

Guidelines for the Prevention and Control of Influenza in Non-Healthcare Group Settings

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Background

The Virginia Department of Health (VDH) recommends taking the general steps outlined below to prevent the spread of influenza in group settings. In this document, “group settings” refers to places where groups of adults, children, or infants get together for purposes other than receiving healthcare. Group settings might be residential (i.e., places where people live day and night for an extended time, such as assisted living facilities and correctional facilities/detention centers) or non-residential (i.e., places where people visit or spend parts of the day, such as adult or child daycare centers, camps, schools, and workplaces). For simplicity, “residents” refers to persons who live in residential group settings and “students/attendees” refers to persons who get together in non-residential group settings.

Although anyone can get influenza, certain groups are at high risk for developing serious flu-related complications (e.g., pneumonia, inflammation of organs, multi-organ failure) that result in hospitalization and sometimes death. These groups include the following:

- Adults aged 65 years or older;
- Children aged less than 5 years (especially those aged less than 2 years);
- Pregnant women and women up to two weeks postpartum;
- Residents of nursing homes and other long-term care facilities;
- American Indians and Alaska Natives;
- People who have a medical condition, such as asthma, neurological and neurodevelopmental condition, chronic lung disease, heart disease, blood disorder, endocrine disorder (including diabetes), kidney disorder, liver disorder, metabolic disorder, weakened immune system because of disease or medication, people younger than 19 years who are receiving long-term aspirin therapy, and people with extreme obesity (body mass index of 40 or more).

Planning and preparation activities should take place before the beginning of the influenza season, which can start as early as October. Additional activities are recommended when an individual in a group setting develops an influenza-like illness (fever with cough and/or sore throat). Further actions might be required if multiple people are ill and an outbreak (or suspected outbreak) occurs.

The local health department has staff with experience and expertise in the management of respiratory illnesses in group settings. They are available for consultation before the influenza season and as needed throughout the influenza season. To find the local health department nearest you, go to <http://www.vdh.virginia.gov/local-health-districts/>. Persons in charge of any residential or day program, service, facility, school, or summer camp licensed or operated by any agency of the Commonwealth are reminded that any outbreak or suspected outbreak, including an outbreak of a respiratory illness like influenza, must be reported to the health department immediately per Virginia disease reporting regulations ([12 VAC 5-90-90](#)).

Planning and Preparation Activities

- Encourage all residents, students/attendees, and personnel to receive seasonal influenza vaccine before the end of October.

- Encourage good infection control practices throughout the year by displaying posters that remind residents, students/attendees, employees, and visitors about proper hand hygiene, respiratory hygiene, and cough etiquette. Sample posters are available at <https://www.cdc.gov/flu/resource-center/freeresources/print/index.htm>.
 - Provide opportunities and supplies for cleaning hands in common areas such as lobbies, corridors, and restrooms. Persons should be reminded to wash hands often with soap and water for at least 20 seconds, especially before eating, after using the bathroom, and after coughing or sneezing. Alcohol-based hand sanitizers with at least 60% alcohol can be used if soap and water are not available.

- Remind residents, students/attendees, and employees to:
 - Cover their nose and mouth with a tissue when coughing or sneezing.
 - Throw the tissue in the trash after it is used, and wash hands promptly afterward.
 - Avoid touching the eyes, nose, or mouth. Germs spread that way.
 - Avoid close contact with sick people.

- Encourage all persons who enter the group setting (including residents, attendees/students, employees, volunteers, contractors, visitors, parents/guardians, and others) to monitor themselves daily for influenza-like illness (e.g., fever, cough, and sore throat). This is especially important during the influenza season (October through May).
 - Persons with influenza-like illness should stay at home and away from the group setting when they are sick. The Centers for Disease Control and Prevention (CDC) and VDH recommendations are to stay home for at least 24 hours after the fever is gone without the use of fever-reducing medicines.

- Prepare signs and letters for use if visitation must be limited or other restrictions are necessary during the influenza season.

