



Infection Control and Prevention Guidelines for Influenza in Long Term Care and Residential Care Facilities

Residents in nursing homes and other residential facilities have a higher risk of complications due to respiratory infections such as influenza. Disease-causing organisms can enter a facility through personnel, residents, or visitors. It is important to identify these illnesses early so actions can be taken quickly to control the spread.

Modes of Influenza Transmission:

Influenza viruses are spread by close contact with infected people through these routes:

- **Droplet transmission** occurs when respiratory droplets from infected persons directly fall within 3-6 feet from the infected person during breathing, talking, coughing, sneezing, or singing.
- **Contact transmission** occurs when droplet material is picked up from contaminated surfaces and items in the infected person's surroundings, then indirectly spread by touching others or by touching one's own eyes, nose, or mouth. Influenza can survive up to 12 hours on cloth, paper, and tissues, and up to 48 hours on hard non-porous surfaces such as stainless steel and plastic. It can also survive up to 5 minutes on hands.
- **Airborne transmission** occurs when respiratory droplets are aerosolized (i.e., during procedure like bronchoscopy, intubation, cardiopulmonary resuscitation (CPR), open airway suctioning, and sputum induction) or when the droplets evaporate and can be easily moved by airflow effects.

Influenza-like illness (ILI) is defined as fever* and a cough and/or sore throat in the absence of another **KNOWN** cause of illness.

*temperature of 100° F (37.8° C) or greater

Actions to Prevent and Control Influenza:

1. **Annual influenza vaccine for employees and residents is strongly recommended.** Infected people may have very mild symptoms—or none at all—but they are still able to spread influenza to others. A high-dose flu vaccine is recommended for persons 65 years of age and older.
2. **Be alert for early signs of influenza-like symptoms in employees and residents.** (See page 4 regarding employees.) Screen and monitor new residents and those returning after temporary absences. Instruct and remind residents to report symptoms promptly, especially fever, cough, sore throat, headache, or body aches. When a resident is suspected of having influenza:
 - a. **Isolate any resident with influenza-like illness from others.**
 - Residents should stay in their own rooms until at least 24 hours after they are free of fever or signs of fever without the use of fever-reducing medications.
 - Residents should not participate in any group activities during this time.
 - Residents with influenza-like symptoms may keep their roommates. These roommates are already exposed, so monitor them closely for the development of illness.
 - Use appropriate personal protective equipment and precautions (see box on page 3).
 - b. **If a resident with influenza-like illness must leave their room for any reason, place a surgical or procedure mask on them.**
 - If wearing a mask compromises the resident's ability to breathe easily, others near them should wear a mask during this time.
 - Instruct and monitor respiratory hygiene and hand hygiene at all times (see next page).
 - **Separate symptomatic residents from others by at least 3-6 feet** if they must be outside their room.
 - c. **Consult with the facility physician regarding the use of antivirals** when influenza is suspected or confirmed. Antivirals are most effective when given within 48 hours of onset of symptoms. Antivirals can make the illness milder, shorten the duration of illness, and prevent complications.

Actions to Prevent and Control Influenza (continued):**3. Educate residents and employees to follow respiratory hygiene, cough etiquette, and hand hygiene and ensure adequate supplies** of tissues, waste containers, and hand hygiene materials.

- Cover mouth and nose with a tissue when coughing or sneezing, OR cough or sneeze into the upper sleeve, NOT into one's hands.
- Put used tissues into a waste basket immediately.
- Wash hands with soap and water or use alcohol-based hand cleaner afterwards.

Control Measures including Infection Prevention:

