



Guidance for the Prevention, Recognition, and Management of Influenza in Philadelphia Shelters 2016 – 2017

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Background Information

This guidance is provided to shelters for the prevention and control of influenza for the 2016-2017 influenza season. Influenza or the “flu” is a highly infectious respiratory disease that can be spread easily within shelters if proper infection control measures are not taken. While most persons with the flu will recover on their own in a few days, the disease can be serious in the elderly and those with underlying medical conditions. For this reason, it is important to plan for influenza prevention and control and take appropriate precautions if cases of influenza are identified within shelter staff and/or residents.

Outbreaks of influenza should be reported to The Philadelphia Health Management Corporation (PHMC) Infection Control Coordinator (ICC) at 215-985-2562 (cell: 215-341-1307) and the Office of Supportive Housing (OSH) Assistant Director of Operations at 215-686-7184 *immediately*. Shelters without an affiliation with PHMC may contact the Philadelphia Department of Public Health, Division of Disease Control at 215-685-6740 (business hours) or 215-686-4514 (after-hours) for outbreak notification, guidance, and assistance. Refer to the influenza outbreak identification and notification section on page 3 for more information.

Influenza Symptoms and Transmission

Influenza or the “flu” is an acute, highly infectious respiratory disease caused by the influenza virus. Influenza is characterized by symptoms such as fever, cough, sore throat, headache, chills, fatigue, muscle aches, and occasionally vomiting and diarrhea. Influenza like illness (ILI) is defined as fever AND cough and/or sore throat in the absence of any other diagnosis. The duration of the illness for most people is typically between 5 and 7 days. The period between when someone is exposed to the virus and the development of symptoms is generally 1-4 days.

Influenza viruses are highly contagious; close contacts to cases often develop infection. The infection is spread via respiratory droplets that are spread through coughing, sneezing, or through the contamination of objects and frequently touched surfaces. Those infected with the virus may be able to spread it beginning 1 day before symptoms develop and up to 5-7 days after becoming ill. Children and persons with weakened immune systems may be able to infect others for as long as 10 days or more. The level of virus present in respiratory secretions of ill persons will be dramatically reduced after fever has resolved although it is important to remember that not everyone with the flu will present with fever.

In a typical winter season, up to 20% or more of a community can be affected by influenza. In closed settings such as long-term care facilities, up to 50% of persons may become ill, especially when there are young children involved. Shelters share many similarities to these settings and are also at high risk for influenza outbreaks.

Planning for Influenza Season

Each fall it is recommended that shelters prepare for the upcoming flu season by doing the following:

1. Encouraging staff and clients to get vaccinated against the flu.
2. Remind staff and clients about flu symptoms through the posting of signs or educational talks. Review infection control guidelines.
3. Plan for possibly changing staffing needs. Those persons with high-risk medical complications should avoid caring for persons with flu-like illness. Additionally, administrative staff should develop a staffing plan to address large numbers of staff call-outs.

4. Stock up on supplies commonly used during flu season such as hand sanitizer, soap, paper towels, disposable tissues, cleaning agents, materials to be used as barriers within shared rooms, etc.

General Recommendations to Prevent the Spread of Influenza

Seasonal influenza (including the 2009 H1N1 strain) can be prevented with yearly vaccination and through the promotion of respiratory hygiene and hand washing. The 2016-2017 seasonal flu vaccines will protect individuals against either three strains (trivalent) or four strains (quadrivalent) of seasonal flu. All individuals older than 6 months of age are recommended to receive the seasonal flu vaccine. Children 6 months to 8 years of age who were not known to have received at least 1 dose of the 2015-2016 seasonal influenza vaccine, should receive 2 doses of the 2016-2017 seasonal influenza vaccine. People with a severe egg allergy (suspected or confirmed) can get a recombinant flu vaccine and should consult a physician before vaccination. In addition to vaccination, the following measures can reduce disease transmission:

1. Persons who are sick with influenza-like symptoms should be considered contagious. They should be confined to their rooms with limited interaction with the general shelter population for 24 hours after the resolution of their fever, without the use of fever reducing medications. Ill residents or staff members must be isolated from others in a separate location. If separate rooms are not available for isolation, social distancing measures of at least 6 feet must be employed. Staff members with ILI should be sent home and should not return to work until 24 hours after the resolution of their fever, without the use of fever reducing medications.
2. Respiratory hygiene and cough etiquette should be encouraged through education and signage. Shelters should make supplies such as disposable tissues, hand washing soap, paper towels, and hand sanitizer available throughout the shelter:
 - Everyone should be encouraged to cover their mouth and nose with tissues when coughing or sneezing. If tissues are not immediately available people should be taught to cough into their elbow or the sleeve of their shirt.
 - Tissues should be available and disposed of in no-touch waste containers.
 - Clean hands with soap and water or alcohol-based hand sanitizer after sneezing or coughing.
3. Hand washing in general should be promoted throughout the shelter:
 - Staff and residents should wash their hands with soap and warm water for at least 20 seconds, especially before eating or preparing food and handling used eating utensils and after handling soiled laundry and going to the bathroom and/or changing diapers.
 - Residents and staff should also avoid touching their eyes, nose, and mouth especially throughout the influenza season because the virus can enter the body through these routes.
 - Children should be assisted in washing their hands with soap and water frequently.
 - Alcohol hand sanitizers are an effective addition to hand washing and are a reasonable temporary substitute when your hands are not visibly soiled or when soap and water are not readily available.
4. Routinely clean commonly touched surfaces and bathrooms:
 - After cleaning, disinfection can be accomplished with a disinfectant rated to control flu viruses. Most common disinfectants are effective against the influenza virus. EPA maintains a list of antimicrobial products on their website at: <https://www.epa.gov/pesticide-registration/antimicrobial-products-registered-use-against-h1n1-flu-and-other-influenza>

Management of Cases with Influenza

Increased surveillance and prompt recognition of ILI among residents is an effective way to control disease transmission within the facility. Residents with respiratory illness that appears to be influenza should be managed as follows:

1. Any resident with ILI who is at high risk for complications (e.g., persons of any age with chronic medical problems, pregnancy, immune suppression, persons age 65 years and older, and children under the age of 5 years) should be referred for medical evaluation early in the course of illness, ideally within 48 hours of symptom onset. In addition, anyone who is concerned about their illness or anyone whose condition is getting worse should seek care. Patients who have no primary health care provider can receive medical care at any PDPH District Health Care Center by enrolling as a patient.

Antiviral medications may shorten illness and prevent severe complications if given within 48 hours of developing symptoms. People with mild ILI and no underlying health conditions generally do not need to be treated with antiviral medications and can recover on their own with rest and fluids.

2. If possible, sick residents and their families should be housed separately from other residents, with dedicated living space (and bathrooms if possible), or ill residents should be separated from the general population especially during activities and meal times. If multiple residents are housed in the same room, staff can use sheets or curtains to create temporary barriers between beds. Ill residents should maintain at least a six feet separation distance between the heads of the beds in sleeping quarters. Beds should be arranged preferably in large well ventilated rooms in a fashion where residents can lay head-to-toe or toe-to-toe whichever will provide the greatest distance between faces.

Residents with influenza should remain in the shelter, and not participate in work, school, or childcare until 24 hours after the resolution of their fever, without the use of fever reducing medications. Ill persons may also be asked to wear masks when passing through public areas of the shelter.

3. The number of staff members who have contact with ill residents should be limited. If possible certain staff should be designated to care for ill residents. Pregnant staff members and others at high risk of severe illness from influenza should not be designated as caregivers for sick residents. In general, wearing a surgical or procedural mask is not recommended for non-healthcare settings. However, staff who have close contact, including examining or providing direct medical care for residents or staff with ILI should wear gloves and a surgical mask or fit-tested N95 respirator. If contact with respiratory secretions is likely a gown should be worn as well.
4. Staff members with ILI should not come to work and should stay home until 24 hours after the resolution of their fever, without the use of fever reducing medications

Influenza Outbreak Identification and Notification

An outbreak is defined as any sudden increase of influenza-like illness (ILI) cases over the normal background rate or when any resident tests positive for influenza. One case of confirmed influenza by any testing method in a congregate living facility is considered an outbreak.

The Philadelphia Health Management Corporation (PHMC) Infection Control Coordinator (ICC) and the Office of Supportive Housing (OSH) Assistant Director of Operations should be notified first of an outbreak (or suspected outbreak) of influenza within the shelter. PHMC's ICC can be reached via 215-341-1307. The ICC will notify the Philadelphia Department of Public Health (PDPH) Division of Disease Control (DDC) of the outbreak occurring in shelters. DDC will coordinate with the ICC about which infection control and isolation measures are appropriate for the outbreak. Additionally, DDC will facilitate laboratory testing if recommended.