- Review environmental cleaning policies and procedures with housekeepers. Frequently touched hard surfaces and objects (such as countertops, bed rails, doorknobs, toys, and bathroom surfaces) should be routinely cleaned and disinfected and if they become visibly soiled. Wash surfaces with a general household cleaner to remove germs. Rinse with water, and follow with an Environmental Protection Agency (EPA)-registered

disinfectant effective against influenza A virus to kill germs. If a surface is not visibly dirty, an EPA-registered product that both cleans and disinfects may be used. Follow directions on product labels. Maintain a supply of disinfectants and other cleaning supplies.

Tracking Illness and Contacting the Local Health Department

- Review the facility's policies and procedures for monitoring respiratory illness and when and how to notify the local health department.
- Maintain an illness log so baseline respiratory illness rates can be determined. Knowledge of baseline rates is needed to know when an outbreak is suspected or occurring. Example of illness logs are available here:
<http://www.vdh.virginia.gov/content/uploads/sites/3/2016/03/RespiratoryIllnessLog-Residents.xls> (for residents) and
<http://www.vdh.virginia.gov/content/uploads/sites/3/2016/03/RespiratoryIllnessLog-Staff.xls> (for staff)
 - Note that adults aged 65 years or more, medically fragile people, and those with neurologic or neurocognitive conditions can manifest atypical signs and symptoms of influenza (e.g. behavior change) and might not have fever.
- Immediately contact the health department if you observe an increase in the number of people (residents/attendees/students or staff) sick with influenza-like illness or an increase in the severity of influenza-like illness (e.g., number of persons requiring hospitalization).

Actions to Take When a Person with a Febrile Respiratory Illness is Identified

- Notify the appropriate supervisor or first aid personnel, if on site and available.
- If the individual appears to be severely ill or is at high risk for developing serious flu-related complications, they should contact a healthcare provider or seek medical care immediately.
 - Call 911 if the ill person develops any emergency warning signs or symptoms, such as fast breathing or difficulty breathing, bluish or gray skin color, severe or persistent vomiting, sudden dizziness, or becomes unresponsive. Emergency signs and symptoms vary slightly between children and adults. Consult the following CDC website for more information: <https://www.cdc.gov/flu/treatment/takingcare.htm>.
- Assist the resident or student/attendee (and involve their parent/guardian, as appropriate) in contacting their healthcare provider to determine whether antiviral drugs or other medications are indicated.
- If in a non-residential setting, ensure that the ill person remains away from the group setting for at least 24 hours after the person is fever-free without the use of a fever-reducing medicine.
- If in a residential setting and the ill person does not need to be evaluated in a healthcare setting:
 - The ill person should be asked to remain in their room or should be placed in a room away from other people, with the door closed.

- Arrange for delivery of meals to the person's room, and ensure availability of water, juice, or other liquids to supplement the usual diet.
- Employees caring for ill residents should use standard and droplet precautions when entering the resident's room. Droplet precautions means that care providers should wear a face mask (e.g., surgical mask) when entering an ill person's room. If substantial spraying of respiratory fluids could occur, gloves and gown as well as goggles (or a face shield in place of goggles) should be worn. Perform hand hygiene before and after touching the resident and after contact with respiratory secretions and contaminated objects/materials.
- The resident's door should be kept closed. If the ill person needs to go into a common area, the person should wear a face mask, if available and tolerable.
- Provide disposable tissues, waste container, and ensure access to soap and water or hand sanitizer.
- Ensure that the person is monitored for increasing severity of illness.
- If the ill individual shares a room with another person, determine how best to manage the other person. Consult with the health department or ask the roommate to contact their healthcare provider to determine whether if antiviral prophylaxis is indicated. Options for room placement might include:
 - Move the person to another private room. The roommate might already be infected with the same respiratory virus, so the roommate should not be placed where they can expose others.
 - Keep the person in the current location. Using screens or a curtain between beds or maintaining a distance (ideally 6 feet) might decrease risk to the roommate.

