Introduction

Influenza is a common and very contagious respiratory tract infection caused by Influenza A or B viruses. It is characterized by the following symptoms: fever, myalgia, headache, severe malaise, sore throat, rhinitis, and cough. People of all ages can be affected, but influenza is more dangerous in the very young, the elderly, and people in poor health due to chronic illness or disability. Antibiotics are not effective since the infection is caused by a virus and not by bacteria. During the influenza season, outbreaks of health-care-associated influenza affect clients and personnel in long-term care facilities and hospitals. In some people, influenza can exacerbate underlying medical conditions (i.e., pulmonary or cardiac disease) or lead to secondary bacterial pneumonia.

Influenza vaccination is the most effective way to gain protection from influenza and prevent outbreaks.

Influenza is primarily transmitted from person to person via virus-laden droplets that are generated when infected persons cough, sneeze, or talk. These droplets can then settle on the mucosal surfaces of the upper respiratory tract of susceptible persons who are near (i.e., within 2 metres) infected persons. Transmission may also occur through direct contact or indirect contact with respiratory secretions, such as when touching surfaces contaminated with influenza virus and then touching the eyes, nose, or mouth. The influenza virus may persist for hours particularly in the cold and in low humidity. Adults can spread influenza to others from the day before getting symptoms to approximately 7 days after symptoms start. Children and immune compromised adults can shed influenza viruses for 10 or more days.

To protect health care workers, clients, and others in the health care setting, individuals who are identified as having symptoms of an influenza-like illness (i.e., acute onset of respiratory illness with fever and cough with sore throat, headache, runny nose, muscle aches, extreme tiredness,
or prostration) need to be identified as soon as possible and infection prevention and control measures put in place to prevent transmission. This policy is not meant to be followed for clients with Severe Acute Respiratory Syndrome (SARS) or an emergent respiratory infection that has not been clearly identified. (Refer to Policy 30-30 Droplet Precautions).

**Policy**

1. Use Droplet and Contact Precautions for a client known or suspected to have Influenza-like Illness or Severe Respiratory Illness (SRI).

2. Notify Infection Prevention and Control Professionals of clients admitted with Influenza-like Illness or Severe Respiratory Illness.

**Purpose**

1. To minimize influenza exposure.

2. To detect and contain clusters or outbreaks of influenza.

**Procedure**

1. Implement respiratory hygiene/cough etiquette at the first point of contact with a potentially infected person. Respiratory hygiene/cough etiquette includes:
   - Post visual alerts instructing clients and persons who accompany them to inform health care personnel if they have symptoms of respiratory infection.
   - Provide tissues or masks to clients and visitors who are coughing or sneezing so that they can cover their nose and mouth.
   - Ensure that supplies for hand washing are available where sinks are located and provide dispensers of alcohol-based hand rub (ABHR) in other locations.
   - Encourage coughing persons to sit at least 2 metres away from others, if possible. If crowded conditions exist, ensure the client wears a surgical mask or at a minimum uses a tissue and performs hand hygiene.

2. Identification
   - Nursing notifies Infection Prevention and Control Professionals of clients with or who develop Influenza-like Illness symptoms so they can monitor during influenza season.
   - Infection Control Professionals notify Public Health of inpatients with Influenza-like Illness.
   - Infection Control Professionals notify Occupational Health Services (OHS) about any cluster of clients so OHS can monitor staff. OHS notifies staff clusters to Infection Prevention & Control.

3. Respiratory Hygiene (Respiratory Cough Etiquette)
   - Teach the client how and when to perform hand hygiene.
   - Teach the client how and when to perform respiratory hygiene practices (cover your cough by coughing into sleeve, using tissues, or wearing a mask). Refer to Policy 20-95 Respiratory Hygiene and Cough Etiquette.
   - Teach the client to wear a mask (if tolerated) when health care workers, other staff and visitors are present.
4. Client Placement

- Whenever possible, use single rooms for inpatients with symptoms compatible with influenza.
- When single rooms are not possible, ensure that spatial requirements (i.e., two metres between clients with symptoms compatible with influenza and clients without symptoms) are maintained.
- Post Droplet and Contact Precautions sign (SHR Printing Services #102107) on the room door indicating the precautions required.

5. Hand Hygiene

- Perform hand hygiene as per 20-20 Hand Hygiene Policy using either alcohol-based hand rub (ABHR) or soap and water.
- Remember to ensure the client’s hands are cleansed before and after eating, after going to the bathroom and frequently if the person is coughing and sneezing.