Shelters without an affiliation with PHMC can notify the Division of Disease Control directly by calling 215-685-6741, Monday through Friday, 8:30 AM-5 PM and 215-686-4514 after hours. DDC staff will provide specific recommendations for disease management and guidance to interrupt the spread of disease in the shelter, and access to diagnostic testing for influenza, if needed. The shelter operator or a designated person should be available to communicate information about new cases and assist with efforts to control an outbreak.

Management of Flu Outbreaks in a Shelter

1. Shelter staff should report outbreaks to the OSH Assistant Director of Operations, the PHMC Infection Control Coordinator, and/or the Philadelphia Department of Public Health as described above. Assistance will be provided to shelters in terms of infection control recommendations and diagnostic testing.
2. Limit congregate activities when there are multiple cases of influenza in a shelter, including the use of playrooms. All group activities should be cancelled or postponed if possible.
3. Consider placing limits on entry and exit from the facility and postponement or restriction of activities involving visitors when residents are experiencing ILI. If new residents are accepted, they should be screened upon registration and intake for ILI.
4. Shelter administration should post signage in order to alert visitors, staff, and residents of the outbreak in the facility. Signage should highlight respiratory and hand hygiene, what precautions to take while in the facility, and if there are visiting restrictions.

Management of Contacts of Influenza

When there are cases of influenza (confirmed or suspected) among shelter residents, the shelter staff should work with the PHMC Infection Control Coordinator and DDC to identify new cases through active symptom screening, if possible. Newly identified persons who are at high risk for complications should be managed as outlined below.

The priority should be to prevent illness in those most susceptible to complications of influenza, including persons who are immunocompromised (e.g., living with HIV infection, undergoing treatment for cancer), persons who are pregnant, very young children, and the elderly.

1. Close contacts in a shelter situation will need to be identified on a case-by-case basis, in conjunction with DDC staff, but will likely include family members, others who share the same sleeping and living quarters, and bathrooms. In shelters where everyone shares communal eating areas, all residents and staff may be considered to be at risk for influenza.
2. High-risk contacts at risk for complications from the flu are candidates for prophylaxis with antiviral medications and should be referred to medical providers for that purpose. The following groups are considered to be in the high risk category:
 - People with chronic medical conditions
 - Children younger than 5, but especially children younger than 2 years old
 - Adults 65 years of age and older
 - Pregnant women and ≤ 2 weeks postpartum women
 - People who are immunocompromised
 - Morbidly obese persons (BMI > 40)

Admission/Transfer Recommendations for Shelters with Influenza Outbreaks

1. If an outbreak is recognized in the shelter, there should be an effort to limit new admissions to the shelter or transfers from the shelter to another shelter until at least one week has elapsed with no new cases and after the onset of symptoms in the most recent case. Persons should not be turned away from the shelter, however every precaution has to be made to separate and isolate sick individuals from healthy ones. If new residents are accepted, they should be screened upon registration and intake for ILI.
2. Residents with active flu symptoms should not transfer to other shelters until at least 24 hours after symptoms have resolved. Family members who have shared sleeping quarters are at high risk for infection themselves, and ideally should not transfer to other shelters while they might be incubating influenza. If a transfer to another facility or a hospitalization cannot be avoided, the receiving facility

should be notified of the resident's illness, and if it can be tolerated the resident should wear a surgical mask during transport.

Housekeeping and Environmental Measures

1. Make sure that bathrooms in all areas are in good condition and cleaned on a regular basis with cleaners and or disinfectant products in accordance with workplace safety and health protocols. Environmental staff should focus on cleaning commonly touched surfaces, such as door knobs, door handles, handrails, toys, and telephones, as well as removing communal dishes (e.g. candy dish).
2. Most disinfectants are effective against influenza virus. Information about effective products against viruses and bacteria can be found at www.epa.gov.
3. Laundry can be washed in a standard washing machine with detergent and hot water (at least 140°F). It is not necessary to separate soiled linen and laundry from ill individuals from that of other residents.
4. Consider using disposable cups, plates, and eating utensils for ill individuals. If your facility uses non disposable utensils and cups, they should be washed with soap and hot water or in a dishwasher.

References and Resources

- Refer to PDPH's website for updates on local influenza activity, posters, and additional information: <https://hip.phila.gov>
- Centers for Disease Control and Prevention: <http://www.cdc.gov/flu>
- Environmental Protection Agency Disinfectants: <https://www.epa.gov/pesticide-registration/antimicrobial-products-registered-use-against-h1n1-flu-and-other-influenza>
- U.S. Department of Health & Human Services: www.flu.gov