Management of an Influenza Outbreak

Once influenza is present in residents or students/attendees, the virus often spreads rapidly within the group setting. Work with your local health department to take steps to reduce the spread of the virus. Proper prevention and control measures are very important in limiting spread of the outbreak to others at home or in the community. Employees, visitors, and returning residents or students/attendees can also introduce or re-introduce influenza into the group setting, so outbreaks can be prolonged or occur more than once during a season.

- Facility management should immediately contact the health department if an increase in cases of influenza-like illness is observed. Working together, the facility and health department can develop prevention and control measures appropriate for the facility.
- Maintain heightened surveillance for febrile respiratory illness among residents, students/attendees, and staff. Keep a log of ill individuals and their symptoms and review it on a regular basis with the health department. The health department can offer guidance regarding how long to continue heightened surveillance.
- Consult with the local health department to determine whether laboratory testing is needed. See the section below for additional information on laboratory testing.
- Other prevention and control measures might include:

Resident-Centered Measures (Residential Group Settings)

- Employees caring for ill residents should use standard and droplet precautions when entering an ill resident's room.
- To the extent possible, employees should be assigned to care for only ill residents or only well residents. Remind ill residents to stay in their room as much as possible, cough and sneeze into tissues, dispose of used tissues properly, and wash their hands frequently.
- Consider limiting group activities to reduce interaction between ill and well residents.
- Consider outreach to family members and other visitors. The privacy and confidentiality of individual residents must be protected, but signs can be posted at building entrances or in the reception area(s). Residents can be encouraged to notify their family members directly or the group setting might choose to send a letter or other form of communication to family members to share that an outbreak is occurring and visitors might want to consider visiting at another time.
 - Individuals at high risk for developing serious flu-related complications should avoid visiting the facility during the outbreak.
 - Visitors to an ill resident should be instructed to wear a face mask while with the resident, and to wash hands carefully upon entering the resident's room and again when leaving the room.
 - Anyone sick with influenza or another respiratory illness should be asked not to visit until they have recovered.
- It might be necessary to close the facility to new admissions/participants until the outbreak is over (i.e., at least 7 consecutive days without any new cases).
- If new residents are accepted, they should have received seasonal influenza vaccine or receive it at the time of admission.
- Consult the local health department for recommendations on [antiviral drug use](#).

Attendee/Student-Centered Measures (Non-Residential Group Settings)

- Remind students/attendees who are ill to stay home until they are fever-free for 24 hours without the use of fever-reducing medications.
 - In settings where the population contains a large proportion of persons at high risk for developing serious flu-related complications, the health department might recommend that ill persons be excluded for a longer period because people with influenza can shed the virus for a few days after the acute illness.
- Encourage frequent hand hygiene and proper respiratory hygiene/cough etiquette and remind students/attendees that they can spread flu virus via their coughs and sneezes or on their hands.
- Cancellation/dismissal is generally not advised for schools unless there is a magnitude of faculty or staff absenteeism that interferes with the school's ability to function. Consult your local Health Director regarding cancellation/dismissal recommendations.
- Consider limiting group activities to reduce interaction between ill and well individuals. For example, consider serving meals in classrooms or other small group settings, rather than in a large dining room or cafeteria.
- Consider outreach to family members and other visitors. The privacy and confidentiality of individual students/attendees must be protected, but signs can be posted at building entrances or in the reception area(s). Students/attendees can be encouraged to notify their family members directly or the group setting might choose to send a letter or other form of

communication to family members to share that an outbreak is occurring and visitors might want to consider visiting at another time.

- Individuals at risk for complications if they develop influenza should be informed so they can avoid visiting during the outbreak.
- Anyone sick with influenza or another respiratory infection should be asked not to visit until at least 24 hours after their fever has resolved (without the use of fever-reducing medicines).