1. Use **standard precautions** when caring for all residents including those with influenza-like illness:
 - **Perform hand hygiene** with soap and water or alcohol-based hand product after contact with the resident or potentially contaminated environmental surfaces.
 - **Use alcohol-based hand rubs when hands are NOT visibly soiled.**
 - a. **When to perform hand hygiene:**
 - Before having direct contact with residents.
 - After contact with any body fluid, mucus membranes, non-intact skin, or wound drainage.
 - After contact with intact skin such as checking vital signs or positioning a resident.
 - If hands are moving from a contaminated body site to a clean body site during care.
 - After contact with inanimate objects in the immediate vicinity of the resident.
 - After removing personal protective equipment such as gloves, gowns, or masks.
 - b. **Follow respiratory hygiene and cough etiquette** (see #3 above).
 - c. **Use gloves** if hand contact with secretions or contaminated surfaces is likely.
 - Always change gloves between residents.
 - Put on clean gloves just before touching a resident's mucous membranes, non-intact skin, or contaminated items.
 - Gloves do not replace the need for hand hygiene because gloves may be torn during use, and hands can become contaminated during removal of gloves.
 - Remove gloves and perform hand hygiene when exiting the room.
2. Use **droplet isolation precautions** in addition to standard precautions when caring for residents with suspected or confirmed influenza, until at least 24 hours after they are free of fever ($\geq 100^{\circ}$ F or 37.8° C) or signs of a fever without the use of fever-reducing medications.
 - a. Use a **surgical or procedure mask** for all routine care when entering the resident's room. Remove the mask and perform hand hygiene when exiting the room.
 - b. Wear a **gown** when soiling of clothes or skin with body fluids, secretions, or excretions is likely.
 - c. Remove gowns and perform hand hygiene when exiting the room.
 - d. The resident should wear a surgical mask if leaving the room is necessary.
 - e. Limit the number of people entering the room to reduce unnecessary exposures.
3. Use **airborne precautions during aerosol-generating procedures** such as bronchoscopies, intubation, CPR, open airway suctioning, and sputum induction.
 - a. Wear an **N95 respirator (mask)**. These provide a seal around the nose and mouth, and filter out small organisms.
 - Only use the brand and size of N95 mask that was used for the fit test.
 - Check and confirm the fit of the mask with every use.
 - Remove the N95 masks and perform hand hygiene when exiting the room.
 - b. Wear **face protection** such as a face shield, a mask with attached shield, or a mask with goggles.
 - c. Use an **airborne infection isolation room (AIIR)** with negative pressure performing 6 to 12 air exchanges per hour for aerosol-producing procedures when possible.

Safe Personal Protective Equipment (PPE) Removal Sequence:**Avoid touching the outside of PPE items****1. Gloves:**

- a. Grasp outside of glove with opposite gloved hand and peel off.
- b. Hold removed glove in the still-gloved hand.
- c. Slide the fingers of ungloved hand under remaining glove at wrist.
- d. Peel second glove off over first glove and discard into trash receptacle.

2. Goggles or Face Shield:

- a. Grasp head band or ear pieces.
- b. Place in designated receptacle for reprocessing or in waste container.

3. Gown:

- a. Unfasten ties.
- b. Pull away from neck and shoulders, touching inside of gown only.
- c. Turn gown inside out.
- d. Fold or roll into a bundle and discard.

4. Mask or Respirator:

- a. Grasp bottom ties or elastic, then top, and remove without contaminating face.

Control Measures including Infection Prevention (continued):**4. Environmental Infection Control:**

- a. Influenza can survive up to 12 hours on cloth, paper, and tissues, and up to 48 hours on hard non-porous surfaces such as stainless steel and plastic.
- b. Use routine cleaning and disinfection strategies during influenza seasons. Focus on cleaning of frequently touched surfaces. For further guidance, consult this CDC document: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm>.

5. Preventing Exposures from Employees and Visitors:

- a. Educate personnel about the importance of vaccination, signs and symptoms of influenza, control measures, and when to pursue influenza testing.
- b. Post signage at all building entry points instructing employees and visitors to report influenza symptoms at the earliest opportunity. An example can be found at www.health.state.mn.us/divs/idepc/dtopics/infectioncontrol/cover/hcp/stopreng.pdf.
- c. Consider having personnel verbally and visually screen visitors for these symptoms. Coach all personnel to be assertive about how to send visitors with symptoms away.
- d. Post educational materials in all appropriate languages regarding respiratory hygiene, cough etiquette, and hand hygiene, and provide adequate supplies to perform these actions.

6. Preventing Exposures from Personnel:

- a. Monitor personnel daily for signs and symptoms of influenza. If an employee becomes ill while at work, they should cease working with residents, and notify their supervisor and/or the employee health nurse.
- b. Healthcare personnel who have had an unprotected exposure to influenza may continue to work as long as they are asymptomatic. They should contact their primary care provider regarding recommendations for antiviral prophylaxis. This recommendation may change for facility-associated outbreaks.

7. Management of Ill Personnel:

- a. Instruct all workers to stay home if they are sick with influenza symptoms.
- b. Healthcare workers with influenza-like illnesses should be excluded from work for at least 24 hours after they no longer have a fever ($\geq 100^{\circ}$ F or 37.8° C) or signs of a fever, without the use of fever-reducing medicines. *Those who work in areas where the residents are considered severely immunocompromised should be considered for temporary reassignment or exclusion from work for 7 days from symptom onset or until symptoms have resolved, whichever is longer.*
- c. Non-healthcare employees with influenza-like illnesses should stay home and not return to work until at least 24 hours after they are free of fever ($\geq 100^{\circ}$ F or 37.8° C) or signs of a fever without the use of fever-reducing medications.
- d. Establish time-off and return to work policies and procedures for employees who are asked to stay home while recovering from fever and respiratory symptoms.

Resources:

CDC, Infection Control Measures for Preventing and Controlling Influenza Transmission in Long-Term Care Facilities. <http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>.