitation is indicated. <p><i>General Precautions</i></p> <ul style="list-style-type: none"> ▪ Wear gloves when collecting and transporting specimens. ▪ Carry soiled linen away from clothing. Do not throw soiled linen on the floor. Wear gloves when handling soiled linen. ▪ Handle needles, syringes and all disposable sharps with care to prevent accidental exposure to blood-borne illness and discard immediately after use into a puncture-proof container. Do not bend, break or otherwise manipulate used needles by hand; do not recap used needles; and do not overfill sharps containers. <p><i>Note: More detailed information on the above personal protective equipment will be found in the Personal Protective Equipment in Health Care video.</i></p>

General Hand Washing Procedures

	1 Remove all jewelry.*		2 Turn on warm water.
	3 Wet your hands. Keep fingertips pointed down.		4 Apply soap from dispenser.
	5 Rub hands together (10-15 s), creating a lather.		6 Pay particular attention to areas between your fingers.
	7 Rub fingernails against palm of opposite hand. Clean nails with brush if soiled.		8 Rinse hands from the wrist to fingertips. Keep fingers pointed down.
	9 Dry hands with a paper towel.		10 Use a clean, dry paper towel to turn off faucet. Do not touch faucet with your hand.
	11 Discard paper towel.	Alcohol Hand Rub When using alcohol hand rub, follow steps 1, 4 (applying alcohol hand rub, rather than soap), 5, 6, & 7. Allow hands to air dry.	

* It is preferable not to wear jewelry to work. However, remember to put jewelry back on after Step 11.



Occupational Health and Safety Agency for Healthcare in BC
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General Hand Hygiene Information

Hand hygiene is the single most important and effective way of preventing the spread of infection. Proper hand hygiene will help to remove surface germs (or germs we have picked up in the environment) and prevent us from passing these germs on to others we come in contact with at work.

Please note: The use of gloves does not replace the need for good hand hygiene

It is important that you wash your hands:

- When arriving on the neighbourhood at the beginning of the shift and before leaving at the end of the shift
- Before and after break
- Before direct contact with a resident
- After direct contact with a resident and between residents
- When visibly soiled
- Before performing invasive procedures
- After contact with secretions/excretions
- After blowing your nose or sneezing/coughing into your hands
- After contact with objects which are known or suspected to be contaminated with secretions/excretions
- Immediately upon removal of personal protective equipment, including gloves
- After handling soiled bed linen, clothing, commodes and other articles
- Between procedure on the same resident to prevent the spread of infection from one area of the body to another
- Before and after preparing, handling or serving food
- Before and after eating your meals
- Before and after feeding a resident
- After using washroom
- After smoking
- After handling pets

Alcohol Gel:

- The use of alcohol gel is not effective if hands are visibly soiled. In this case the use of soap and water is the procedure of choice.
- There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
- The use of alcohol gel is indicated prior to performing an invasive aseptic procedure such as urinary catheter insertion.
- The use of alcohol gel is also indicated before and after contact with residents who have antimicrobial-resistance organisms (e.g. MRSA, VRE, etc.).
- Applying small volume (e.g. ≤ 0.5 ml) is not more effective than washing your hands with soap and water. The ideal amount of alcohol gel to use is not known but if your hands feel dry after being rubbed together for 10-15 seconds, you did not use enough alcohol gel.

Other hand hygiene tips:

- Cover cuts and abrasions on hands with waterproof bandage.
- Ensure nails are free from polish and artificial nails as these items are associated with increased numbers of bacteria on the fingernails and increase the risk of catching or spreading infections.
- Keep your hands away from your mouth, nose and eyes. Placing your infected hands on these sites cause germs to enter your body and cause an infection.

Isolation Procedures

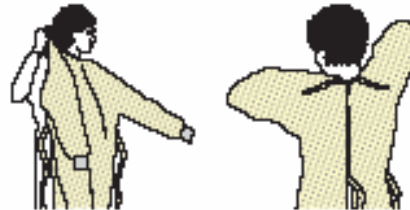
For isolation procedures see Appendices M, N, O, P, Q, R, S, and U for the guidelines for Registered Staff, Personal Care Workers/Continuing Care Assistants, Laundry Department, Culinary Services Department, Housekeeping Department, Maintenance Department, Recreation Staff and Volunteers, Occupational Health Nurse, respectively

SEQUENCE FOR DONNING PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required; e.g. Standard and Contact, Droplet or Airborne Infection Isolation.

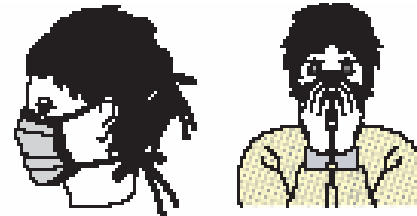
1. Gown

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. Mask or Respirator

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



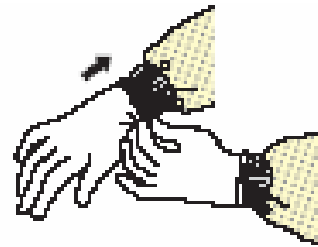
3. Goggles or Face Shield

- Place over face and eyes and adjust to fit



4. Gloves

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

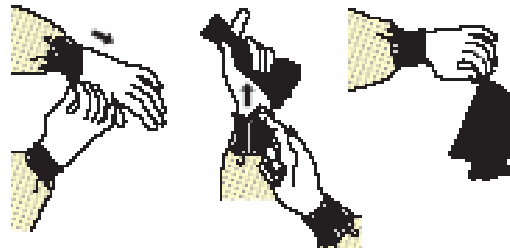


SEQUENCE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT (PPE)

Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and close door.

5. Gloves

- Outside of gloves is contaminated
- Grasp outside of glove with opposite gloved hand, peel off
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist
- Peel glove off over first glove
- Discard gloves in waste container



6. Goggles or Face Shield

- Outside of goggles or face shield is contaminated
- To remove, handle by head band or ear piece
- Place in designated receptacle or in waste container



7. Gown

- Gown front and sleeves are contaminated
- Unfasten ties
- Pull away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard



8. Mask or Respirator

- Front of mask/respirator is contaminated – DO NOT TOUCH!
- Grasp bottom, then top ties or elastics and remove
- Discard in waste container



PERFORM HAND HYGIENE IMMEDIATELY AFTER REMOVING ALL PPE

Appendix C – Inservice: Signs and Symptoms of Influenza-Like Illness and Gastrointestinal Infections

Signs and Symptoms of Influenza-like Illness:

Signs and symptoms of influenza-like illness include (must have at least two of the following):

- Fever >38°C (can be taken at any site) – may or may not be present
- Chills
- New headache or eye pain
- Muscle aches
- Tiredness or loss of appetite
- Sore throat
- New or increased dry cough

Employees must remain away from the workplace for three to five days after the onset of influenza-like symptoms. Employees may wish to see their family doctor to receive anti-viral medication.

Symptoms of a Gastrointestinal Infection:

Has episodes of vomiting (greater than 2) or diarrhea (2 or more loose or watery stools above what is normal for the person) in a 24 hour period not caused by something else such as food or medication induced.

In order to be Diagnosed with a GI infection you must also have BOTH of the following:


- Positive stool culture and
- At least one symptom of GI infection (nausea, vomiting, abdominal pain or tenderness, or diarrhea).

Employees must remain away from the workplace until they have had no episodes of vomiting or diarrhea for 24 hours.

The differences between a Cold and Influenza-Like Illness (Flu):

SYMPTOM	COLD	INFLUENZA
Fever	Rare	Usually high; sudden onset; lasts 3 – 4 days
Headache	Rare	Frequent
Aches & pains	Slight	Usual; often quite severe
Weakness	Rare/mild	Moderate to extreme; can last up to 1 month
Bed ridden	Never	Frequently; lasts up to 5 – 10 days
Sniffles	Common	Sometimes
Sneezing	Usual	Sometimes
Sore throat	Common	Sometimes
Cough	Sometimes; mild to moderate	Usual; can become severe
Complications	Sinus and ear infection	Bronchitis, pneumonia, kidney failure; can be life threatening

Public Health Services CDHA (updated 2002)

	Policy ID No.:	
	Title:	Influenza and Pneumococcal Vaccine: Resident and Staff
	Effective Date:	December 2005
	Version:	02
	Manual & Volume:	Safety Volume 1
	Section:	2
	Approved By:	Executive Director Resident Care
	Distribution group(s):	Resident Care
Division:	<input checked="" type="checkbox"/> EC <input type="checkbox"/> RLC	

Policy:

As per Public Health recommendations:

- Influenza vaccinations will be administered to residents and employees during the annual influenza campaign.
- Pneumococcal vaccinations will be administered to residents.

Purpose:

To provide measures to minimize the incidence of influenza and prevent influenza outbreaks within the facilities.

To reduce the prevalence of pneumococcal pneumonia.

Procedure:

Responsible Party	Step #	Responsibility
<u>Infection Control/Occupational Health</u>		
Infection Control Designate/Occupational Health Nurse	1.	Posts information in facility for residents, employees, volunteers and visitors regarding annual influenza vaccination campaign.
	2.	Initiates ‘Influenza Season Preparatory Checklist’.
	3.	Orders the vaccine from the Public Health and arranges for pickup/delivery. Note: vaccine is kept at a temperature of 2-8° C and never frozen during transport and storage at the facility. Note: Each medication fridge is equipped with thermometers to monitor therapeutic temperatures.
	4.	Orders the necessary supplies for administration of the vaccine.
	5.	Maintains an inventory of the vaccine vials received, their location and the lot number.
	6.	Establishes date(s) for vaccine clinics following Public Health Guidelines/directives.

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	7.	Collects statistics on the immunization rate and forwards information to Public Health following the clinics.
	8.	Reports adverse events/reactions to the Medical Officer of Health.
	9.	Files completed 'Influenza Season Preparatory Checklist' in office filing cabinet. Retains copy for 2 years.
<u>Resident Immunization</u>		
Physician	10.	Assesses resident upon admission and orders pneumococcal vaccination and annual influenza vaccination along with emergency care medications (e.g., epinephrine), unless contraindicated.
	11.	Reorders annual influenza vaccine and emergency care medications on resident's semi-annual medication review, unless contraindicated.
Registered Staff	12.	Reviews each resident's health care record for: <ul style="list-style-type: none"> ▪ contraindications, ▪ special considerations, ▪ Obtained consent to the vaccines. Documents on the 'Resident Immunization Administration Record'.
	13.	Transcribes order for vaccine and epinephrine to Medication Administration Record for appropriate month indicating "Refer to Resident Immunization Administration Record".
	14.	Forwards number of residents requiring influenza and pneumococcal vaccination to the Infection Control Designate.
	15.	If competent to perform the skill, administers the pneumococcal vaccine to resident at any time during the year. Carries epinephrine and syringe while performing procedure in the event of an adverse event. Administers the influenza vaccine when directed by Infection Control Designate. (See Advanced Nursing Skills Policy and Immunization information for certification guidelines and procedure to administer vaccine and emergency care medications)

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Title:	Influenza and Pneumococcal Vaccine: Resident and Staff

	16.	In the rare case of anaphylactic reaction, administers emergency medication as ordered by physician and calls 911. Documents symptoms and interventions in progress notes. Completes resident incident report and forwards to Infection Control Designate.
	17.	Documents administration of vaccine on 'Resident Immunization Administration Record' which includes: <ul style="list-style-type: none"> ▪ Generic \ trade names of the vaccine ▪ Lot number of the vaccine vial ▪ Site of administration ▪ Date, time and RN signature Document the following in progress notes: <ul style="list-style-type: none"> ▪ Adverse events and emergency care (if applicable). ▪ Refusal of the vaccine. ▪ Any side effects and treatments.
	18.	Files 'Resident Immunization Administration Record' in resident's health care record. Forwards number of residents who have received the influenza vaccine to facility Infection Control Designate.
<u>Employee Immunization</u>		
Occupational Health Physician/Medical Advisor	19.	Writes an order for clinical protocol for all staff who are willing to receive the influenza vaccination. Also includes an order for emergency care medication (e.g., epinephrine).
Infection Control Designate/Occupational Health Nurse/Registered Nurse	20.	Obtains signed consent from employees on the 'Employee Consent Form – Influenza Vaccination'.
	21.	If competent to perform the skill, administers the influenza vaccine. Carries epinephrine and syringe while performing procedure in the event of an adverse event. (See Advanced Nursing Skills Policy and Immunization information for certification guidelines and procedure to administer vaccine and emergency care medications)
	22.	In the rare case of anaphylactic reaction, administers emergency medication as ordered by physician and calls 911. Completes employee incident report and copies Infection Control Designate.

Policy ID No.:	65
Title:	Influenza and Pneumococcal Vaccine: Resident and Staff

	23.	Documents administration of vaccine on 'Employee Consent Form – Influenza Vaccination'. <ul style="list-style-type: none"> ▪ Generic name and lot number of vaccine, date and site of administration. ▪ Adverse events and emergency care (if applicable)
	24.	Places completed employee consent form in Employee Medical File in Occupational Health Nurse's office.

Set-Up:

- Consent to Treatment
- Physician's Orders
- Resident Immunization Administration Record
- Medication Administration Record (MAR)
- Influenza Season Preparatory Checklist
- Record of Advanced Nursing Skills for individual RNs
- Progress notes
- Employee Consent Form – Influenza Vaccination
- Clinical Protocol – Influenza Vaccine for employees
- Incident Report (if applicable)
- Medication Fridges
- Cooler and ice for transport
- Fridge Thermometers
- 3cc or 1cc syringes
- 25G 1" needles
- Sharps container
- Alcohol swabs
- Aqueous Epinephrine 1:1000
- Vaccine(s)

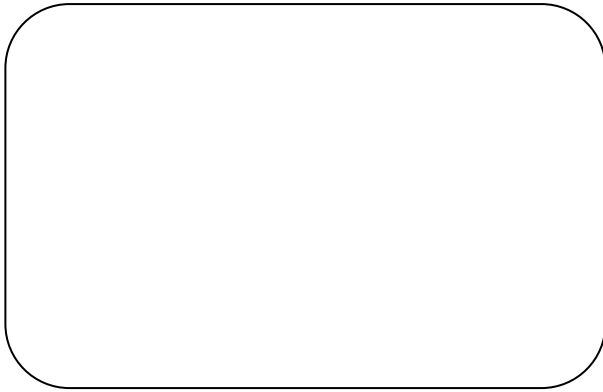
References:

College of Registered Nurses of Nova Scotia (2005). *Immunization Guidelines for Registered Nurses*.

