*Philadelphia Department of Public Health*
**Division of Disease Control**

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# *Health Advisory*

## Increasing Influenza A Incidence

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### Surveillance Summary

The Philadelphia Department of Public Health (PDPH) conducts surveillance for respiratory viruses seasonally. Within the last week, local hospital laboratories have reported large increases of influenza A positive specimens. Despite the increase in influenza, RSV remains the most frequently identified respiratory pathogen (figure). The Pennsylvania Department of Health (PADOH) has also reported widespread influenza transmission across the state for the last two weeks. The vast majority of influenza isolates nationally and locally have been subtyped as A/H3. Antigenic characterization by the Centers for Disease Control and Prevention (CDC) virology laboratory indicates that the four most common circulating influenza strains A/H3N2 and 2009 H1N1, and both influenza B lineages, closely match the strains included in this year's quadrivalent vaccine.

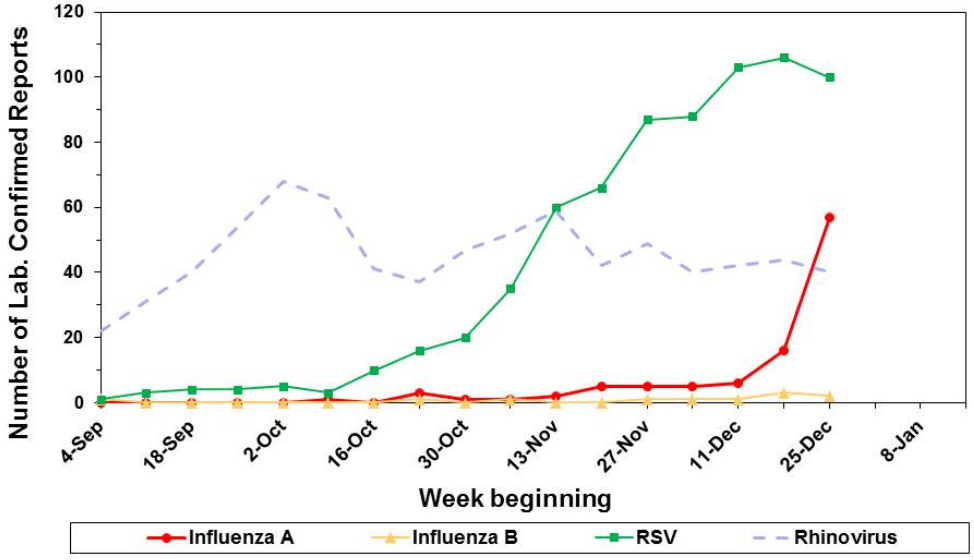
High levels of resistance to the adamantanes (amantadine and rimantadine) persist among influenza A (H1N1)pdm09 and influenza A (H3N2) viruses (the adamantanes are not effective against influenza B viruses). However, the majority of recently circulating influenza viruses are susceptible to the neuraminidase inhibitor antiviral medications, oseltamivir, zanamivir, and peramivir.

**Vaccination remains the optimal way to prevent influenza and influenza-related complications. It is not too late to recommend influenza vaccine for your patients.** Healthcare providers eligible for Vaccine for Children (VFC) influenza vaccine from PDPH can order additional vaccine throughout the season. Please visit https://kids.phila.gov/index.php/programs/vaccines-for-children/ for more information.

For additional surveillance data or to report institutional outbreaks of respiratory illness, severe or fatal influenza, please contact the Division of Disease Control at (215) 685-6740 or visit the Health Information Portal at https://hip.phila.gov. For additional information regarding influenza testing recommendations, treatment, and reporting requirements, please see the attached appendix.

**Weekly Laboratory-Based Respiratory Virus Surveillance: Philadelphia, 2016-2017 Season**

Based on data from select local hospital virology laboratories

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# Appendix

***Influenza Testing Recommendations***

Most patients with symptoms of respiratory virus infection do not require diagnostic testing for clinical management. Several commercial and hospital laboratories offer respiratory virus diagnostic testing in the form of rRT-PCR, viral culture, DFA, and IFA. Facilities without access to a commercial or clinical laboratory performing respiratory virus diagnostic testing may contact PDPH for assistance with testing.

- Diagnostic testing for influenza is encouraged for the following groups:
  - Hospitalized patients with suspected respiratory virus infection or unexplained respiratory failure
  - Patients who died of suspected respiratory virus infection or unexplained respiratory failure
  - Patients with symptoms that may indicate severe disease for influenza such as: respiratory distress, hypoxia, pneumonia, acute respiratory distress syndrome, neurologic symptoms, or atypical symptoms in a severely immunocompromised patient without known etiology
  - Cases of suspected antiviral resistance
  - Patients with ILI and exposure to swine, live poultry, or an area with ongoing avian influenza transmission in the week before symptom onset
- Specimens should be labeled appropriately, refrigerated (4°C) or placed on ice or cold packs prior to and during transport, and ideally tested within 72 hours of collection. Preferred respiratory specimens for diagnostic testing should be collected within the first three to four days of illness and include: Nasopharyngeal(NP)/Oropharyngeal (OP) swabs collected with a synthetic tip (e.g., nylon, Dacron, plastic, aluminum) and placed immediately into a sterile vial with viral transport media; Nasal aspirate or wash specimens; Endotracheal aspirate or bronchoalveolar lavage fluid; tissue samples from post-mortem proximal and distal trachea, right and left bronchi and right and left central lung.
- Rapid influenza diagnostic tests (RIDT) can be used to identify influenza but have sub-optimal sensitivity. A negative rapid test does not definitively rule out influenza.

**Influenza Treatment Recommendations**

Clinicians are encouraged to initiate early treatment of suspected or confirmed influenza with antiviral medications, oseltamivir (Tamiflu®), zanamivir (Relenza®), or peramivir (Rapivab®) in patients who:

- have severe or complicated illness, including hospitalization
- are at higher risk for influenza complications (e.g. persons with chronic or immunosuppressive medical conditions, those <2 or >65 years of age, pregnant and postpartum women, persons with a BMI ≥40, and those with neurologic or neurodevelopmental conditions)
- are suspected of having novel influenza A infection
- are residents of nursing homes and other chronic care facilities

- Antiviral treatment is most effective if initiated within 48 hours of illness onset, however, there may be some treatment benefit in patients with severe complicated illness even if started after 48 hours of illness.
- Most patients with influenza-like illness do not require diagnostic testing for clinical management. Antiviral treatment should not wait for laboratory confirmation of influenza since delayed treatment can affect efficacy and a negative rapid test result does not rule out influenza.
- Antiviral chemoprophylaxis should be used for prevention of influenza in institutional outbreaks and in persons who are at high risk for influenza complications and are unable to receive the flu vaccine

**Influenza & Non-Influenza Respiratory Virus Reporting Requirements**

PDPH 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, RSV, rhinovirus, adenovirus, parainfluenza, or human metapneumovirus infections
- *Fatal cases* of laboratory-confirmed (including positive rapid tests) or suspected influenza, RSV, rhinovirus, adenovirus, parainfluenza, and human metapneumovirus
- *Suspect novel influenza A cases* including those with:
  - 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.

**Cases should be reported to the Division of Disease Control (DDC) by phone at 215-685-6748 or by fax to 215-238-6947 using the attached influenza or other respiratory virus reporting forms. Fillable PDF versions of the influenza and other respiratory virus report forms can be found at https://hip.phila.gov**