PENNSYLVANIA DEPARTMENT OF HEALTH
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Increased Influenza Activity and Severe Illness Reported

DATE:	1/10/2017
TO:	Health Alert Network
FROM:	Karen M. Murphy, PhD, RN, Secretary of Health
SUBJECT:	Increased Influenza Activity and Severe Illness Reported
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	Statewide
COUNTY:	Statewide
MUNICIPALITY:	Statewide
ZIP CODE:	Statewide

This transmission is a "Health Advisory" that provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL.

EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE.

FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE.

LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE.

PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP.

Summary

Influenza transmission is increasing across the country and in Pennsylvania. The Pennsylvania Department of Health (PADOH) has determined influenza activity to be widespread for the last two weeks. PADOH has received reports of severe influenza illness and deaths due to influenza, particularly in the elderly, which is not unexpected during influenza season. Clinicians are reminded to treat suspected influenza in high-risk outpatients, those with progressive disease and all hospitalized patients with antiviral medications as soon as possible. Treatment should begin regardless of negative rapid influenza diagnostic test (RIDT) results and without waiting for RT-PCR testing results. Early antiviral treatment (within the first day or two) works best, but treatment may offer some benefit when started up to 4-5 days after symptom onset in hospitalized patients. Early antiviral treatment can reduce influenza morbidity and mortality.

Since October 2016, influenza A(H3N2) has been the predominant circulating influenza subtype. PADOH has also detected co-circulation of A(H1N1)pdm09 and influenza B viruses. Antigenic characterization by the Centers for Disease Control and Prevention (CDC) virology laboratory indicates that the four most common circulating influenza subtypes closely match the strains

included in this year's quadrivalent vaccine. Most patients with severe respiratory illness reported to PADOH this season have been unvaccinated. Clinicians should continue efforts to vaccinate patients this season for as long as influenza viruses are circulating, and promptly start antiviral treatment of severely ill and high-risk patients if influenza is suspected or confirmed.

Recommendations

1. Clinicians should encourage all patients who have not yet received an influenza vaccine this season to be vaccinated against influenza. This recommendation is for patients 6 months of age and older. There are several influenza vaccine options for the 2016-2017 influenza season (see https://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s_cid=rr6505a1_w), and all available vaccine formulations this season contain A(H3N2), A(H1N1)pdm09, and B virus strains. Live Attenuated Influenza Vaccine is not recommended for the current season.
2. Clinicians should encourage all persons with influenza-like illness who are at high risk for influenza complications to seek care promptly to determine if treatment with influenza antiviral medications is warranted.
3. Decisions about starting antiviral treatment should not wait for laboratory confirmation of influenza. Clinicians using RIDTs to inform treatment decisions should use caution in interpreting negative RIDT results. These tests, defined here as rapid antigen detection tests using immunoassays or immunofluorescence assays, have a high potential for false negative results. Antiviral treatment should not be withheld from patients with suspected influenza, even if they test negative by RIDT; initiation of empiric antiviral therapy, if warranted, should not be delayed.
4. CDC guidelines for influenza antiviral use during 2016-17 season are the same as during prior seasons (see http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm).
5. When indicated, antiviral treatment should be started as soon as possible after illness onset, ideally within 48 hours of symptom onset. Clinical benefit is greatest when antiviral treatment is administered early. However, antiviral treatment might still be beneficial in patients with severe, complicated, or progressive illness, and in hospitalized patients and in some outpatients when started after 48 hours of illness onset, as indicated by clinical and observational studies.
6. Treatment with an appropriate neuraminidase inhibitor antiviral drugs (oral oseltamivir, inhaled zanamivir, or intravenous peramivir) is recommended as early as possible for any patient with confirmed or suspected influenza who:
    a. Is hospitalized; or
    b. Has severe, complicated or progressive illness; or
    c. Is at higher risk for influenza complications. This list includes:
        i. Children aged younger than 2 years;
        ii. Adults aged 65 years and older;
        iii. Persons with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopment conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury);

iv. Persons with immunosuppression, including that caused by medications or by HIV infection;
v. Women who are pregnant or postpartum (within 2 weeks after delivery);
vi. Persons aged younger than 19 years who are receiving long-term aspirin therapy;
vii. American Indians/Alaska Natives;
viii. Persons who are morbidly obese (i.e., body-mass index is equal to or greater than 40); and
ix. Residents of nursing homes and other chronic-care facilities.

7. Antiviral treatment can also be considered for suspected or confirmed influenza in previously healthy, symptomatic outpatients not at high risk on the basis of clinical judgment, especially if treatment can be initiated within 48 hours of illness onset.
8. Clinical judgment, on the basis of the patient's disease severity and progression, age, underlying medical conditions, likelihood of influenza, and time since onset of symptoms, is important when making antiviral treatment decisions for outpatients.
9. While influenza vaccination is the best way to prevent influenza, a history of influenza vaccination does not rule out influenza virus infection in an ill patient with clinical signs and symptoms compatible with influenza. Vaccination status should not impede the initiation of prompt antiviral treatment.

Influenza Reporting Requirements to PA-DOH

PADOH requests that healthcare providers and/or infection prevention practitioners report the following cases to the health department for the 2016-2017 season:

- Hospitalized persons with laboratory-confirmed influenza (including positive rapid antigen tests)
- Persons admitted to the ICU with laboratory-confirmed influenza infections
- Fatal cases of laboratory-confirmed (including positive rapid tests) or suspected influenza.
- Suspect novel influenza A cases including those with: o Influenza A virus detected but not subtypeable
    - Influenza-like illness (ILI), which is defined as temperature ≥ 100°F and cough and/or sore throat without another known etiology and report either direct or indirect exposure to swine or live poultry or travel to an area with ongoing transmission of avian influenza within the week prior to symptom onset
- Institutional outbreaks of respiratory illness, including those occurring in long-term care, school, childcare center, or shelter. Outbreaks are defined as 1 laboratory-confirmed case or >2 cases of ILI in a facility.

Categories of Health Alert messages:
Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; no immediate action necessary.

This information is current as of January 10, 2017, but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.