Halifax, Nova Scotia: Author.

Health Canada (2002). *Canadian Immunization Guide* (6th ed.). Retrieved from website August 30, 2005:

<http://www.phac-aspc.gc.ca/publicat/cig-gci/index.html>.



Resident Immunization Administration Record – Sample

Special considerations:

Two-Step Tuberculin Skin Test

TB test and epinephrine Order Date (Initial)	Consent Obtained Date (Initial)	Assessment complete. No contraindications. (Date & Signature)	Generic / Trade Name	Lot #	Site (anterior forearm)	Date & Time administered RN signature	Results in mm Date & time results read RN signature
					<input type="checkbox"/> Left <input type="checkbox"/> Right	Step #1:	
					<input type="checkbox"/> Left <input type="checkbox"/> Right	Step #2:	

Vaccine Administration

Vaccine Order Date (Initial)	Epinephrine Order Date (Initial)	Consent Obtained Date (Initial)	Assessment complete. No contraindications. (Date & Signature)	Generic / Trade Name	Lot #	Site (deltoid)	Date & Time administered RN signature
<i>Pneumococcal</i>						<input type="checkbox"/> Left <input type="checkbox"/> Right	
<i>Tetanus</i>						<input type="checkbox"/> Left <input type="checkbox"/> Right	
<i>Hepatitis B</i>						<input type="checkbox"/> Left <input type="checkbox"/> Right	
<i>Other</i>						<input type="checkbox"/> Left <input type="checkbox"/> Right	
<i>Other</i>						<input type="checkbox"/> Left <input type="checkbox"/> Right	

Resident Name: _____

Special Considerations:

Influenza Vaccine Administration

Vaccine Order Date (Initial)	Epinephrine Order Date (Initial)	Consent Obtained Date (Initial)	Assessment complete. No contraindications. (Date & Signature)	Generic / Trade Name	Lot #	Site (deltoid)	Date & Time administered RN signature
						<input type="checkbox"/> Left <input type="checkbox"/> Right	
						<input type="checkbox"/> Left <input type="checkbox"/> Right	
						<input type="checkbox"/> Left <input type="checkbox"/> Right	
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						<input type="checkbox"/> Left <input type="checkbox"/> Right	

Employee Consent Form – Influenza Vaccine

The influenza vaccine prevents or minimizes the symptoms of influenza.

You should not receive the Influenza vaccine if you had:

- An anaphylactic reaction to a previous influenza vaccine.
- An anaphylactic reaction to eggs (vaccine developed in egg-based agar).
- An anaphylactic reaction to Thermerisol (found in contact lens solution).

Side Effects

On **rare** occasions people may experience an anaphylactic reaction to the vaccine. If this happens you will be given Epinephrine by the RN and immediately sent to hospital by ambulance. **Notify the RN if you are:**

- In your second or third trimester of pregnancy.
- Have uncontrolled heart rhythm problems.
- Taking MAO inhibitors (Parnate/Tranycpromine, Nardil/Phenelzine, or Manerix/Moclobemide).

I have read and understand the posted information related to the influenza vaccine which outlines the benefits and risks. I have been given an opportunity to have my questions answered. I hereby consent to receive the influenza vaccine.

Employee Signature

Date

To be completed by Administering Registered Nurse

Administered: _____ (Drug/Dose/Lot#)

on _____ (Date/Time) into the Left Right Deltoid

by _____ (Signature)

Clinical Protocol – Influenza Vaccine for Employees

The following applies to all employees of Arborstone Enhanced Care, Cedarstone Enhanced Care, Harbourstone Enhanced Care, Maplestone Enhanced Care and Parkstone Enhanced Care who meet the eligibility criteria.

The Occupational Health Nurse or Registered Nurse designate:

- Administers as indicated Influenza vaccine 0.5 ml IM to current and newly hired employees between October 1st, 20__ and March 31st, 20__.

In the case of an adverse reaction/event to the influenza vaccine:

- Administer 0.3 ml aqueous epinephrine 1:1000 s/c to employees in the thigh or opposite limb of the injection.
- May repeat dose in 15 minutes.

Physician's Signature

Date

Appendix F – Advanced Nursing Skills Package for Vaccination Administration
VACCINATION ADMINISTRATION EDUCATION PACKAGE

INTRODUCTION

Vaccinations provide protection against diseases that cause morbidity and mortality. The elderly population, due to their overall decreased physiologic function, health problems and impaired mobility are at increased risk of mortality from influenza and pneumococcal illnesses. In order to decrease morbidity and mortality in the elderly population and residents of long term care facilities, the influenza vaccine is offered to the residents on a yearly basis as part of the Public Health Department's funded annual vaccination program. The pneumococcal vaccine is administered on admission if resident has not previously received it. Residents should receive at least one dose of pneumococcal vaccine during their lifetime.

INFLUENZA

Each year more than 6700 deaths and 70,000 hospital admissions are attributed to influenza. Influenza is caused by the influenza virus which has three subtypes (A, B, C). It is spread from person to person by direct contact, predominantly airborne transmission in crowded populations in enclosed spaces. The incubation period is usually 1 – 3 days. Influenza is characterized by the sudden onset of fever, myalgia, sore throat and non-productive cough, lasting several days. Epidemic disease is usually caused by A and B. An increase in mortality occurs during epidemics. The increased mortality results not only from influenza and pneumonia but also from cardiopulmonary and other chronic diseases that can be exacerbated by this disease.

INFLUENZA VACCINE

The vaccine strain (subtypes) changes each year based on the antigenic change in the virus noted the previous influenza season in Canada and other countries. Dead strains from the previous year's virus are cultured in an egg-based agar in the laboratory for the vaccine. Refer to the manufacturer's package insert. Once administered, protection occurs in 2 weeks and can last greater than 6 months and up to a little less than a year in a healthy person. However, in the elderly or chronically ill person protection occurs in 2 – 3 weeks and lasts 4- 6 months, sometimes less.

PNEUMOCOCCAL ILLNESS

Pneumococcal disease is caused by the bacterium *Streptococcus pneumoniae*. In Canada, 16% of community acquired pneumonia in adults has been attributed to this. The average mortality rate is 12% and can be as high as 40% in invasive infection with bacteria in the elderly. There are 23 types of pneumococcal bacteria, all of which the pneumococcal vaccine provides protection against. Pneumonia is characterized by rales or dullness to percussion of the chest and one of the following:

- New onset of purulent sputum or change in character of sputum
- Organism(s) cultured from blood.
- Isolation from an etiologic agent from a specimen obtained by transtracheal aspirate, bronchial brushing or biopsy.

Pneumococcal Vaccine

Obtain the history of a previous pneumococcal vaccine from the resident, family, or previous physician.

It is only given once except in certain conditions. If administered more than once, it may cause a local reaction, i.e. a painful administration site. It will not cause an anaphylactic reaction. Most healthy adults develop protection against most or all of the 23 types of pneumococcal bacteria 2 – 3 weeks after vaccination. The vaccine is 80% effective in preventing pneumonia in healthy adults and 50% - 80% in the elderly. Refer to the manufacturer's package insert.

Although the pneumococcal vaccine may be administered at the same time as the influenza vaccine, it is recommended that the resident receive the vaccines at different times. In the event of an anaphylactic reaction, this will assist in identifying which vaccine was the cause. If vaccines must be administered at the same time, the Pneumococcal vaccine should be given in the opposite deltoid to the one that the influenza vaccine was given.

Consents

Informed consent is an important part of performing a procedure. Discuss the procedure, potential side effects and rare anaphylactic reactions with the resident and/or next of kin. Verify that signed consent has been obtained prior to administering the vaccine on the Consent to Treatment form. Obtain a vaccine history including previous vaccine reactions.

General Considerations

- A physician's order for the vaccine and Epinephrine must be obtained prior to administration.
- Resident/next of kin consent must be obtained prior to administering the vaccine and epinephrine if necessary.
- Check Resident Allergy Record prior to administration.
- Wash hands before and after procedure.
- Check label on vial for proper solution.
- Check expiry date on vial prior to drawing solution.
- Initial, date and time vial once opened. Solution expires one month after opened.
- Check manufacturer's label for storage and preparation. Must be refrigerated at all times.
- Never bend, break or recap needles.
- Discard used needle and syringe in puncture-resistant container.
- Ensure necessary equipment is obtained for vaccination and in the event of an anaphylactic reaction.

CONTRAINDICATIONS FOR INFLUENZA VACCINE ONLY

- Known anaphylactic reaction to a previous vaccine.
- Known anaphylactic reaction to eggs.
- Known anaphylactic reaction to Thimerisol (found in contact lens solution).

- Individuals with acute febrile illness should not be vaccinated until their symptoms have abated.

SITE SELECTION

The best site is the upper arm (deltoid muscle) as it is easily accessible and consistent in the event of an anaphylactic reaction. The injection site is limited because of major vessels, nerves and bones. Only small amounts of solution can be injected in this site. The area for injection is rectangular, on the lateral upper third of the arm, about 2 inches below the shoulder, or at the lower edge of the acromium. Refer to *Kozier, Erb, et al., 2000, page 644.*

The following sites should be avoided:

- Area where there is a hematoma.
- Vein, artery and nerve site.
- Mastectomy side.
- Arm where there is a fistula.

ADMINISTERING THE VACCINE

Influenza vaccine:

- Administer intramuscularly at a 90° angle
- 25 gauge 1” or 5/8” needle with a 1 cc or 3 cc syringe
- Check the manufacturer’s insert for dosage to be administered (usually 0.5 ml)
- Once needle is inserted in the site draw back on the syringe’s plunger before injecting solution in muscle to ensure the needle is not situated in a vein.

Pneumococcal vaccine:

- Check the manufacturer’s insert for dosage to be administered (usually 0.5 ml)
- May be available in single dosed pre-filled syringes
- Administer intramuscularly at a 90° angle
- Once needle is inserted in the site draw back on the syringe’s plunger before injecting solution in muscle to ensure the needle is not situated in a vein.

ADVERSE REACTIONS

Symptoms of adverse reactions are mild and last 2 days. Treat the symptoms accordingly with analgesia, rest and fluids. The symptoms may include any of the following sore injection site (most common) and mild symptoms such as headache, fever, general malaise. Residents may experience fainting (vasovagal syncope) following a vaccine and are to be placed in a recumbent position with feet elevated until symptoms resolve.

ANAPHYLACTIC REACTION (RARE)

Potentially life-threatening. Begins within several minutes after injection of the substance. Monitor residents closely for 15 minutes following the vaccine for symptoms of anaphylaxis: sneezing, wheezing, coughing, itching, “pins and needles” sensation of skin, flushing, facial edema, urticaria, anxiety, respiratory difficulties, hypotension and angioedema.

Treatment of anaphylaxis

- Place resident in recumbent position with lower legs elevated.
- Administer epinephrine 0.3ml s/c in opposite limb of vaccine site. An additional dose of epinephrine 0.3 ml s/c can be administered within 15 minutes.
- Ensure clear airway is maintained.
- Call 911 to transport to nearest acute care emergency department.
- Report all anaphylactic reactions to the Infection Control Designate in your facility. These reactions must be reported to the Public Health Department in your district.

DOCUMENTATION

Administration of the vaccine is documented on the resident's Resident Immunization Administration Record and the Resident's Data Record. Adverse reactions and anaphylactic reactions are to be documented in the Resident's Progress Notes along with the treatment provided.

Document the following on the Resident Immunization Administration Record:

- Generic \ trade names of the vaccine
- Lot number of the vaccine vial
- Site of administration
- Date, time and RN signature

Document the following in progress notes:

- In the event of adverse reactions, documentation is completed on the resident's progress notes including any treatment administered to alleviate symptoms. Describe symptoms experienced. Indicate time and effectiveness of treatment (if applicable).
- In the event of an anaphylactic reaction timeliness of the treatment administered is critical. Chronological documentation of the event and treatment is to be completed in the progress notes.
- Refusal of the vaccine.
- Any side effects and treatments.

Medication Administration Record (MAR):

- Transcribes order for vaccine and epinephrine to MAR for appropriate month indicating "Refer to Resident Immunization Administration Record" (RIAR).

Procedure – Vaccine Administration

1. Obtain necessary physician order, written consent, and equipment.
2. Check Resident Allergy Record.
3. Identify resident.
4. Explain procedure to resident.
5. Wash hands.
6. Obtain vial.
7. Check expiry date.
8. Wipe stopper of vial with alcohol swab.
9. Insert needle into stopper.
10. Draw required amount of solution from vial into syringe.
11. Remove bubbles from syringe.
12. Change needle.
13. Cleanse injection site with alcohol swab.
14. Insert needle at a 90° angle.
15. Draw back on plunger.
16. Insert solution slowly.
17. Remove needle.
18. Cleanse site with swab. Apply band aid if needed.
19. Discard needle and syringe in puncture-resistant container.
20. Wash hands.
21. Monitor resident for 15 minutes for evidence of anaphylaxis.
22. Document on Resident Immunization Administration Record.

PROCEDURE – ANAPHYLACTIC REACTION

1. Resident is presenting with symptoms of an anaphylactic reaction.
2. Take note of time.
3. Call for assistance and instruct to call 911.
4. Place resident in a recumbent position with lower limbs elevated.
5. Administer 0.3 ml s/c of aqueous epinephrine 1:1000 in the opposite limb. This dose can be repeated in 15 minutes.
6. Ensure oral airway is clear.
7. Notify family/responsible party of transport to hospital.
8. Document sequence of events in progress notes.
9. Document allergy on allergy sheet and Resident Data Record.
10. Report event to facility Infection Control Designate and Public Health.

GLOSSARY

Antigen: any substance which is capable, under appropriate conditions, of inducing a specific immune response and of reacting with the products of that response.

Epidemic: increased occurrence of the disease above the usual or expected frequency.

Etiologic: science of dealing with causes of disease.

