



Infection Control Guidance for the Prevention, Recognition and Management of Influenza in Healthcare Settings

2016-2017

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Background Information

This guidance summarizes recommendations that were issued by the Centers for Disease Control and Prevention (CDC), “Prevention Strategies for Seasonal Influenza in Healthcare Settings,” available at <http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>. This guidance applies to all persons (healthcare workers) in contact with patients and/or infectious material in a healthcare or home healthcare setting and may extend to laboratory personnel and those without direct patient care responsibilities.

The Philadelphia Department of Public Health (PDPH), Division of Disease Control conducts surveillance on all hospitalized and fatal cases of lab-confirmed influenza. Additionally, PDPH collects reports and investigates all pediatric deaths and institutional outbreaks due to influenza virus. Surveillance data, health advisories, and guidance documents for Philadelphia are posted at <https://hip.phila.gov/>.

Influenza Symptoms and Transmission

Symptoms of influenza include fever $\geq 100^{\circ}\text{F}$, cough, sore throat, runny or stuffy nose, body aches, headaches, chills, fatigue, nausea, diarrhea and vomiting. The incubation period averages 2 days. Severe complications of influenza include pneumonia, bronchitis, sinus or ear infections or death. Those over the age of 65 years or with underlying medical conditions are at increased risk for serious complications of influenza.

Virus shedding begins 24-hours prior to symptom onset and can persist for an average of 5 to 7 days after symptom onset. Children and immunocompromised persons may shed the virus for a longer period.

Influenza viruses are transmitted person to person through close contact. Influenza viruses can be transmitted through (1) droplets expelled during coughing or sneezing (approximately 6 feet), (2) contact with an infectious patient or contact with a contaminated object (fomite) followed by self-inoculation and (3) small particle aerosols in the vicinity of an infected person. All respiratory secretions and bodily fluids, including diarrheal stools, from an infected patient are considered potentially infectious.

Infection Control Recommendations

- ***Vaccination.*** Annual vaccination is the most important measure to prevent seasonal influenza infection. Vaccinating health care workers is important to minimize influenza transmission in healthcare settings. Influenza vaccine is recommended for anyone ≥ 6 months old, unless contraindicated.
 - Staff may be vaccinated with either inactivated influenza vaccine (flu shot) or live attenuated influenza vaccine (LAIV, nasal spray). LAIV is only recommended for staff younger than 50 years old who are not pregnant, and who are otherwise healthy with no underlying medical conditions. Staff members who receive LAIV should refrain from contact with severely immunosuppressed patients for 7 days after vaccination.
 - Healthcare settings should offer free vaccine at the workplace and strongly encourage staff be immunized. Require signed declination forms from employees who refuse vaccination. Additional strategies for developing and instituting an employee vaccination program are available from the CDC: <http://www.cdc.gov/flu/toolkit/long-term-care/strategies.htm>.
- ***Minimize Potential Sources of Exposure.***
 - Encourage hand hygiene, respiratory hygiene, and cough etiquette by posting signage and providing tissue and hand sanitizer/hand washing stations.
 - Promptly identify patients with respiratory illness and encourage them to sit separated (i.e., 3 to 6 feet) from other patients. Consider asking them to wear facemasks in waiting areas.
 - Post signage at entry to the facility that restricts ill visitors.

- Monitor and Manage Healthcare Workers with Influenza.
 - Instruct healthcare workers with fever and respiratory symptoms to not report to work and notify their supervisor and infection control personnel.
 - Exclude ill healthcare workers from patient care until they are fever free for 24 hours without the use of fever-reducing medication.
 - Advise healthcare workers at higher risk for complications from influenza (e.g., pregnant women, persons greater than 65 years old, and persons with certain chronic health conditions) to consult with their provider if they become ill with the symptoms of flu so they can receive early treatment. To the extent possible they should also avoid participating in high-risk exposure activities such as aerosol-generating procedures or caring for persons with suspect or confirmed flu.
 - Remind healthcare workers with cough and sneezing to practice hand hygiene and cough etiquette. A facemask should be worn during patient care activities. If symptoms are acute, the worker may need to be evaluated to determine appropriateness of patient contact.
 - Educate all healthcare workers on infectious disease prevention, including preventing influenza.
 - Consider temporary reassignment or exclusion of ill workers in areas with extremely immunocompromised patients or those in a protected environment. Employees in these settings should be excluded until 24 hours after fever resolution or for 7 days after the onset of symptoms, whichever is longer.

- Standard Precautions. All healthcare workers in every healthcare setting should adhere to standard precautions during the care of patients in order to prevent disease transmission.
 - Strict adherence to hand hygiene; hand hygiene is absolutely essential and must be performed before and after patient care.
 - Use of non-sterile gloves for any contact with potentially infectious material, followed by hand hygiene immediately after glove removal.
 - Respiratory/cough etiquette must be practiced at all times.
 - Use gowns and eye protection for activity that may generate splashes of respiratory secretions or other infectious material.

- Droplet Precautions. Implement droplet precautions for patients with suspected or confirmed influenza. Precautions should be followed for 7 days after illness onset or for 24 hours after the resolution of fever, whichever is longer.
 - Isolate patients in a private room or area.
 - Wear a facemask for all direct patient care activities. Alternative personal protective equipment may be used if it provides equivalent protection from splashes and sprays (e.g., face shields and N95 respirators).
 - Mask patients under droplet precautions, if possible, before transporting them outside of their room.

- Aerosol-Generating Procedures. Special precautions should be taken during aerosol-generating procedures with patients confirmed or suspected to have influenza. Precautions include limiting the number of healthcare workers in the room during procedures, conducting procedures in an airborne infection isolation room (AIIR), using a portable HEPA filter, following standard precautions, and wearing respiratory protection equipment equivalent to a N95 respirator. Clean all surfaces following the procedure.

- Environmental Infection Control. Routine cleaning and disinfection procedures can be used during influenza season in all healthcare settings.

- Communication with the Philadelphia Department of Public Health, Division of Disease Control. Healthcare settings in Philadelphia should contact PDPH when there is an outbreak or concerning level of

influenza activity in the facility. PDPH provides summaries of local influenza activity at <https://hip.phila.gov>.

Additional Resources

- Flu Information in Philadelphia for Healthcare Providers (PDPH): <https://hip.phila.gov>
- Information for Healthcare Providers on Influenza in Pennsylvania (PADOH): <http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/I-L/Pages/Influenza-Recommendations-for-Health-Care-FacilitiesEMS.aspx#.WAeOREbD8y9>
- Flu Clinical and Public Health Guidance (CDC): www.cdc.gov/flu
- Infection Control in Health Care Facilities (CDC)—*includes information on respirators and antiviral treatment*: www.cdc.gov/flu/professionals/infectioncontrol/index.htm
- Flu information (U.S. Department of Health and Human Services): www.Flu.gov
- CDC Influenza toolkit for Long-term Care Employers: <http://www.cdc.gov/flu/toolkit/long-term-care/index.htm>