Employee-Centered Measures

- Employees should be encouraged to receive influenza vaccine if they did not receive vaccine before the beginning of the flu season. It takes about two weeks after vaccination to develop antibodies that will protect them for the remainder of the flu season.
- Ill employees, volunteers, contractors, consultants, and others who enter the group setting should be reminded to stay at home for at least 24 hours after their fever is gone without the use of fever-reducing medicines.
 - In settings where the population contains a large proportion of persons at high risk for influenza complications, the health department might recommend that ill persons be excluded for a longer period because people with influenza can shed the virus for a few days after the acute illness.
- Hand hygiene, use of standard and droplet precautions when caring for ill people, and attention to environmental cleaning should be re-emphasized and barriers to adherence (e.g., supply shortages) removed.
 - Environmental cleaning of frequently touched surfaces and objects (e.g., doorknobs, counter tops, children's toys, medication, and snack carts) is especially important.

Group Settings and the Use of Respiratory Protection

The use of a fit-tested respirator (e.g., N-95 respirator) is not usually recommended for workers in non-healthcare settings for general work activities. For specific work activities that involve contact with people who have a febrile respiratory illness, such as escorting or interviewing the ill person or providing assistance to the ill person, the following are recommended:

- Keep interactions with ill persons as brief as possible and try to maintain a distance of 6 feet from the ill person.
- Ask the ill person to follow good cough etiquette and hand hygiene and to wear a face mask, if tolerable and available.
- Staff/workers who are at high risk for complications from influenza should avoid people with febrile respiratory illness (possibly by temporary reassignment).
- When caring for a person with influenza, workers should follow droplet precautions, which include wearing a face mask when entering an ill person's room.

Laboratory Testing

Decisions on laboratory testing during a suspected outbreak in a group setting should be made in collaboration with the local health department. Laboratory testing is not always necessary. Reasons for laboratory testing include:

- To confirm that an outbreak of an influenza-like illness (ILI) is caused by influenza. Other respiratory viruses (e.g., adenovirus, parainfluenza virus, respiratory syncytial virus) and

bacteria (e.g., *Streptococcus pneumoniae*) can also cause ILI outbreaks.

- To determine the influenza type associated with the outbreak. Knowledge of the influenza type and sub-type [e.g., influenza B versus influenza A (H1N1) or A (H3N2)] can help public health officials and clinicians determine the best choice of antiviral drugs. Typing influenza strains is also important for monitoring for the appearance of new viruses.

Additional laboratory testing, including viral culture, might be needed if symptoms persist despite appropriate antiviral treatment or prophylaxis. Resistance to the antiviral agent can occur quickly. Immunocompromised individuals might be at increased risk for persistent infection and emergence of an influenza virus with resistance to available antiviral agents.

- If pursuing laboratory confirmation of the outbreak, the local health department will coordinate the submission of several specimens to the Division of Consolidated Laboratory Services (DCLS) for outbreak confirmation. DCLS provides “flu kits,” which include materials for specimen collection and transport [e.g., nasopharyngeal (NP) swabs, viral transport media, shipping container]. NP swabs collected from persons within the first two days of illness onset are the specimens of choice. Specimens must be received at DCLS within 72 hours of collection.

Use of Antiviral Drugs

Treatment: Early treatment of people with influenza using antiviral medications is recommended for persons who are hospitalized, have severe illness, or are at high risk for developing serious flu-related complications. If the individual is not hospitalized or is not in a high-risk group, antiviral medications may be considered and clinical judgment should be used to guide treatment decisions. Antiviral drugs work best when given in the first two days of illness.

Prophylaxis: Use of antiviral drugs to prevent influenza is sometimes recommended for individuals at high risk for complications from influenza, when the vaccine is not a good match for the circulating influenza viruses, and for groups of people (e.g., employees, residents, and students/attendees) to control an outbreak in a group setting. Consult with your local health department for assistance when determining the need for prophylaxis. Decisions will be made based on the nature of the outbreak and the population affected.

Additional Information

General information about influenza is available from the CDC at <http://www.cdc.gov/flu/> and from the Virginia Department of Health at <http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/>. These websites include recommendations for the use of influenza vaccine and antiviral drugs, as well as other prevention and control guidelines. They also contain fact sheets and other useful information for schools, businesses, care providers, as well as the public.