Immunity: resistance to an infectious agent or disease.

Morbidity: ratio of sick to well persons in a society.

Mortality: ratio of total number of deaths to the total number of population.

Risk: the probability or likelihood of an event occurring.

RESOURCEFUL WEBSITES:

www.gov.ns.ca/health/reports.htm (Nova Scotia Department of Health website for more information on influenza vaccines)

www.influenza.cpha.ca (Canadian Public Health Association influenza website with many links to other sites)

REFERENCES:

A guide to the control of respiratory infection outbreaks in long term care homes, public health division and long term care home branch, ministry of health and long term care, Ontario, October (2004).

Guide to influenza control for long term care facilities, public health services (2005).

Kozier, B., Erb, G., Berman, A.J., Burke, K., Bouchal, D.S.R., & Hirst, S.P. (2000). *Fundamentals of nursing: The nature of nursing practice in Canada (5th ed.)*. Prentice Hall Health: Toronto.

Public Health Services (2002). *Influenza Vaccination Program: Information for Health Care Professionals*.

**SKILLS CHECKLIST
VACCINATION ADMINISTRATION**

Employee: _____ Date: _____

When performing vaccination administration the practitioner:	Yes	No
1. Checks the physician's order.		
2. Checks the Consent to Treatment form.		
3. Checks if resident has allergy to egg or previous vaccine.		
4. Gathers appropriate equipment.		
5. Identifies resident.		
6. Checks if resident has had a mastectomy, fistula, or currently has an acute febrile illness.		
7. Explains the procedure to the resident.		
8. Washes hands.		
9. Checks vial for solution and expiry date.		
10. Wipes stopper of vial with alcohol swab and draws appropriate amount of solution in syringe.		
11. Selects and cleanses injection site appropriately.		
12. Injects vaccine appropriately.		
13. Discards needle and syringe appropriately.		
14. Records appropriately in Resident's Immunization Administration Record.		
15. Monitors and verbalizes action in the event of an anaphylactic reaction.		

I have supervised _____ in the administration of vaccines and certify that she/he is competent to perform this skill independently.

Supervisor: _____ Date: _____

This employee requires more instruction/supervision prior to completing this skill independently.

Supervisor: _____ Date: _____

Vaccination Administration Competence – Written Exam

Name: _____ Date: _____

A: Circle the best response to the following statements. /10

1. A vaccine is administered via the following route:
 - a) subcutaneous
 - b) intradermal
 - c) intramuscular
 - d) intravenous

2. The best site for vaccine administration.
 - a) deltoid
 - b) gluteus maximus
 - c) lateral mid thigh
 - d) mastoid

3. The following sites should be not be used as injection sites.
 - i) Mastectomy side.
 - ii) Limb where there is mild dermatitis.
 - iii) Area where there is a hematoma.
 - iv) Limb where there is a fistula.
 - a) i, ii, iii
 - b) i, iii, iv
 - c) ii, iii, iv
 - d) All of the above

4. An anaphylactic reaction is exhibited by the following symptoms:
 - a) sneezing, facial edema, vomiting, sore arm
 - b) sneezing, coughing, difficulty breathing, itching
 - c) hives, vomiting, diarrhea, influenza-like symptoms
 - d) nausea, aches, pains, sore arm

5. Anaphylaxis is treated using the following medication, dosage and route.
 - a) ephedrine 0.3 ml IM in same limb of vaccination site
 - b) epinephrine 0.3 ml s/c in same limb of vaccination site
 - c) ephedrine 0.3 ml s/c in opposite limb of vaccination site
 - d) epinephrine 0.3 ml s/c in opposite limb of vaccination site

- c) The elderly are at increased risk of morbidity and mortality from influenza and pneumonia due to the following reason.
- a) health care workers
 - b) decreased physiologic function
 - c) poor nutritional intake
 - d) hypertension
- d) The most common adverse reaction following vaccine administration is:
- a) headache
 - b) fever
 - c) sore injection site
 - e) fainting
8. In the elderly or chronically ill person protection occurs
- a) in 2 – 3 weeks and lasts 4 months, sometimes less.
 - b) in 2 – 3 weeks and lasts 6 months, sometimes less.
 - d) in 4 – 6 weeks and lasts 4 months.
 - e) in 4 – 6 weeks and lasts 6 months.
9. A person is not to receive a vaccine injection for the following reason(s).
- f) cold symptoms
 - ii) anaphylactic allergy to eggs
 - iii) previous anaphylactic reaction to a vaccine
 - iv) pregnant
- a) i, ii, iii
 - b) ii, iv
 - c) ii, iii
 - d) All of the above
10. The following should be obtained prior to administering a vaccine to a resident
- g) Signed consent
 - ii) Physician's order
 - iii) History
 - iv) Creatinine level
- a) i, ii, iii
 - b) i, ii, iii, iv
 - c) ii, iii, iv
 - e) i, ii

B: Answer True or False to the following statements. /5

1. The pneumococcal vaccine may be administered the same time as the influenza vaccine in the same deltoid the influenza vaccine was administered. _____
2. The resident should be monitored for 15 minutes following a vaccine. _____
3. The manufacturer's insert should be referenced prior to giving a vaccine. _____
4. An anaphylactic reaction to a vaccine is common. _____
5. Land marking deltoid: lateral upper third of the arm, 2 inches below the shoulder. _____

C: Place the procedure in chronological order for treatment of an anaphylactic reaction. /5

- _____ Ensure oral airway is clear.
- _____ Administer 0.3 ml of Adrenalin s/c
- _____ Place resident in recumbent position.
- _____ Arrange for transport to hospital.
- _____ Elevate lower limbs.

Vaccine Administration – Answers to Examination

Section A

1. c
2. a
3. b
4. b
5. d
6. b
7. c
8. a
9. c
10. a

Section B

1. F
2. T
3. T
4. F
5. T

Section C

- 4
- 3
- 1
- 5
- 2

Appendix E – Resident and Employee Surveillance Reports – Influenza and Gastrointestinal Infection Page 1 of 1

ENHANCED CARE <input type="checkbox"/> Resident <input type="checkbox"/> Employee															
ENTERIC OUTBREAK UNIT SURVEILLANCE REPORT															
Neighborhood: _____				KEY: D = DIARRHEA V=VOMITING											
Month: _____															
Date: _____															
Room	Resident	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
		0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														

ENHANCED CARE <input type="checkbox"/> Resident <input type="checkbox"/> Employee															
RESPIRATORY OUTBREAK UNIT SURVEILLANCE REPORT															
Neighborhood: _____				KEY: T = temperature > 38°				ST = sore throat				M = myalgia			
Month: _____				CH = chills				CO = new or increased cough				LOA = loss of appetite			
Date: _____				H = headache or eye pain				N = nasal congestion							
Room	Resident	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
		0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700	0700-1900	1900-0700
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														
	Specimen sent														

Instructions for completing the Surveillance Report:

1. Select the correct surveillance report. Insert resident name and room # or employee name.
2. Use the key provided for abbreviations of symptoms. Complete for all affected residents/employees daily.
3. Indicate when the specimen has been sent by placing a checkmark in the appropriate date.

Appendix F – Nasopharyngeal Swabbing Technique

Diagnosis of respiratory viruses (influenza, RSV etc.) depends on the collection of high-quality specimens, their rapid transport to the lab and appropriate storage. Nasopharyngeal swabs provide a superior specimen for influenza identification compared to nasal swabs thus all attempts should be made to obtain a nasopharyngeal swab. It is recognized that this may be difficult at times and so people are asked to do the best they can in these cases.

Nasopharyngeal swabs should be obtained as soon as an influenza outbreak is suspected. Collect nasopharyngeal swabs from up to 4 to 6 different ill patients (within 48 hours of symptom onset), as directed by Infection Control Designate/nurse manager/manager on call.

Note: Nasopharyngeal swabs are different than C&S swabs with the charcoal medium.

1. Check expiry date on swab and medium.

2. Collection of Nasopharyngeal Swabs:

- Wear gloves and a mask
- Ensure the client's nose is clean (excess mucous can interfere with the collection of cells).
- How to estimate the distance to the nasopharynx: Prior to insertion, measure the distance from the corner of the nose to the front of the ear and insert the shaft **ONLY** half this length.
- Seat the patient comfortably. Tilt the patient's head back slightly to straighten the passage from the front of the nose to the nasopharynx to make insertion of the swab easier.
- Insert the swab provided along the medial part of the septum, along the base of the nose, until it reaches the posterior nares – gentle rotation of the swab may be helpful. (If resistance is encountered on one side, try the other nostril, as the patient may have a deviated septum).
- Rotate the swab several times to dislodge the columnar epithelial cells. *Note – Insertion of the swab usually induces a cough.*
- Rub the swab vigorously (but gently) along the lining of the septum (centre of the nose) several times to collect cells.
- Insert the swab into the collection tube and snap off the end. Put the cap on. Label and refrigerate in a specimen fridge which maintains an optimal temperature of 2-8°C.

3. **Labeling specimens and Requisitions:**
 - Record resident name, date and time of specimen collection, and write **“nasal swab”** on the specimen tube
 - Record all of the above information on the requisition as well as:
 - _____ **Enhanced Care – ILI Outbreak** (Influenza-Like Illness) – **Stat** – at the top
 - Under **Specimen Source**, check off **“Other”** and write **“Nasal Swab”**
 - Under **Examination** check off
 - **“Virus”** and write **“Influenza”**
 - **“Other”** and write **“PCR”** (Polymerase Chain Reaction) – this is a relatively new technique which allows results to be obtained within 24 hours.

4. **Send the swab to the virology lab.** This can be done on Fridays as well as the weekends (the lab will start the culture process and freeze a portion for PCR testing on Monday). Once specimen collected, notify Infection Control Designate/manager who will then contact Public Health at 902-481-5800. If the Infection Control Designate/manager, the registered staff contact public health directly.

Appendix G – INFLUENZA SEASON PREPARTORY RECORD – Infection Control Designate

Year: _____


Item	Date Completed
SEPTEMBER	
Compile Employee Lists	
Compile Resident Lists	
Send Creatinine/ Influenza Vaccine Sheets to the Neighborhoods	
Send out competency packages to RNs to certify along with other inservice information	
Check fridges and discard any old vaccines	
Order vaccine from Public Health	
Post hand hygiene information in all public washrooms and post signs at front door/delivery/service entrances	
OCTOBER	
Order Supplies: 25g 5/8 inch needles 25 g 1 inch needles 1 cc syringes Alcohol swabs 2x2 non sterile dressings Band aids Nasal swabs Puncture resistance containers	
Epinephrine (one on each medication cart) Check expiry date on all epinephrine	
Arrange dates for employee clinics and send memo	
Review Respiratory Surveillance Report and send to neighborhoods	
Inservice Registered Staff on upcoming influenza season information (i.e. Surveillance Report, Emergency care measures, etc.)	
Arrange dates for resident influenza vaccines to be given. Maintains record of employee vaccination for seven years	
Distribute educational information to employees / residents / families	
Arrange for the collection of the influenza vaccine. Maintain vaccine cold chain at 2-8°C (check this temperature against the document recently circulated) during transport and throughout storage at the home (e.g. ensure stored in fridge connected to generator, immediately return vaccine vial to fridge after dosing, etc.).	
Storage of vials lot number and location: _____ _____	

Signature: _____

Date: _____

Retained by Infection Control Designate for Seven Years

Appendix H – Tuberculin Skin Test Policy for Residents and Employees and Associated Records
Advanced Nursing Skill: Two-Step Tuberculin Skin Test

	Policy ID No.:				
	Title:	Tuberculin Skin Test: Resident and Employee			
	Effective Date:	October 2005			
	Version:	02			
	Manual & Volume:				
	Section:				
	Approved By:	Executive Director Resident Care			
	Distribution group(s):	Resident Care			
	Division:	<table border="1" style="display: inline-table;"> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">EC</td> <td style="width: 20px;"></td> <td style="text-align: center;">RLC</td> </tr> </table>	X	EC	
X	EC		RLC		

Policy:


A two-step tuberculin skin test is performed on all newly admitted residents and newly hired employees unless there is documentation of a previous positive skin test or a history of tuberculosis.

Purpose:


To determine baseline reference and current tuberculin status of residents and employees.

Procedure:


Responsible Party	Step #	Responsibility
<u>Resident</u>		
Physician	1.	Assesses resident upon admission. Orders two-step tuberculin skin test and emergency care medications (e.g., epinephrine) as indicated.
Registered Nurse	2.	Reviews resident's health care record for contraindications and special considerations. Ensures consent obtained on Consent to Treatment record.
	3.	Transcribes order for TB skin test and epinephrine to MAR for appropriate month indicating "Refer to Resident Immunization Administration Record."
	4.	If competent to perform the skill, completes the first step of the tuberculin skin test. Carries epinephrine and syringe while performing procedure in the event of an adverse event. (See Advanced Nursing Skills Policy and Tuberculin information for certification guidelines and procedure to administer tuberculin solution and emergency care medications).
	5.	In the rare case of adverse event, administers emergency medication as ordered by physician and calls 911. Documents symptoms and interventions in progress notes. Completes resident incident report and forwards to nurse manager.

	Policy ID No.:	86
	Title:	Tuberculin Skin Test: Resident and Employee

Registered Nurse (con't)	6.	Documents administration on tuberculin skin test on 'Resident Immunization Administration Record' which includes: <ul style="list-style-type: none"> ▪ Generic or trade names of the Tuberculin solution and dose ▪ Lot number of the vial ▪ Site of injection and date for interpreting results ▪ Adverse events and emergency care (if applicable)
	7.	Reads site after 48-72 hours, palpates for induration. Interprets and measures in millimeters. Documents results (actual number in mm) in on 'Resident Immunization Administration Record'.
If induration equal to or greater than 10 mm (positive):		
	8.	Notifies physician of results.
If induration less than 10 mm (negative):		
	9.	Completes the second step of the tuberculin skin test in 7-14 days. Follows step 3 to 6.
<u>New Hire - Employee</u>		
Occupational Health Physician/Medical Advisor	10.	Writes an order for clinical protocol for all new employees to receive the two-step tuberculin skin test. Also includes an order for emergency care medication (e.g., epinephrine).
Recruiter/designate	11.	Informs new employee of mandatory two-step tuberculin skin testing. Provides contact information for Occupational Health Nurse. Notifies the Occupational Health Nurse of new hire.
Occupational Health Nurse	12.	Obtains employee's medical history in relation to tuberculosis and skin testing. If documentation of negative 2-step tuberculin skin test in last calendar year, only do 1-step test. If documentation of negative 2-step tuberculin skin test in previous three months, skin test not required. Supporting documentation must be provided by employee.
	13.	Obtains signed consent from employee on 'Employee Consent Form – Two-Step Tuberculin Skin Test'.