6. Respiratory Protection

- Wear a regular mask (procedure or surgical) when within two metres of the client.
- Change mask if it becomes wet or soiled (from the wearer’s respiration or through an external splash).
- Remove the mask by the straps, being careful not to touch the mask itself, after leaving the room and dispose of in hands-free waste receptacle.
- Perform hand hygiene after removing the respiratory protection and after leaving the room.

7. Eye Protection

- Wear eye protection (i.e., visor, face shield) whenever a mask is worn. Prescription eye glasses are not considered sufficient eye protection.
- Remove eye or face protection after leaving the room and dispose of in either a hands-free waste receptacle (if disposable) or in a separate receptacle to go for cleaning (if reusable).

8. Gloves and Gown

- Wear gloves and gown for all contact with the client or the environmental surfaces in the room.
- Gloves and gowns are single use only.
- Change gloves after contact with infectious material that may contain high concentrations of microorganisms.
- Remove gloves, then the gown. Untie at the back, pulling forward and turning inside on itself, rolling up and discarding in the laundry hamper in the room. Perform hand hygiene after removing gown and gloves. Avoid contact with the environmental surfaces when leaving the room.

9. Client transportation

- Transportation of the client to other departments or facilities should be limited to essential diagnostic or therapeutic procedures.
- Inform the receiving department that Droplet & Contact Precautions are required.
• Client should wear a regular mask during transport and be instructed on how to perform respiratory hygiene. For clients who are unable to wear a regular mask, provide tissues for use and instructions on how and where to dispose of them, and the importance of hand hygiene after handling tissues.
• When leaving their room, the client must have on a freshly laundered gown/housecoat and have cleaned their hands with alcohol-based hand rub (ABHR) or soap and water.
• Gloves for transport of client and when anticipating direct contact with client, a gown is required.
• Place chart in clean bag or pillowcase and place on client’s lap or bed.
• Avoid contact with surfaces en route. Use elbow to push elevator buttons.
• Use clean sheet to cover client.
• Clean equipment used in the department with a hospital disinfectant.

10. Visitors

• Instruct visitors regarding appropriate use of a mask, eye protection, gowns, gloves and hand hygiene as well as visitor guidelines for Droplet and Contact Precautions by providing Droplet and Contact Precautions – Client, Family and Visitor Information (SHR Printing Services #102927).
• Visitors with Influenza-like Illness must not visit while symptomatic. Close relatives of critically ill clients are exempt, but they must wear masks upon entry into the facility and perform hand hygiene before and after the visit, which must be restricted to that client only.

11. Client and family teaching

• Clients should understand the nature of their infectious disease and why precautions are being used to prevent the transmission of disease to other clients, family and friends during their hospital stay and upon their return to the community.
• Provide Influenza Fact Sheet available from SHR Printing Services #103139 or copied from the Infection Prevention and Control Manual.

12. Client Care Equipment

• Limit the amount of supplies taken into the room to avoid unnecessary waste at client’s discharge. Remove unnecessary items.
• Dedicate non-critical client care equipment to a single client (i.e., stethoscope, blood pressure cuff, tourniquet, vacutainer, laundry hamper stand, walker and commode).
• Any equipment that comes in direct contact with the client should be cleaned and disinfected with a hospital disinfectant.
• If sharing of equipment is unavoidable, clean and disinfect between clients.
• Trays from clients on Precautions can be placed on tray carts because the cart is washed after each use.
• Trays from clients on Precautions left after pickup by food and nutrition staff should be bagged and left for pick up in a designated area.
• Gloves should be worn for pickup of dietary trays in additional precaution rooms only.
13. Environmental Cleaning

- Interim cleaning of rooms is performed in the same manner as for all clients while wearing personal protective equipment as noted on the precaution signage.
- Following discharge or discontinuation of precautions:
  - Precaution sign should remain in place until cleaning is completed.
  - Precaution discharge cleaning is performed as for all clients.
  - Bedscreens are to be changed.

14. Cultures

- Virology tests will be needed to confirm diagnosis in atypical cases and for surveillance.
- See Appendix A for collection of Nasopharyngeal Swab for Influenza Testing.

15. Outbreak Management

- In the event that clients/residents and/or staff members display signs and symptoms of Influenza or Influenza-like Illness in numbers higher than normally expected, an outbreak may be declared.
- Although routine surveillance should serve to identify most outbreaks, it remains the responsibility of all health care workers to communicate concerns promptly so the Infection Prevention and Control Department can initiate action.

References


Appendix A - Nasopharyngeal Swab for Influenza Testing

Step 1:
- Patient should be seated or lying in a comfortable position. Inform patient they may feel some discomfort.
- Don personal protective equipment.
- Tilt head back and lift nose slightly.
- Insert small flocked swab into nostril gently, push straight back along the nasal septum just above the floor of the nasal passage to the nasopharynx until gentle resistance is felt and the tip is touching the mucosal surface as indicated in diagram.