	Policy ID No.:	87
	Title:	Tuberculin Skin Test: Resident and Employee

Occupational Health Nurse/Registered Nurse	14.	If competent to perform the skill, meets with Employee immediately after hire and administers step 1 of tuberculin skin test. Carries epinephrine and syringe while performing procedure in the event of an adverse event. (See Advanced Nursing Procedure Policy and Tuberculin information for certification guidelines and procedure to administer tuberculin solution and emergency care medications). Provide staff with Employee Tuberculin Test card, as applicable.
	15.	In the rare case of adverse event, administers emergency medication as ordered by physician and calls 911. Completes staff incident report.
	16.	Documents results (actual number in mm) on the ‘Occupational Health Department Two-Step Tuberculin Skin Test’ record: <ul style="list-style-type: none"> ▪ The injection site and date for reading results ▪ Generic or trade names of the Tuberculin solution and dose ▪ Lot number of the vial ▪ Adverse events/emergency care (if applicable).
	17.	Reads site after 48-72 hours, palpates for induration. Interprets and measures in millimeters. Documents results (actual number in mm) on ‘Occupational Health Department Two-Step Tuberculin Skin Test’ record and, if applicable, employee tuberculin skin-testing card.
If induration equal to or greater than 10 mm (positive):		
	18.	Refers all employees to their family physician for assessment prior to returning to work. Advises scheduling department to remove employee from all booked shifts until cleared to return to work by Occupational Health Nurse.
Employee	19.	Provides documentation of physician assessment or chest x-ray report to Occupational Health Nurse.
Occupational Health Nurse	20.	Completes further follow-up with physician as required
	21.	Completes ‘Occupational Health Department Two-Step Tuberculin Skin Test’ record indicating clearance obtained and notifies scheduling.
If induration less than 10 mm (negative):		
	22.	Completes step 2 of the tuberculin skin test 1 to 4 weeks later. Follows step 13 to 16.

	Policy ID No.:	
	Title:	Tuberculin Skin Test: Resident and Employee

Occupational Health Nurse (con't)	23.	Files all associated documentation including the consent form on the employees medical file.
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Set-Up:

Consent to Treatment
 Physician's Orders
 Resident Immunization Administration Record
 Clinical Protocol – 2-step tuberculin skin test for employees
 Occupational Health Department: 2-step Tuberculin Skin Testing Record
 Employee Consent Form: 2-step Tuberculin Skin Testing
 Fridge Thermometers
 Inventory Record/Count
 Record of Advanced Nursing Skills for individual RNs
 Progress notes
 Incident Report (if applicable) – both resident and employee
 Medication Fridges
 Cooler and ice for transport
 Tuberculin syringes
 27-28G 5/8" needles
 Sharps container
 Alcohol swabs
 Aqueous Epinephrine 1:1000 and 1cc syringe with 25G 1" needle
 Tuberculin solution

References:

Canadian Lung Association (2000). *Canadian Tuberculosis Standards* (5th ed.). Canada: Health Canada.
 College of Registered Nurses of Nova Scotia (2005). *Immunization Guidelines for Registered Nurses*.
 Halifax, Nova Scotia: Author.

Communicable Disease Control (C.D.C.) Manual

Health Canada (2002). *Canadian Immunization Guide* (6th ed.). Retrieved from website August 30, 2005:
<http://www.phac-aspc.gc.ca/publicat/cig-gci/index.html>.



Clinical Protocol – Two-step Tuberculin Skin Test for Employees: Sample

The following applies to all newly hired employees of Arborstone Enhanced Care, Cedarstone Enhanced Care, Harbourstone Enhanced Care, Maplestone Enhanced Care and Parkstone Enhanced Care who meet the eligibility criteria.

The Occupational Health Nurse or Registered Nurse will administer the two-step tuberculin skin test as per facility guidelines using tuberculin solution 0.1 ml intradermally.

In the case of an adverse reaction/event to the tuberculin solution:

- Administer 0.3 ml aqueous epinephrine 1:1000 s/c in thigh or opposite limb of injection.
- May repeat dose in 15 minutes.

This order is valid from April 1st, 20__ to March 31st, 20__.

Physician's Signature

Date



Employee Consent Form – Two-Step Tuberculin Skin Test

Tuberculosis is a mycobacterial infection caused by *Mycobacterium tuberculosis*, an acid-fast bacillus. It is most commonly transmitted between people by inhaling droplet spray from an infected person who is coughing, sneezing, singing, or playing an instrument.

The tuberculin skin test is the main tool in diagnosing tuberculosis infection.

You should not have the tuberculin skin test if you had:

- Severe blistering tuberculin skin test reaction in the past
- Documented active tuberculosis or documented treatment (active or passive) in the past
- Extensive burns or eczema
- Significant viral infection
- Vaccination with a live vaccine in the past month (e.g., MMR).

Note: you can receive the tuberculin skin test if you received the BCG vaccination in the past.

Side Effects

Immediate erythematous or other reactions may occur at the injection site. In highly sensitive persons, vesiculation, ulceration or necrosis may appear at the test site. Scarring may also occur at the test site if strongly positive reactions to the tuberculin test occur.

On **rare** occasions people may experience an anaphylactic reaction to the vaccine. If this happens you will be given Epinephrine by the RN and immediately sent to hospital by ambulance. **Notify the RN if you are:**

- In your second or third trimester of pregnancy,
- Have uncontrolled heart rhythm problems
- Taking MAO inhibitors (Parnate/Tranycpromine, Nardil/Phenelzine, or Manerix/Moclobemide).

I have read and understand the posted information related to the tuberculin skin test which outlines the benefits and risks. I have been given an opportunity to have my questions answered. I hereby consent to receive the two-step tuberculin skin test.

Employee Signature

Date

Facility (check one)		
<input type="checkbox"/> AEC	<input type="checkbox"/> MEC	<input type="checkbox"/> PEC
<input type="checkbox"/> HEC	<input type="checkbox"/> CEC	

**Occupational Health Department
Employee Two-Step Tuberculin Skin Test Record**

Name: _____ Position: _____ Date of Hire: _____

Step One:

Tuberculin Solution	Dose	Lot #	Site (anterior forearm)	Date/Time	Administered By	Date Read	Read by	Results	Comments
			<input type="checkbox"/> Left <input type="checkbox"/> Right						

Step Two:

Tuberculin Solution	Dose	Lot Number	Site (anterior forearm)	Date/Time	Administered By	Date Read	Read by	Results	Comments
			<input type="checkbox"/> Left <input type="checkbox"/> Right						

*****If induration equal to or greater than 10 refer to family physician for clearance.*****

Date Referred: _____

Scheduling Notified: _____

Date Clearance Received: _____

Scheduling Notified: _____

Occupational Health Nurse: _____

Date: _____

TUBERCULIN SKIN TESTING EDUCATION PACKAGE FOR OCCUPATIONAL HEALTH NURSE/REGISTERED NURSE

INTRODUCTION

Tuberculosis (TB) continues to be a health risk for residents in long term care facilities. The tuberculin test is the primary tool in the diagnosis of tuberculosis infection. As more than 90% of patients are entirely asymptomatic at the time of primary infection, they can only be identified through tuberculin skin testing. All newly admitted residents and newly hired employees to the facility are screened to identify active cases of TB and to document baseline tuberculin skin testing status unless contraindicated on assessment. A two-step procedure is used to allow clinicians to distinguish between a booster response and conversions caused by new infection.

TUBERCULOSIS

Tuberculosis is a mycobacterial infection caused *Mycobacterium tuberculosis*, an acid-fast bacillus. It is most commonly transmitted through the airborne route, with an infected individual forcefully expiring through coughing, sneezing, singing, or playing an instrument, and another individual inhaling the bacteria. At the time of primary infection greater than 90% of patients are asymptomatic and are only identified through conversion of their tuberculin skin test.

TUBERCULIN SKIN TESTING (MANTOUX)

The tuberculin skin test involves the injection of a small amount of purified protein derived from tubercle bacilli. Within 48 hours, a person who has previously developed immunity to these tuberculin antigens will develop a reaction at the injection site. The reaction will cause localized swelling, manifested by induration of the skin at the injection site.

CONSENTS

Informed consent is an important part of performing a procedure. Discuss the procedure, potential side effects and rare anaphylactic reactions with the resident and/or next of kin as well as the newly hired employee. Verify that signed consent has been obtained prior to administering the tuberculin skin test on the Consent to Treatment form or the Employee Consent Form – Two-Step Tuberculin Skin Test. Obtain a history from the resident and/or next of kin or employee regarding previous exposure to tuberculosis, BCG administration, and tuberculin skin testing.

GENERAL CONSIDERATIONS

- A physician's order and resident/next of kin consent/employee consent must be obtained prior to administering the tuberculin skin test.
- Wash hands before and after procedure.
- Never bend, break or recap needles. Use one-handed technique if you must recap.
- Check expiry date on vial prior to drawing solution.
- Initial, date and time vial once opened. Solution expires one month after opened.

- Check label on vial for proper solution.
- Check manufacturer's label for storage and preparation. Must be refrigerated at all times in fridge maintained at 2-8°C and exposure to light avoided.
- Discard of used needle and syringe in puncture-resistant container.
- Ensure resident/employee is seated comfortably.
- Ensure easy access to acute care setting if required.
- Ensure necessary equipment is obtained for tuberculin skin testing and in the event of an anaphylactic reaction.

CONTRAINDICATIONS

- Residents/Employees with severe blistering tuberculin reaction in the past;
- Residents/Employees with documented active TB or documented treatment (active or passive) in the past;
- Residents/Employees with extensive burns or eczema;
- Residents/Employees with infections; and
- Residents/Employees who have received a vaccination with a live vaccine in the past month.

Note: Previous BCG vaccination is not a contraindication to tuberculin testing.

SITE SELECTION

The best site is the dorsal aspect of the forearm as it is easily accessible. If this site is not available, the dorsal and lateral aspects of the upper arm can also be used.

ADMINISTERING TUBERCULIN

- Administer intradermally at a 10° angle
- 26 or 27 gauge needle with a 1 cc syringe
- Check the manufacturer's insert for dosage to be administered (usually 0.1 ml)
- Once needle is inserted in the site, inject tuberculin slowly, resistance should be felt and a bleb will be formed 5 to 10 mm in diameter.
- If little resistance is felt and there is no bleb or a shallow diffused bulge appears, the needle was placed too deeply or if a substantial portion of the dose leaks out, the needle has not been placed deeply enough. If either situation occurs, repeat the tuberculin skin test at least 5 mm from the original site or in the other arm.

ADVERSE REACTIONS

In highly sensitive persons, vesiculation, ulceration or necrosis may appear at the test site. Scarring may also occur at the test site if strongly positive reactions to the tuberculin test occur. Immediate erythematous or other reactions may occur at the injection site. Rare systemic allergic reactions have occurred with immediate skin rash or generalized rash with in 24 hours of administration.

DOCUMENTATION – RESIDENT

Administration of the tuberculin skin test is documented on the resident's Medication Administration Record, the Resident Immunization Administration Record, and the Resident's Progress Notes. Adverse reactions and anaphylactic reactions are to be documented in the Resident's Progress Notes along with the treatment provided.

Medication Administration Record:

- Following the injection of the tuberculin, initial the Medication Administration Record in the appropriate space indicating the site of injection. The injection site location will provide a reference in the event of an anaphylactic reaction where epinephrine is required.
- In 48-72 hours, document the results on the Medication Administration Record in the appropriate space indicating the amount of induration.

Resident Immunization Administration Record:

- Update the 2-step Mantoux column
- In 48-72 hours, document the results on the Record next to the date the tuberculin test was administered.

Progress Notes

- In the event of adverse reactions, documentation is completed on the resident's progress notes including any treatment administered to alleviate symptoms. Describe symptoms experienced. Indicate time and effectiveness of treatment.
- In the event of an anaphylactic reaction timeliness of the treatment administered is critical. Chronological documentation of the event and treatment is to be completed in the progress notes.
- Document the results of the tuberculin testing, indicating any further action that may be required.

DOCUMENTATION – EMPLOYEE

Administration of the tuberculin skin test is documented on the Occupational Health Department Two-Step Tuberculin Skin Test Record and file in the employee health file.

Procedure – Tuberculin Skin Testing: Occupational Health Nurse/Registered Nurse

1. Obtain necessary physician order, written consent and equipment.
2. Identify resident/employee.
3. Explain procedure to resident/employee.
4. Wash hands.
5. Obtain vial of Tubersol.
6. Check expiry date.
7. Wipe stopper of vial with alcohol swab.
8. Insert needle into stopper.
9. Draw required amount of solution from vial into syringe.
10. Remove bubbles from syringe.
11. Cleanse injection site with alcohol swab.
12. Insert needle intradermally at a 10 degree angle into dorsal aspect of the forearm
13. Insert solution slowly so a small bleb 5 – 10 mm in diameter will form under the epidermis.
14. Remove needle.
15. Discard needle and syringe in puncture-resistant container.
16. Wash hands.
17. Monitor resident/employee for 15 minutes for evidence of anaphylaxis.
18. For resident document on Medication Administration Record and Resident Immunization Administration Record tuberculin administered. For employee document on the Occupational Health Department Two-Step Tuberculin Skin Test Record.
19. 48 – 72 hours after the tuberculin skin test, read results by inspecting the injection site with a flexible ruler:
 - Positive reaction indicated when induration is 10 mm or more
 - Negative reaction when induration measures < 10 mm
20. Record results for resident document on Medication Administration Record and Resident Immunization Administration Record tuberculin administered. For employee document on the Occupational Health Department Two-Step Tuberculin Skin Test Record.
21. For residents report positive readings to the physician. For staff refer employee to family physician for assessment and clearance prior to returning to work.
22. If results are < 10 mm induration, repeat the procedure in 7-14 days for residents and one to four weeks later for employees.

PROCEDURE – ANAPHYLACTIC REACTION

1. Resident/employee is presenting with symptoms of an anaphylactic reaction
2. Take note of time.
3. Call for help.
4. Place resident/employee in a recumbent position with lower limbs elevated
5. Administer emergency medication (e.g., 0.3 ml s/c of aqueous epinephrine 1:1000 in the thigh or opposite limb of injection). This dose can be repeated in 15 minutes.
6. Ensure oral airway is clear.
7. Arrange for rapid transport to an emergency room.
8. For resident, notify next of kin of transport to hospital.
9. For resident, document sequence of events in progress notes.
For employees document on the employee health record.
10. For resident, document allergy on allergy sheet, Medication Administration Record and Resident Data Record.
11. Report event to facility Infection Control Designate and Public Health.

REFERENCES:

DeWit, S. C. (1994). *Rambos' Nursing Skills for Clinical Practice (4th Ed.)*. W.B. Saunders: USA.

Long, R. (ed). (2000). *Canadian Tuberculosis Standards (5th Ed.)*. Government of Canada: Canadian Lung Association.

Nova Scotia Department of Health (1999). *Partners for Infection Control: Guidelines for Tuberculin Testing in Long Term Care*.

SKILLS CHECKLIST: Tuberculin Skin Testing

Employee: _____ Date: _____

When performing a tuberculin skin test, the Occupational Health Nurse (OHN)/Registered Nurse (RN):	Yes	No
1. Checks the physician's order.		
2. Checks for resident/employee allergy.		
3. Confirms Consent.		
4. Gathers appropriate equipment.		
5. Identifies resident/employee.		
6. Explains the procedure to the resident/employee.		
7. Washes hands.		
8. Checks vial for solution and expiry date.		
9. Cleans vial and draws appropriate amount of solution in syringe.		
10. Selects and cleans injection site appropriately.		
11. Injects tuberculin solution appropriately.		
12. Discards needle and syringe in a puncture-resistant container.		
13. For resident RN document on Medication Administration Record and Resident Immunization Administration Record tuberculin administered. For employee OHN document on the Occupational Health Department Two-Step Tuberculin Skin Test Record.		
14. Monitors and verbalizes action in the event of an anaphylactic reaction.		
15. Verbalizes that they will read the site in 48 to 72 hours and record results for resident on Medication Administration Record and Resident Immunization Administration Record. For employee verbalizes that they will read the site and document on the Occupational Health Department Two-Step Tuberculin Skin Test Record.		
16. For resident, verbalizes need to report positive readings ($\geq 10\text{mm}$) to attending physician. For employee, verbalizes that employee must see their attending physician and receive clearance prior to returning to work. Verbalizes to repeat procedure in 7-14 days for residents and 1-4 weeks for employees if first result is $< 10\text{mm}$ induration.		

I have supervised _____ in the administration of a tuberculin skin test and certify that she/he is competent to perform this skill independently.

Supervisor: _____ Date: _____

This employee requires more instruction/supervision prior to completing this skill independently.

Supervisor: _____ Date: _____

TUBERCULIN SKIN TESTING COMPETENCE – WRITTEN EXAM

Name: _____ Date: _____

A: Circle the best response to the following statements. /8

1. The amount of tuberculin that is injected into the intradermis is:
 - a) 0.2 mls
 - b) 0.1 ml
 - c) 0.5 mls
 - d) 1.0 ml

2. The best site for intradermal injections is
 - a) lower abdomen
 - b) deltoid
 - c) Dorsal aspect of forearm
 - d) Gluteus Medius

3. The angle of insertion for intradermal injections is
 - a) 0 degrees
 - b) 10 degrees
 - c) 45 degrees
 - d) 90 degrees

4. After tuberculin skin testing for residents and employees, the injection site should be read in
 - a) 2 to 4 hours
 - b) 24 hours
 - c) 48 to 72 hours
 - d) 2 weeks

5. A positive tuberculin skin test is indicated if the induration is greater than or equal to
 - h) 10 mm
 - i) 5 mm
 - j) 1 mm
 - k) 3 mm

6. If the first tuberculin test reading is less than 10 mm induration, repeat the tuberculin skin testing procedure in
 - a) 24 hours
 - b) 48 to 72 hours

Caring for People.

- c) 2 weeks
- d) 1 month

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7. A person is not to receive a tuberculin skin test for the following reason(s).
- i) previous TB history
 - ii) anaphylactic allergy to eggs
 - iii) known family history of TB
 - iv) previous BCG vaccination
- a) i, iii, iv
 - b) ii, iv
 - c) i
 - d) All of the above
8. The following should be obtained prior to administering a vaccine to a resident
- i) Signed consent
 - ii) Physician's order
 - iii) History
 - iv) Creatinine level
- a) i, ii, iii
 - b) i, ii, iii, iv
 - c) ii, iii, iv
 - f) i, ii

B: Answer True or False to the following statements. /5

1. When reading a tuberculin skin test, you measure the redness not the induration at the injection site. _____
2. The resident/employee should be monitored for 15 minutes following tuberculin administration. _____
3. The manufacturer's insert should be referenced prior to giving tuberculin. _____
4. An anaphylactic reaction to tuberculin is common. _____
5. More than 90% of residents/employees are symptomatic at the time of primary infection of tuberculosis and can be identified only by completing the skin test. _____

TUBERCULIN SKIN TESTING – ANSWERS TO EXAMINATION

Section A

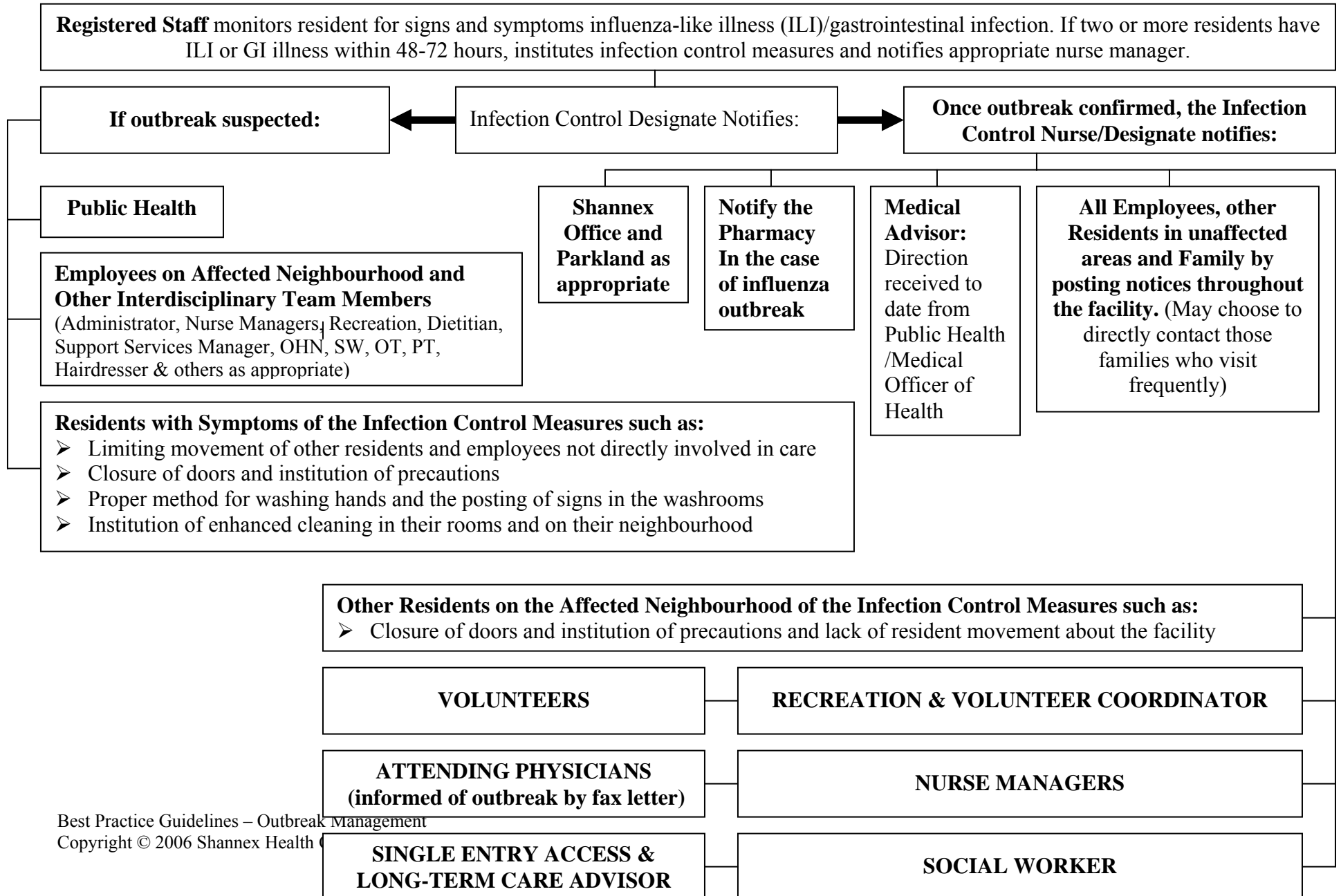
1. b
2. c
3. b
4. c
5. a
6. c
7. c
8. a

Section B

1. F
2. T
3. T
4. F
5. F

Appendix I – Communication Plan

When an outbreak is suspected or confirmed the following communication plan is instituted:



Appendix J – Checklist for Suspected Outbreak Situation – Infection Control Designate

- Step 1: Suspect the presence of an outbreak
- Step 2: Establish the diagnosis
- Step 3: Review the surveillance report and institute the communication plan
- Step 4: Inform the Interdisciplinary Team and Medical Advisor
In the case of an influenza outbreak inform the pharmacy.
- Step 5: Consult with Public Health Services/Medical Officer of Health.
- Step 6: Determine if an out break exists and follow the direction from Public Health Services/Medical Officer of Health
- Step 7: If applicable, develop a handout for all employees identifying the infection control measures specific to the organism causing the outbreak.
- Step 8: In the case of an influenza outbreak contact MSI for drug coverage if antiviral medications are required.
- Step 9: Establish daily Interdisciplinary Team Meetings
- Step 10: Institute control measures:
- | | |
|---|-----|
| Respiratory Isolation/Precautions | N/A |
| Closed doors to neighbourhood / use of alcohol jel | N/A |
| Visitors | N/A |
| Internal transfers, external transfers and admissions | N/A |
| Cohorting residents and employees | N/A |
| Vaccinations | N/A |
| Cancellation of Recreation Activities | N/A |
| Employee Education Needs | N/A |
| Environmental Controls (enhanced cleaning, etc.) | N/A |
- Step 11: Declare the outbreak over
- Step 12: Complete the Outbreak Report

Appendix K – Outbreak Guidelines for Registered Staff on Affected Neighbourhoods

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees follow policy and equipment-specific guidelines for cleaning and disinfecting equipment (see cleaning and disinfecting policy).
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review appropriate inservices related to hand hygiene, isolation, standard precautions, personal protective equipment, and other related topics at least yearly. Review isolation procedures with neighbourhood employees, including housekeeping and culinary services.
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Notify the facility Infection Control Designate in case of two or more residents exhibiting influenza-like illness or gastrointestinal infection. If unavailable, notify a nurse manager or responsibility nurse.

Outbreak Management

- Prepare a surveillance report for the neighbourhood and update every shift. Monitor all residents for signs and symptoms of influenza-like illness and gastrointestinal illness. Update 24-hour report on resident condition.
- If Infection Control Designate is unavailable, responsibility nurse is to contact Public Health when an outbreak is suspected.
- Collect nasopharyngeal swabs or stool samples as directed by Infection Control Designate/ nurse manager/responsibility nurse. Notify the infection control nurse/nursing manager/responsibility nurse once the sample(s) have been collected.
- Maintain isolation of residents until otherwise directed by Infection Control Designate. Residents sharing semi-private rooms are both placed on isolation. The privacy curtain may be used to help prevent the spread of infection to the unaffected resident.
- Provide all neighbourhood employees with a copy of their applicable checklist.

- Follow standard precautions and isolation:
 - Wear gloves and gown if hand or clothes contact with respiratory secretions or bodily fluids or potentially contaminated surfaces is anticipated.
 - Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.
 - Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn.
 - When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water
 - If hands are not visibly soiled, use alcohol-based hand rub or soap and water.
 - Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
 - With influenza, wear a mask when entering the resident's room and when providing care within three feet of the resident. Remove the mask immediately upon exiting the room and discard in the waste receptacle provided.
 - With influenza, have the resident wear mask and discard immediately upon reentering the room if it is necessary for the resident to move from his/her room.
 - Wash hands after removing your PPEs.
 - Use red linen bags to collect laundry for affected residents and leave in resident room until full. Place a garbage bag in the red linen bag to prevent seepage of infected fluids.
 - Use red garbage bags during an outbreak for:
 - incontinent products during a gastrointestinal outbreak; or
 - garbage containing respiratory fluids during an influenza outbreak.
 - All equipment brought into an affected resident's room must be immediately cleaned and disinfected upon exiting the room (e.g. lifts, blood pressure machines, thermometers, glucometers, etc.).
- Disinfect the telephone at the nursing station at least twice per shift using Virox™ wipes.
- Post signs on doors of affected resident's rooms indicating visitors to check with nursing staff prior to entering the room.
- Ensure adequate supplies are on neighbourhood for the outbreak:
 - Red linen bags
 - Gowns
 - Masks
 - Gloves
 - Alcohol gel – for medication cart, nursing station and entrance/exit doors to neighbourhood (if appropriate)
- Communicate the fluid needs for each resident to the continuing care assistants/personal care workers.