To view video on proper collection go to http://vimeo.com/7748002

Step 2:
- Rotate the swab two to three times and hold the swab in place for 5 seconds to ensure maximum absorbency.

Step 3:
- Put the swab in the Viral Transport Medium tube and break the shaft at the breakpoint so the tip drops into the transport medium tube. Secure the top of the tube.
- Label specimen and place in plastic bag.
- Write on requisition: Nasopharyngeal swab for respiratory viruses and fully complete requisition.
- Transport to Virology without delay. Refrigerate if sample cannot be immediately transported.

Equipment:
- Viral transport media with flocked swab kit - SKU #204783 obtain from Materials Management. Store at room temperature.
- Virology requisition and labels
- Plastic bag
- Appropriate Personal Protective Equipment (gloves, mask and eye protection)

June 2010 For further questions contact SHR Virology at 655-1763
A comprehensive influenza management program ensures both optimal care for the client and effective protection for other clients and healthcare workers.

**Purpose**

1. Influenza management delineates administrative, environmental and respiratory protection controls to prevent transmission of influenza within its facilities.
2. To ensure prompt detection, additional precautions and treatment of persons who have influenza-like illness (ILI) or confirmed influenza.
3. To ensure processes are in place to protect healthcare workers and clients from influenza exposure.

**Administrative Control Procedures**

**Nursing Care**

- Policies pertaining to Nursing care and management of clients with influenza and ILI as it relates to infection control are found in Infection Prevention and Control Manual policies [40-70 Influenza and Influenza-like Illness (ILI), 30-30 Droplet Precautions] and [20-95 Respiratory Hygiene and Cough Etiquette]. Policies are reviewed and updated every three years or whenever new information becomes available and are based on provincial or federal infection control guidelines.

**Immunization**

- Immunization of healthcare workers and the public, including clients of long term care facilities is guided by the Saskatchewan Ministry of Health Influenza Immunization Program Parameters. The program is promoted using the “I got one! Influenza vaccine” brand, through a variety of methods: posters, brochures, pop-up banners, 4flu website, 4flu phone line, Sunday SUN ad and flyers targeted to specific neighborhoods and rural communities. The vaccine order form, along with influenza program information, is sent to physician offices and SHR depts. in early Sept. for vaccine pick up on the first day of the campaign.

- Public immunization clinics are held in a variety of locations throughout the region for a 2 week period. In the 3rd week, nurses visit senior high rises in Saskatoon and small rural communities to immunize residents. Persons who miss the 2 week drop-in clinics can book an appointment commencing the 3rd week of the campaign to the end of March each year.

- In LTC and acute care facilities, clients are immunized under a physician order. For a description of the planning and implementation of the public campaign refer to the Seasonal Influenza Immunization policy# 60-b-60 located in PHS-Disease Control Program Manual.

- Health Care Worker immunization clinics which may include mobile clinics to high risk areas and designated areas, are offered in all acute care sites and community facilities such as Idylwyld Centre and Parkridge Centre over a 2 week period. Health Care workers and volunteers in rural communities are immunized by trained immunizers at their facilities or are invited to a public site. In the 3rd week clinics operate out of the Occupational Health & Safety (OH&S) Site Satellite offices. For a detailed description of the implementation of the staff campaigns refer to the Policy 7311-30-016 Annual Influenza Immunization of Health Care Workers located in the SHR Region-Wide Policy and Procedure Manual.
Health Care Workers designated to immunize the public or SHR employees and volunteers are required to attend an initial 4 hour education session. Immunizers, who immunized in the previous year’s influenza season, require a 2 hour review annually. Nurses who administer vaccine under a physician’s order are not required to attend additional education. Refer to the Immunization Education and Competency located in the PHS Disease Control Program Manual.

The Department of Pharmaceutical Services maintains a process for identification of urban acute care clients who may be suitable candidates for immunization during an acute care admission. Refer to “Influenza Vaccine Policy and Procedure” in the Pharmacy department manual.

Upon their consent, Home Care Nurses will administer vaccine to home-bound clients. Home Care clients who can travel may receive immunization at public sites during the 2 week campaign. The process is embedded within Public Health policy.

Pneumococcal vaccine is administered to people over 65 years of age according to the provincial Immunization Program Parameters. During the seasonal influenza public campaign vaccine is offered along with seasonal vaccine to persons 65 years or older, including persons turning 65 years before March 31.