- Provide resident and families with appropriate education related to restrictions to visiting and standard precautions as well as prevention strategies such as respiratory hygiene, cough etiquette and hand hygiene.
- Ensures the doors to the neighbourhood remain closed until the outbreak has been deemed over.
- Minimize the movement of staff from affected areas to other areas of the nursing home. Restrict visitors as directed by the Infection Control Designate.
- Pick up pharmacy deliveries from the front desk.
- Communicate significant changes in resident condition to the family/responsible party. The plan of action for the communication is done in conjunction with the Infection Control Designate /nurse manager to ensure a consistent, clear, non-alarming message is delivered to families.
- Meet with the Infection Control Designate daily to review the surveillance report.
- Attend interdisciplinary outbreak meetings, as appropriate.
- Transcribe and administer antiviral medication as directed by the Medical Advisor or other medications for symptom management as directed by the resident's attending physician. Monitor resident for side effects. Completes a medication review to identify medications that may worsen the resident's symptoms (e.g., in the case of GI infection may hold motility drugs, medications for constipation, etc.). Re-evaluate diabetic medications.
- All employees complete maintenance requests as per usual however slips from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood.

Influenza Only

- Re-offer the influenza vaccine to those individuals who initially refused.
- When outbreak over, transcribe order from Medical Advisor to discontinue prophylactic anti-viral medication.

Gastrointestinal Infection Only

- Notify the food services department of any dietary changes. Residents with gastrointestinal symptoms are placed on clear fluids for 24-48 hours. In the case of gastrointestinal illness, consult the Dietitian if a resident has been on clear fluids for 48 hours. Following clear fluids the resident is usually placed on a transitional diet until symptoms have fully subsided and they can return to their usual diet.

Appendix L – Outbreak Guidelines for Personal Care Workers/Continuing Care Assistants on Affected Neighbourhoods

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees follow policy and equipment-specific guidelines for cleaning and disinfecting equipment (see cleaning and disinfecting policy).
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review the content of the inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.
- Notify the registered staff immediately of any residents exhibiting signs and symptoms of influenza-like illness (ILI) or gastrointestinal (GI) infection.

Outbreak Management

- Follow all infection control guidelines as directed such as:
 - Keeping the doors to the neighbourhood closed.
 - Limiting employee and resident traffic on and off the neighbourhood. Plan trips to reduce the traffic through affected areas.
 - Following proper hand hygiene techniques and utilizing alcohol gel when entering and exiting the neighbourhood.
 - Provide/supervise meals in resident rooms for those on isolation.
 - Disinfect the hand held phones at each change of shift using facility disinfectants.
 - All equipment brought into an affected resident's room must be immediately cleaned and disinfected upon exiting the room (e.g. lifts, blood pressure machines, thermometers, glucometers, etc.).
- Maintain resident isolation until directed otherwise.
- Follow standard precautions and isolation:
 - Wear gloves and gown if hand or clothes contact with respiratory secretions or bodily fluids or potentially contaminated surfaces is anticipated.

- Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.
- Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn.
- When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water
- If hands are not visibly soiled, use alcohol-based hand rub or soap and water.
- Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
- With influenza, wear a mask when entering the resident's room and when providing care within three feet of the resident. Remove the mask immediately upon exiting the room and discard in the waste receptacle provided.
- With influenza, have the resident wear mask and discard immediately upon reentering the room if it is necessary for the resident to move from his/her room.
- Wash hands after removing your PPEs.
- Use red linen bags to collect laundry for affected residents and leave in resident room until full or at a minimum of once per day. Place the red linen bag in a garbage bag to prevent seepage of infected fluids.
- Use red garbage bags during an outbreak for:
 - incontinent products during a gastrointestinal outbreak; or
 - garbage containing respiratory fluids during an influenza outbreak.
- Clean spills of infectious material as outlined in the guideline in Appendix L. When the housekeeping department is not present in the nursing home, cleans all spills of a potentially infectious nature. Use the housekeeping cart which was made ready by the housekeeper to wipe up these spills. After each use, empty and clean/disinfect the bucket and change the mop head.
- Provide basic information to residents and/or families on infection control measures such as closed room doors and hand hygiene. For more specific information, refer to registered staff.
- All employees should ensure that dirty laundry is immediately placed in a laundry bag. Dirty laundry should never be allowed to touch the floor or other furniture in the room. It is collected in the resident's room in a separate red laundry bag. The laundry bag is changed by the nursing staff a minimum of once a day. One employee collects the dirty laundry in the affected resident's room and brings it to the door of the room where a second (clean) employee holds a red linen bag allowing the full bag to be inserted. The "clean" linen bag is held in such a way as not to contaminate the hands and uniform of the "clean" employee. The employee on the outside of the room folds the laundry bag over her/his hands to prevent them from coming into direct contact with the contaminated laundry or bag.

- All employees should ensure that garbage is immediately placed in a red garbage bag and never allowed to touch the floor or other furniture in the room. The garbage bag is changed by the housekeeping staff a minimum of once per shift. One employee collects the garbage in the affected resident's room and brings it to the door of the room where a second (clean) employee holds a second garbage bag allowing the full bag to be inserted. The "clean" bag is held in such a way as not to contaminate the hands and uniform of the "clean" employee. The employee on the outside of the room folds the garbage bag over her/his hands to prevent them from coming into direct contact with the contaminated garbage.
- Deliver personal laundry to the room of affected residents and put away.
- Provide resident with frequent fluid passes and additional fluids according to the direction from the registered staff.
- All employees complete maintenance requests as per usual however slips from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood.
- Attend all interdisciplinary outbreak meetings as requested.
- Once the outbreak is over, strip the bed for deep cleaning by the housekeeping department.
- Once deep cleaning is completed remake the resident's bed.

Appendix M – Outbreak Guidelines for the Laundry Department

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review appropriate inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.

Outbreak Management

- Follow standard precautions and isolation:
 - Wear gloves when handling dirty linen and wear gown and gloves when handling linen from affected residents' rooms.
 - When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water
 - If hands are not visibly soiled, use alcohol-based hand rub or soap and water.
 - Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
 - Wash hands after removing your PPEs.
- The laundry staff pick up the soiled laundry from the affected neighbourhood after pick up from all other neighbourhoods. The laundry bin is to be covered with a clean fitted sheet during transport. Soiled laundry should then be immediately taken to the laundry department.
- Once the laundry has been delivered to the laundry department from affected neighbourhoods the bins used for transport are cleaned and disinfected.
- Do not enter affected neighbourhoods, with the exception of laundry delivery.
- Laundry delivery to affected neighbourhoods should be completed following delivery to all other neighbourhoods. Do not enter affected resident's rooms to deliver personal laundry. Nursing staff will place the personal laundry in the affected resident's room.

- White linens should be delivered to the affected neighbourhood by the laundry department. This neighbourhood is last on the delivery schedule and the cart should be empty before returning to the laundry department. Once the cart is returned to the laundry department it is immediately cleaned and disinfected. At Harbourstone the laundry exchanges the laundry carts on the neighbourhood. Carts on the affected neighbourhood should be the last exchanged. All laundry returned to the department from the affected neighbourhood's cart is considered contaminated and should be washed. The cart is then cleaned and disinfected.
- Attend all interdisciplinary outbreak meetings as requested.

Follow the procedure for receiving and washing laundry in the laundry room:

Laundry Personnel shall, while wearing protective equipment (gloves and gown):

- Wheel soiled laundry into sorting area of laundry room.
- Empty laundry from bags into marked soiled linen bins. Sort into the following categories, making sure no soiled laundry touches floor or walls:
 - Towels and face cloths
 - Sheets and pillow cases
 - Blankets
 - Coloured personal clothing
 - White personal clothing
- Disinfect soiled laundry carts as needed.
- Fill washers to preset levels, set to proper setting for category. Run cycle.

Note: During times of outbreak infected laundry is not sorted in bins, but is put directly into the washer, using care to put open end of bag into the washer, pushing the bottom of bag into the drum to place infected laundry into the washer without any chance of getting secretions or bodily waste on Laundry Aide. Disinfect soiled laundry carts.

Appendix N – Outbreak Guidelines for the Culinary Services Department

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review appropriate inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.

Outbreak Management

- Prepare meal trays for residents on isolation and ensure trays are immediately cleaned and disinfected through the dishwasher when removed from the affected resident's room. Check the temperature of the dishwasher three times daily as per facility routine and report any problems to supervisor immediately.
- Order additional fluids (e.g., soups, jello, supplement, etc.) to meet nutritional requirements as directed by the Dietitian or Registered Staff
- Limit traffic on and off the neighbourhood. Plan trips to reduce the traffic through affected areas.
- Follow standard precautions and isolation:
 - Wash hands using proper technique before and after touching the resident, after touching the resident's environment.
 - Wash hands after removing your PPEs.
 - Do not enter the room of affected residents and do not handle excretions/secretions of affected residents.
- Clean and disinfect the dining area and servery according to their job routine using D10.
- Ensure clothing protectors are stored in their correct location in the cupboard.
- All employees complete maintenance requests as per usual however slips from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood.
- Attend all interdisciplinary outbreak meetings as requested.

Appendix O – Outbreak Guidelines for the Housekeeping Department

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees follow policy and equipment-specific guidelines for cleaning and disinfecting equipment (see cleaning and disinfecting policy).
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review appropriate inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.

Outbreak Management

- Complete additional cleaning to all contact surfaces on neighbourhood such as handrails, door and door handles (especially soiled linen door/handle), public washrooms, key pads to neighbourhoods, push bars on exit doors, phones and counters at the nursing station, etc. at least twice per day at the beginning and end of the shift.
- Limit traffic on and off the neighbourhood. Plan trips to reduce the traffic through affected areas.
- Take laundry hampers to the neighbourhood doors at the designated time for laundry pick up, according to facility routine.
- Ensure adequate supplies are on the neighbourhood:
 - Virox™ wipes
 - Extra toilet paper
 - Extra paper towels
 - Extra cleaning supplies
 - Hand sanitizer (in collaboration with the registered staff)
- Follow standard precautions and isolation:
 - Wear gloves and gown if hand or clothes contact with respiratory secretions or bodily fluids or potentially contaminated surfaces is anticipated.
 - Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.

- Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn.
- When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water
- If hands are not visibly soiled, use alcohol-based hand rub or soap and water.
- Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
- With influenza, wear a mask when entering the resident's room and when within three feet of the resident. Remove the mask immediately upon exiting the room and discard in the waste receptacle provided.
- Wash hands after removing your PPEs.
- All equipment brought into an affected resident's room must be immediately cleaned and disinfected upon exiting the room.

- Cleaning during the outbreak should be thorough, keeping in mind the following principles:
 - Work from clean items/surfaces to dirty
 - Saturate the cleaning cloth with disinfectant by pouring directly onto the cloth. Never spray or squirt the chemical onto infected surfaces.
 - Change your mop head or cleaning cloth frequently. Avoid contaminating the clean cloth (e.g. don't "double-dip" your cloth into the cleaning solution.

- For homes using a mop and bucket system, change water and mop head after cleaning the floor of a resident on isolation. With the secure system the mop head is cleaned after every use

- Change the cleaning cloth after cleaning the room of a resident on isolation.

- Prepare the housekeeping cart for the nursing staff to use after hours for cleaning up spills of body fluids.

- All employees complete maintenance requests as per usual however slips from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood.

- Attend all interdisciplinary outbreak meetings as requested.

- Complete a daily cleaning of all surfaces in the resident's room that is within reach of the resident. daily with a cleaner which is appropriate to the infectious agent. Particular attention should be given to contact surfaces such as door and door handles, and resident washrooms, light switches, call bells, telephone, remote controls, side rails, faucets, toilet flushes, key pads, etc.

- Adhere to the following **Guidelines for Cleaning a Resident Room during an Outbreak:**
 1. Don your PPE (personal protective equipment) according to the correct method described in Appendix B.
 2. Take cleaning cart to the door way of the resident's room to be cleaned.
 3. Empty trash into a red garbage bag, tie and place it beside the bedroom door. Disinfect the waste receptacle and reline with a new garbage bag.
 4. Take a new rag and chemical (Virox™) and clean resident room, working backwards from the inner most part of the room out to the door. Make sure to pay extra attention to frequently touched surfaces including: telephone, call bell, bedrails, night stand, TV remote, light switches, door and door handles, etc.
 5. Take a new rag and chemical (Virox™) and clean the resident's bathroom working backwards from the inner most part of the room out to the door. Make sure to pay attention to everything in the bathroom including the toilet, flush lever, sink and faucet, handrails, mirrors, paper and soap dispensers, light switch, door and door handle, etc.
 6. Put all rags in your dirty rag bucket and cover immediately.
 7. Mop the floor working backwards from the inner most part of the room out to the door.
 8. Mop the washroom floor from the inner most part of the room out to the door.
 9. Put mop head in your dirty mop head bucket and cover immediately.
 10. Before you leave the room, clean the door paying special attention to the door handles, and place this rag in the dirty rag bucket.
 11. Remove PPE and discard into red garbage bag in the resident's room.
 12. Immediately wash hands.
 13. Once the rag and dirty mop bucket is emptied, clean and disinfect buckets.
 14. Wash hands

- Once the outbreak has been declared over or the resident has been taken off isolation, the resident room is carbolized/deep cleaned (see Appendix U). Housekeepers should ensure all privacy or window curtains are removed and cleaned. For gastrointestinal outbreak discard the remainder of the roll of toilet paper in use. All rolls of paper towel and toilet paper in the resident's bathroom but not in a covered dispenser should be discarded.

- Public area housekeepers should not provide services to the affected neighbourhood unless directed by departmental manager. These duties are assumed by the affected neighbourhood's housekeeper. This directive may be reassessed dependent on human resources issues and the extent of the outbreak.

- All employees should ensure that garbage is immediately placed in a red garbage bag and never allowed to touch the floor or other furniture in the room. The garbage bag is changed by the housekeeping staff a minimum of once per shift. One employee collects the garbage in the affected resident's room and brings it to the door of the room where a second (clean) employee holds a second garbage bag allowing the full bag to be inserted. The "clean" bag is held in such a way as not to contaminate the hands and uniform of the "clean" employee. The second employee on the outside of the room folds the garbage bag over her/his hands to prevent them from coming into direct contact with the contaminated garbage.

- Garbage collection: collect garbage from affected neighbourhoods after collecting on all other neighbourhoods last and bring immediately to the trash compactor. Disinfect the garbage cart before returning it to the neighbourhood. At HEC, CEC and PEC disinfect the garbage collection bin on the neighbourhood on a daily basis.

Appendix P – Outbreak Guidelines for the Maintenance Department

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review appropriate inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.

Outbreak Management

- Maintenance requests from affected neighbourhoods will be picked up in the mail pans at the front desk or other designated locations off of affected neighbourhoods.
- Maintenance employees following normal operating procedures in relation to the tracking and prioritization of maintenance requests with the exception of maintenance requests from affected neighbourhoods.
- During an outbreak situation maintenance employees only complete those items on the affected neighbourhoods that are related to employee or resident safety. All other maintenance requests are catalogued for completion once the outbreak has been declared over.
- Follow standard precautions and isolation:
 - Wear gloves and gown if hand or clothes contact with respiratory secretions or bodily fluids or potentially contaminated surfaces is anticipated.
 - Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.
 - Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn.
 - When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water
 - If hands are not visibly soiled, use alcohol-based hand rub or soap and water.

- **Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
 - With influenza, wear a mask when entering the resident's room. Remove the mask immediately upon exiting the room and discard in the waste receptacle provided.
 - Wash hands after removing your PPEs.
 - All equipment brought into an affected resident's room must be immediately cleaned and chemically disinfected upon exiting the room.

- Attend outbreak meetings as requested by the Infection Control Designate.

- Maintenance to hang clean privacy curtain and window coverings after the outbreak is over and the room has been deep cleaned.

Appendix Q – Outbreak Guidelines for Recreation Staff and Volunteers

Prevention of Outbreaks

- All employees and volunteers are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees and volunteers who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- All employees and volunteers practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review appropriate inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.
- Recreation and volunteer coordinator to provide or arrange appropriate education for volunteers related to hand hygiene, isolation procedures, standard precautions, the use of personal protective equipment and other related topics.

Outbreak Management

- Follow standard precautions and isolation, as applicable:
 - Wear gloves and gown if hand or clothes contact with respiratory secretions or bodily fluids or potentially contaminated surfaces is anticipated.
 - Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.
 - Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn.
 - When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water
 - If hands are not visibly soiled, use alcohol-based hand rub or soap and water.
 - Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
 - With influenza, wear a mask when entering the resident's room and when providing services within three feet of the resident. Remove the mask immediately upon exiting the room and discard in the waste receptacle provided.
 - Wash hands after removing your PPEs.

- All equipment and supplies brought into an affected resident's room must be immediately cleaned and chemically disinfected upon exiting the room.
- Attend outbreak meetings as requested by the Infection Control Designate.
- Recreation and volunteer coordinator limit and/or postpone group recreation activities according to the direction from the interdisciplinary outbreak meeting. This is to be reviewed on a daily basis at the interdisciplinary team meeting depending on the pattern of illness, etc. Residents from affected neighbourhoods are prohibited from participating in larger facility programs where they may come into contact with residents from unaffected neighbourhoods.
- The recreation department may visit and conduct small group or one-on-one programs on affected neighbourhoods which do not require supplies and equipment such as verbal activities, sing-songs etc. as determined by the interdisciplinary team.
- Recreation activities with outside performers coming into the facility and residents visiting from other facilities should be reevaluated and possibly cancelled during the outbreak.
- Volunteers are to report their signs and symptoms of illness to the Recreation and Volunteer Coordinator who determines their appropriateness to visit the facility.
- All volunteers are informed by the Recreation and Volunteer Coordinator to remain away from the facility for three to five days after the onset of influenza-like symptoms and to remain away from the facility until they have no episodes of vomiting or diarrhea for 24 hours in the case of gastrointestinal infection.

Appendix R – Outbreak Guidelines for the Occupational Health Nurse/Designate

Prevention of Outbreaks

- All employees are encouraged to receive the influenza vaccine on a yearly basis to help prevent influenza outbreaks. Employees who receive the vaccine from another health care provider other than the nursing home are to notify the Infection Control Designate of their immunization status.
- Monitor employee absences for signs and symptoms of influenza or gastrointestinal infection.
- Inform employees to remain away from the workplace for three to five days after the onset of influenza-like illness and encourage employees to see their physician regarding anti-viral medications
- Review self-study inservices regarding the signs and symptoms of influenza and gastrointestinal infection, and the difference between the cold and influenza.
- Review appropriate inservice packages related to hand hygiene, isolation, standard precautions, personal protective equipment and other related topics at least yearly.
- All employees practice proper infection control techniques at all times (e.g., covering mouth and nose when sneezing or coughing, hand hygiene, use of personal protective equipment as needed, proper disposal of soiled items, etc.).
- In the case of gastrointestinal infection, inform employees to remain away from the workplace until they have no episodes of vomiting and diarrhea for 24 hours.

Outbreak Management

- Follow standard precautions and isolation:
 - Wash hands using proper technique before and after touching the infected staff member, whether or not gloves were worn.
 - When hands are visibly soiled or contaminated with respiratory secretions or bodily fluids, wash hands with soap and water.
 - If hands are not visibly soiled, use alcohol-based hand rub or soap and water.
 - Note:** There are some organisms that are resistant to alcohol gel and require the use of soap and water (e.g. norovirus). Refer to the handout provided by the infection control designate identifying the infection control measures specific to the organism causing the outbreak.
 - With influenza, wear a mask when within three feet of an affected resident or staff member. Remove your mask immediately upon exiting the room and discard in the waste receptacle provided.
 - With influenza, have employees wear a mask if they must enter the facility and discard only once they have left the facility.
 - Wash hands after removing your PPEs.
- Start Employee Surveillance Report and update daily.
- Attend all interdisciplinary outbreak meetings as requested by the Infection Control Designate. Provide an update of the Employee Surveillance Report during this meeting.

Appendix S - Procedure for Cleaning Spills of a Potentially Infectious Nature

Definition: Spills of a potentially infectious nature consist of blood, urine, stool, emesis, semen, wound exudate, or other fluids.

Question:

Who is responsible for cleaning these spills?

Answer:

The Nursing Department are responsible for completing the initial cleaning of the spill, including wiping of fluids, gathering and removal of bed linens to a red laundry bag, and removal of garbage in a red garbage bag. Once the initial clean up has been completed by the Nursing Staff, the Housekeeping Staff complete a thorough cleaning using the appropriate cleaning solution. If a spill occurs during a time when there is no Housekeeping Staff, the Nursing Staff are to assume the full responsibility of thoroughly cleaning it.

Please note: during an **outbreak** contaminated laundry and garbage should be removed by having one staff inside the room of the affected resident place the soiled items or garbage into a red laundry bag or garbage bag inside the resident room, and then place this bag into another red garbage bag held by another staff person just outside the door. These bags should then be taken directly to the dirty utility room.

For a small spill the following procedure is to be followed:

Step 1.

Put on your Personal Protective Equipment (PPE)

- Gloves are always to be worn
- Depending on the spill any combination or all of the following may be required: gown, mask, disposable hair caps, shoe covers. What is to be worn should be determined following an assessment by the Registered Staff.
- *Rationale:* Fluid splashes can contaminate hair, clothing, jewelry, shoe tops and bottoms and laces. Protect these with hair and garment covers and gloves to prevent the spread of infection.

Step 2.

- Spray disinfectant cleaner (Virox™) onto the cleaning cloth to be used. Absorb the spill with the cloth(s) and place in a red laundry bag or red garbage bag if seepage is anticipated. If any paper towel is used, discard in a red garbage bag.
- *Rationale:* Disinfectant cleaners such as Virox™, loosen blood and bodily fluid soils. If cleaned promptly, scrubbing of the areas may not be required.

Step 3.

- Using another clean cloth, spray cleaner onto the cloth and wipe any remaining visible spill. Spray additional cleaner directly on the area and allow chemical to remain on the spill for 5 minutes, then wipe with a clean cloth. Place any cloths used in the red laundry bag.
- *Rationale:* The cleaner must be given time to work prior to being mopped.

Step 4.

- Using the mop bucket containing Virox™ solution, mop any affected floor areas.

Step 5.

- Remove PPE worn and discard in red garbage or laundry bag as appropriate. Perform hand hygiene.

For a large spill the following procedure is to be followed:

Step 1.

- After putting on required PPE, prepare two mop buckets with Virox™ solution and gather 2 mop heads.
- *Rationale:* A 2 bucket system of cleaning for big spills allows better rinsing of the scrubbed areas.

Step 2.

- Use the mop from bucket #1 to drip disinfectant cleaner onto the spill, but don't touch the spill. Keep the area wet for 10 minutes.
- *Rationale:* The cleaner must be given time to work prior to being mopped.

Step 3.

- Mop the entire spill using the mop from bucket #1.

Step 4.

- Using the mop from bucket #2, mop and rinse the spill area again. If the spill is located in a resident room, the entire room can be mopped at this time.
- A final spray with cleaner can be applied to catch any spills missed by the mop.
- *Rationale:* The 2 bucket system allows the cleaner to fully disinfect the spill.

Step 5.

- Place used mop heads in a red garbage bag.
- Carefully pour mop water in the Housekeeping Closet drain.
- Clean and disinfect the mop buckets using Virox™ cleaner
- Rinse out the drain and disinfect with Virox™ cleaner.

Step 6.

- Remove PPE worn and discard in red garbage or laundry bag as appropriate. Perform hand hygiene.

Adapted from Johnson Diversey Environmental Binder, 2nd Edition, 2002

Appendix T – Guidelines for Deep Cleaning of Resident Room Following an Outbreak

Nursing:

1. Strip bed and place soiled linens into red linen bag.
2. Remake the bed following deep cleaning

Housekeeping:

1. Housekeeping staff to assemble housekeeping cart with necessary supplies.
2. Don personal protective equipment as outlined in the Standard Precaution Guidelines in the Department of Health, Partners in Infection Control Binder located at each nursing station.
3. Clean the room using the following procedure working from the inner most part of the room out:
 - Disinfect using Virox™ all furniture including over the bed tables, bed, mattress, closet, bureau and bulletin board.
 - Take rags and chemical (Virox™) and clean resident room, working backwards from the inner most part of the room out to the door, paying particular attention to contact surfaces such as door and door handles, light switches, call bell, telephone, remote controls, side rails, faucets, toilet flushes, etc.
 - Disinfect walls, shelves/ornaments, window ledges and baseboards.
 - Remove privacy curtain and window covering and places them in a red soiled linen bag to be laundered.
 - Empty waste baskets in room and washroom, place garbage in red garbage bag.
 - Disinfect garbage cans in room and washroom.
 - Take new rags and chemical (Virox™) and clean the resident's bathroom working backwards from the inner most part of the room out to the door. Make sure to pay attention to everything in the bathroom including the toilet, flush lever, sink and faucet, handrails, mirrors, paper dispensers, light switch, door and door handle, etc.
 - Discard all rolls of paper towel and toilet paper in the resident's bathroom not in a covered dispenser.
 - Dry mop then wet mop the floor working backwards from the inner most part of the room out to the door.
 - Change the dry mop head, wet mop head and any rags used
 - Put all rags in your dirty rag bucket and cover immediately.
 - Put mop head in your dirty mop head bucket and cover immediately.
 - Before you leave the room, clean the door paying special attention to the door handles, and place this rag in the dirty rag bucket.
 - Remove PPE and discard into red garbage bag.
 - Immediately wash hands.
 - Takes red garbage bags directly to compost, and takes red linen bag directly to laundry room.
 - Once the rag and dirty mop bucket is emptied, clean and disinfect buckets.
 - Washes hands again
4. Notifies registered staff that room has been cleaned.

Maintenance:

1. Hang clean privacy curtain and window coverings once room has been deep cleaned.

Appendix U – Letter to Attending Physicians regarding Outbreak Occurrence

Appropriate Letterhead

Date:

Re: Nursing Home Outbreak

Dear Doctor _____;

I am writing to inform you that we are currently in an _____ outbreak situation which is affecting your residents of _____ Enhanced Care. As a result of this outbreak we have instituted the following measures:

Administration of antiviral medications as ordered by the Medical Officer of Health and the Medical Advisor.

Affected residents have been confined to their room, including meals.

If you have any questions or concerns, do not hesitate to contact our Infection Control Designate _____ at _____. You will be notified when the outbreak has been declared over.

Yours truly,

Infection Control Designate

Appendix V – Letter to Attending Physicians when Outbreak Declared Over

Appropriate Letterhead

Date:

Re: Nursing Home Outbreak

Dear Doctor _____;

I am writing to inform you that the outbreak situation at _____ Enhanced Care has been declared over.

If you have any feedback for the interdisciplinary team on the management of this outbreak situation and how we can make improvements for future outbreaks, do not hesitate to contact _____ at _____.

Yours truly,

Infection Control Designate

Appendix X – Table of Contents for Outbreak Report – Sample Only

Executive Summary

- 1.0 Introduction
- 2.0 Overview of Outbreak
 - 2.1 Outbreak Period
 - 2.2 Population of Residents and Employees
 - 2.2.1 Numbers affected
 - 2.2.2 Signs and symptoms
 - 2.2.3 Resident and Employee Vaccinations (if applicable)
 - 2.3 Specimens
 - 2.4 Communication Plan
 - 2.5 Administration of Antiviral medication (if applicable)
- 3.0 Isolation Practices and Containment Measures Implemented
- 4.0 Evaluation of Interventions Implemented
 - 4.1 Strategies from Best Practice Guidelines
 - 4.2 Communication Plan
 - 4.3 Feedback from Key Stakeholders
- 5.0 Cost Analysis
- 6.0 Conclusions
- 7.0 Recommendations

Appendixes:

- Appendix A – Letters from Public Health
- Appendix B – Communication Tools
- Appendix C – Medical Order for Antiviral medication (if applicable)
- Appendix D – Minutes from Interdisciplinary Outbreak Meeting

Best Practice Guidelines for Outbreak Management of Influenza and Gastrointestinal Infection

Shannex Health Care

Key Aspects to an Effective Outbreak Management Program

- Early identification and institution of interventions to prevent the spread of infection
- Effective communication strategy
- Interdisciplinary involvement

Purpose of the Best Practice Guidelines

- Prevention
- Early detection
- Outbreak Management

Shannex Health Care: Outbreak
Management

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Prevention Strategies

- Influenza vaccination of residents and employees
- Respiratory hygiene/cough etiquette
- Standard Precautions
- Restriction of ill visitors and employee
- Employee and housekeeping routines

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Management

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Prevention Strategies (con't)

- Proper infection control techniques:
 - covering mouth and nose when sneezing or coughing
 - hand hygiene (Soap & alcohol gel available)
 - use of personal protective equipment
 - proper disposal of soiled items such as garbage and laundry
- Cleaning and disinfecting equipment

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Management

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Prevention Strategies (con't)

- Educate general public, residents, and employees
- Ongoing monitoring residents' for signs and symptoms of influenza and GI illness
- Occupational Health Nurse monitor employee absences for same
- Tb tests completed on all new admissions and newly hired employees

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Identification of an Outbreak

- Registered Staff report symptoms to infection control designate
- If infection control designate suspects an outbreak, immediately institutes the Communication Plan (see Appendix I) and the Checklist for Suspected Outbreak Situations (see Appendix J)

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Management

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Specimen Collection

- Influenza and stool samples are collected as directed by the Infection Control designate
- Cold storage of the specimens is maintained

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Management

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Isolation Precautions

- Resident is placed on isolation in their room, including for meals.
- All other residents are restricted to the neighbourhood.
- Wear gloves if anticipate hand contact with respiratory secretions, bodily fluids, and potentially contaminated surfaces.