Surveillance
- Public Health Services (PHS) oversees influenza and ILI surveillance in the community (schools and sentinel physicians’ offices) and in the Emergency Rooms for acute care hospitals. Two SHR physicians participate in the provincial sentinel physician reporting process. In addition, several other physicians participate in local surveillance. For details refer to the surveillance chapter of the SHR Pandemic Influenza plan which describes the seasonal and pandemic surveillance processes. Surveillance findings are reported weekly during influenza season within the region and to the Ministry of Health. [http://infonet.sktnhr.ca/emergencypreparedness/Pages/PandemicInfluenzaPlanUpdateChapters.aspx](http://infonet.sktnhr.ca/emergencypreparedness/Pages/PandemicInfluenzaPlanUpdateChapters.aspx)

- Infection Prevention and Control (IPC) staff performs surveillance during influenza season by reviewing admission diagnoses of inpatients, searching for diagnoses compatible with ILI or influenza.

Investigations/Specimens
- Laboratory Service Manual virology (Microbiology) section, “Nasopharyngeal Swab” and “Nasopharyngeal Washing” outline the procedures which apply to collection and transportation of specimens. Directions for nasopharyngeal testing are included in this policy in Appendix A. Both Direct Fluorescent Antibody (DFA) and real-time Polymerase Chain Reaction (PCR) testing for influenza is available at RUH Virology Laboratory and at the Saskatchewan Disease Control Laboratory in Regina.

- Bronchoscopy is not the primary diagnostic method for influenza. Bronchoscopy on any person with influenza or ILI is performed in a negative pressure bronchoscopy suite or in an airborne infection isolation room if a bronchoscopy suite is not available.

Outbreak Management
- Policies and procedures pertaining to outbreak management of respiratory illness, including influenza and ILI are found in the Infection Prevention and Control manual,
Policy 55-60 Influenza-like Illness Outbreak Management and in the Policy 50-20 Outbreak Management in Long Term Care. Provincial guidelines for outbreak management are found in the Communicable Disease manual (Public Health Services) and have been distributed to each long term care and personal care home in the province; these guidelines may be broadly applied to all care environments and discuss preparation for influenza season in addition to aspects of outbreak management and control.

Environmental Control Procedures

- Facilities and Engineering Services (FES) is responsible for maintaining ventilation systems to ensure proper directional airflow, and adequate air change rates for client rooms, including airborne infection isolation and bronchoscopy rooms. FES procedures include HEPA filter changes and cleaning of isolation rooms.

- Endoscopy service is responsible to ensure proper cleaning and disinfection or sterilization processes for contaminated bronchoscopes to prevent transmission via contaminated equipment.

- PHS, Pharmaceutical Services and Nursing staff handling vaccine are responsible to maintain the recommended cold chain, documentation and related procedures for vaccine. These procedures are located in the provincial Immunization Program Parameters manual (the manual is available on the Internet).

- Non-invasive ventilation (NIV) using BiPAP or CPAP is not recommended for support of clients known or suspected of having influenza. Guidelines for the use of NIV are located in the Client Care section of the Regional Administrative Policy and Procedure Manual.

Personal Control Procedures

Healthcare Workers

- Regional policies 7311-30-016 Annual Influenza Immunization of Healthcare Workers and 7311-30-017 Management of Employees, Physicians and other Healthcare Workers during Influenza Outbreaks in Healthcare Facilities give details of responsibilities of various groups and departments regarding immunization and during outbreaks.

- Immunize or Mask Policy implemented in fall of 2014. All individuals covered by this Policy must either choose to be vaccinated annually against influenza or wear a surgical/procedure mask during influenza season when in a Patient Care Location in accordance with this Policy. During an influenza outbreak, this Policy is suspended at the outbreak location and Saskatoon Health Region’s outbreak policies will apply.

- OH&S is responsible for healthcare worker immunization and respiratory protection programs. OH&S collaborates with teaching institutions, Medical Affairs and others to ensure physicians, students and volunteers have the opportunity to receive immunization. See “Immunization” and “Personal Protective Equipment- Respiratory Protection” in the Occupational Health and Safety Policy and Program Manual.

Education

- Education regarding prevention, transmission and symptoms of influenza and ILI is provided via the IPC, PHS and OH&S programs.
40-70 Appendix B – Influenza Management

- Clinical staff (i.e., nursing, respiratory therapy, etc) provide education to clients on respiratory hygiene, cough etiquette and hand hygiene procedures.

- Training/certification and recertification of staff to immunize clients, peers or the public is coordinated by PHS and OH&S.

References

Saskatchewan Ministry of Health Influenza Immunization Program Parameters 2009-10.