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Management

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Isolation Precautions (con't)

- Wear disposable gown if anticipate soiling of clothes with respiratory secretions or bodily fluids and discard upon exiting the room.
- Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.
- Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn.

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Isolation Precautions (con't)

- Influenza: wear a mask upon entering affected resident's room and when providing care within three feet of the resident. Remove the mask immediately upon exiting the room and discard.
- Influenza: if it is necessary for the resident to move from room have them wear mask and discard immediately upon reentering the room.
- Wash hands after removing your PPE.

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Isolation Precautions (con't)

- Use red laundry bags to collect laundry from affected residents. Change daily.
- Place a garbage bag in the red linen bag as needed to prevent seepage of infected fluids.
- Use red garbage bags for incontinent products in case of GI infection or garbage containing respiratory or respiratory fluids of affected residents.

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Isolation Precautions (con't)

- Residents sharing semi-private rooms are both placed on isolation.
- Garbage bag is changed by the housekeeping staff a minimum of once per shift using the proper technique.
- All staff are to follow the proper procedure for cleaning a biohazardous spill

Isolation Precautions (con't)

- Once outbreak confirmed, close the neighbourhood doors and place notices on the doors alerting employees and visitors.
- Place the alcohol gel at all doorways - use when entering and exiting the affected neighbourhoods.
- Follow departmental outbreak checklist
- Ensures adequate supplies are available

Isolation Precautions (con't)

- All equipment brought into an affected resident's room must be immediately cleaned and chemically disinfected upon exiting
- Minimize the movement of employees from affected areas to other areas.
- Hair salon services evaluated throughout the outbreak.
- Follow Guidelines for Deep Cleaning a Resident's Room following an Outbreak.

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Surveillance Report

- Registered staff:
 - Prepares a neighbourhood Respiratory or Gastrointestinal Infection Surveillance Report.
 - Updates the surveillance report at least every shift to ensure up-to-date information on affected residents and their symptoms.
 - Maintained on the neighbourhood for at least seven days after the last resident begins to exhibit symptoms.
 - Forward to the Infection Control Designate after outbreak over.

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Communication

- Outbreak meeting held daily throughout the outbreak
- Infection Control Designate contacts:
 - Public Health Nurse to report symptoms and ask for further direction (liaisons on a daily basis)
 - Consulting pharmacy in case of influenza
 - Medical Advisor
 - Employees on affected neighbourhoods and interdisciplinary team: updated on outbreak situation and status of residents at least daily
 - Family physician using form letter
- Social Worker contacts Single Entry Access and Long-Term Care Advisor

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Communication (con't)

- Registered Staff:
 - Contacts family/responsible party of resident's condition and any restrictions to visiting.
 - Communicates residents' conditions and any new residents presenting with symptoms on the 24-hour report.
 - Informs affected residents of the infection control measures such as:
 - Limiting movement
 - Closure of doors and institution of precautions
 - Proper method for washing hands and the posting of signs in the washrooms
 - Institution of enhanced cleaning in their rooms and on their neighbourhood
 - informs other residents on the affected neighbourhood of the infection control measures (e.g. closure of doors and institution of precautions).

Shannex Health Care: Outbreak
Management

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Departmental Responsibilities: Nursing

- Dirty laundry is immediately placed in a laundry bag and changed a minimum of once a day.
- Disinfect the telephone at the nursing station at least twice per shift using Virox™ wipes.
- Ensure adequate supplies
- Deliver personal laundry (affected rooms)
- Outbreak over: strip bed for deep cleaning by housekeeping department and remake once completed.

Shannex Health Care: Outbreak
Management

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Departmental Responsibilities: Laundry

- Follow facility specific routine for laundry pick up.
- Once the laundry has been delivered to the laundry department from affected neighbourhoods the bins used for transport are cleaned and disinfected.
- Delivery to affected neighbourhoods should be last.
- White linens to the affected neighbourhood last. Once cart is returned to laundry department clean and disinfect immediately.

Shannex Health Care: Outbreak
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Departmental Responsibilities: Culinary Services

- Prepare meal trays for residents on isolation
- Immediately clean and disinfect trays through the dishwasher.
- Check temperature dishwasher three times/day.
- Clean and disinfect the dining area and servery.
- Clothing protectors stored in correct location.

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Departmental Responsibilities: Housekeeping

- Daily cleaning all surfaces in resident's rooms (attention to contact surfaces)
- Cleaning to all contact surfaces such as handrails, door and door handles (especially soiled linen door/handle), public washrooms, key pads to neighbourhoods, phones and counters at the nursing station, etc. at least twice per day at the beginning and end of the shift.

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Departmental Responsibilities: Housekeeping

- Prepare the housekeeping cart for the nursing staff to use after hours for cleaning spills of body fluids.
- Collect garbage from affected neighbourhoods last and bring to the trash compactor immediately. Disinfect the garbage cart before returning it to the neighbourhood.
- Once the outbreak has been declared over or the resident has been taken off isolation, the resident room is carbolized/deep cleaned

Shannex Health Care: Outbreak
Management

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Departmental Responsibilities: Maintenance

- Slips from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood for maintenance to collect.
- Complete items on affected neighbourhood related to employees or resident safety.
- Hang clean privacy curtain and window coverings after room has been deep cleaned.

Shannex Health Care: Outbreak
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Departmental Responsibilities: Recreation Staff and Volunteers

- Recreation and Volunteer Coordinator limit and/or postpone group recreation activities - interdisciplinary outbreak meeting.

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Management

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Medication

- Antiviral and other medications are administered as ordered by the physician/Medical Advisor
- Influenza vaccine reoffered to residents/employees

Shannex Health Care: Outbreak
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Symptom Management

- GI infection:
 - placed on clear fluids for the first 24-48 hours of their symptoms.
 - If on a clear fluid diet for more than 48 hours the Registered Staff consults the Dietitian - determine need for supplements.
 - Followed by a transitional diet (both fluids and simple solids) until symptoms have fully subsided. Once the symptoms have fully subsided placed back on usual diet.
- Elderly require 1500 ml of non-caffeinated fluid per day. During times of illness additional beverages, unless contraindicated by conditions such as renal disease or congestive heart failure

Shannex Health Care: Outbreak
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Outbreak Over

- Declared over in consultation with the Medical Officer of Health.
- Registered Staff photocopy order from medical advisor discontinuing prophylactic antiviral medication.
- Evaluation: Infection Control Designate completes the outbreak report

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Best Practice Guidelines for Outbreak Management of Influenza and Gastrointestinal Infection

Prevention Strategies:

- **Good hand hygiene (Soap and alcohol gel)**
- Influenza vaccination of residents and employees
- Respiratory hygiene/cough etiquette e.g., covering mouth and nose when sneezing or coughing
- Standard Precautions
- Restriction of ill visitors and employees
- Employee and housekeeping routines
- Proper infection control techniques:
 - use of personal protective equipment (PPE)
 - proper disposal of soiled items such as garbage and laundry
- Cleaning and disinfecting equipment
- Education of the general public, residents, and employee
- Ongoing monitoring of residents' for signs and symptoms of influenza and GI infection
- Occupational Health Nurse monitor employee absences for same
- Two-step Tuberculosis skin test completed on all new admissions and newly hired employees

Isolation Precautions:

- Resident placed on isolation in their room, including for meals.
- Residents sharing semi-private rooms are both placed on isolation.
- All other residents are restricted to the neighbourhood.
- *Personal Protective Equipment:*
 - Wear gloves if anticipate hand contact with respiratory secretions, bodily fluids, and potentially contaminated surfaces.
 - Wear disposable gown if anticipate soiling of clothes with respiratory secretions or bodily fluids and discard upon exiting the room.
 - Change gloves and gown after each resident encounter and when soiling occurs following a procedure with the resident.
 - Influenza: wear a mask when providing care within three feet of the resident. Remove the mask immediately upon exiting the room and discard. If it is necessary for the resident to move from room have them wear mask and discard immediately upon reentering the room.
- Wash hands using proper technique before and after touching the resident, after touching the resident's environment, after touching the resident's respiratory or bodily fluids or secretions, whether or not gloves were worn. Wash hands after removing your PPE.
- Use red laundry bags to collect laundry for affected residents. Change daily. Place a garbage bag in the red linen bag to prevent seepage of infected fluids.
- Use red garbage bags for incontinent products in case of GI infection or garbage containing respiratory or respiratory fluids of affected residents.
- Garbage bag is changed by the housekeeping staff a minimum of once per shift using the proper technique.
- All staff are to follow the proper procedure for cleaning a spill of a potentially infectious nature.
- Once outbreak confirmed, close the neighbourhood doors and place notices on the doors alerting employees and visitors.
- Place the alcohol gel at all doorways - use when entering and exiting affected neighbourhoods.
- Follow departmental outbreak checklist

Isolation Precautions (con't):

- Ensures adequate supplies are available on all affected neighbourhoods
- All equipment brought into an affected resident's room must be immediately cleaned and chemically disinfected upon exiting the room
- Minimize the movement of employees from affected areas to other areas of the nursing home.
- Hair salon services evaluated throughout the outbreak during outbreak meetings.
- Follow Guidelines for Deep Cleaning a Resident's Room following an Outbreak

Communication:

- Registered staff notifies the Infection Control Designate
- Outbreak meeting held daily throughout the outbreak
- Recreation and Volunteer Coordinator informs Volunteers
- Infection Control Designate contacts:
 - Public Health Nurse: reports symptoms and seeks further direction (talks on daily basis)
 - Consulting pharmacy in case of influenza
 - Medical Advisor (Direction received from Public Health/Medical Officer of Health)
 - Employees on affected neighbourhoods and interdisciplinary team are updated on the outbreak situation and the status of the residents at least daily
 - Lack of resident movement about the facility
 - Family physician using form letter
 - All employees, other residents in unaffected areas and family by posting notices throughout the facility. (May choose to directly contact those families who visit frequently)
- Registered Staff contacts:
 - Residents with symptoms and informs them of the infection control measures such as:
 - Limiting movement of other residents and employees not directly involved in care
 - Closure of doors and institution of precautions
 - Proper method for washing hands and the posting of signs in the washrooms
 - Institution of enhanced cleaning in their rooms and on their neighbourhood
 - Other residents on the affected neighbourhood and informs them of the infection control measures such as closure of doors and institution of precautions
 - Family/responsible party of resident's condition and any restrictions to visiting.
 - Communicates residents' conditions and any new residents presenting with symptoms on the 24-hour report.
- Social Worker contacts:
 - Single Entry Access and Long-Term Care Advisor

Department-Specific Responsibilities

Nursing:

- Registered staff complete surveillance reports and communicate to Infection Control Designate.
- Dirty laundry is immediately placed in a laundry bag in affected residents' rooms and changed a minimum of once a day.
- Disinfect the telephone at the nursing station at least twice per shift using Virox™ wipes.
- Ensure adequate nursing supplies
- Deliver personal laundry to affected rooms
- AEC: bring linen from affected residents' rooms to laundry department
- Outbreak over: strip bed for deep cleaning by housekeeping department and remake after.

Laundry:

- Dirty Linen: Follow facility specific routine for laundry pick up. Pick up from affected neighbourhoods should be last.
- Once the laundry has been delivered to the laundry department from affected neighbourhoods the bins used for transport are cleaned and disinfected.
- Delivery to affected neighbourhoods should be last.
- White linens to the affected neighbourhood last. Once cart is returned to laundry department clean and disinfect immediately.

Culinary Services:

- Prepare meal trays for residents on isolation
- Immediately clean and disinfect trays through the dishwasher.
- Check temperature dishwasher three times/day.
- Clean and disinfect the dining area and servery with D10 as per routine.
- Clothing protectors stored in correct location.

Housekeeping:

- Daily cleaning all surfaces in resident's rooms (attention to contact surfaces) – see routine.
- Cleaning to all public contact surfaces such as handrails, door and door handles (especially soiled linen door/handle), public washrooms, key pads to neighbourhoods, phones and counters at the nursing station, etc. at least twice per day at the beginning and end of the shift.
- Prepare the housekeeping cart for the nursing staff to use after hours for cleaning spills of body fluids.
- Collect garbage from affected neighbourhoods last and bring to the trash compactor immediately. Disinfect the garbage cart before returning it to the neighbourhood.
- Once the outbreak has been declared over or the resident has been taken off isolation, the resident room is carbolized/deep cleaned.

Maintenance:

- Requests from affected neighbourhoods are placed in the maintenance mail pan at the front desk or designated box not located on the affected neighbourhood for maintenance to collect.
- Complete items on affected neighbourhood related to employees or resident safety. All others logged for after the outbreak.
- Hang clean privacy curtain and window coverings after room has been deep cleaned.

Recreation Staff and Volunteers:

- Recreation and Volunteer Coordinator limit and/or postpone group recreation activities.