PHILLY FLU FINDINGS

Philadelphia Department of Public Health
Seasonal Influenza Surveillance Report
MMWR Week 17: April 22—April 28, 2018

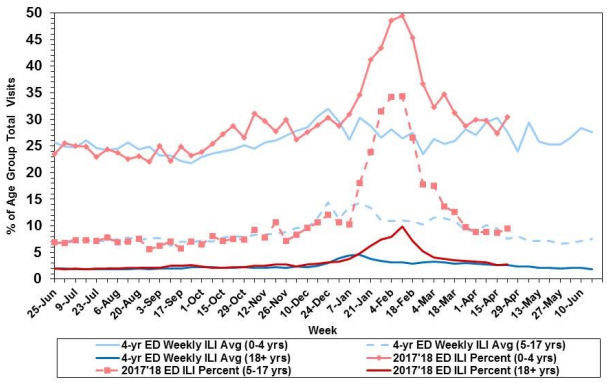
Philadelphia Influenza Activity

Please note these data are provisional and subject to change.

During week 17, febrile/flu-like illnesses at emergency departments increased across all age groups. Sentinel hospital laboratory surveillance for influenza A and B also demonstrated slight increases for both virus types. Despite the increases, the activity being seen currently is typical for this time of year. There were 7 reports of severe influenza (Philadelphia resident, positive by rapid test, PCR or culture, and hospitalized for ≥ 24 hrs.) during this time frame, of which 4 (57.1%) hospitalizations were due to influenza A. One influenza associated death was reported during week 17 and the total number of influenza associated deaths so far this season is 48, including one pediatric case. There were no influenza outbreaks (≥ 1 case of laboratory confirmed influenza) reported in a long term care facility during week 17.

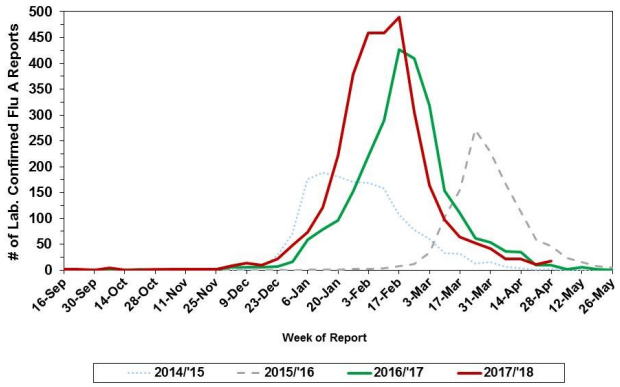
Febrile/Flu-like Illnesses at Philadelphia Emergency Departments, 2017-18 Data Compared to 4-Year Historical Weekly* Averages

**Age group specific weekly average of values from the years 2013 - 2016*



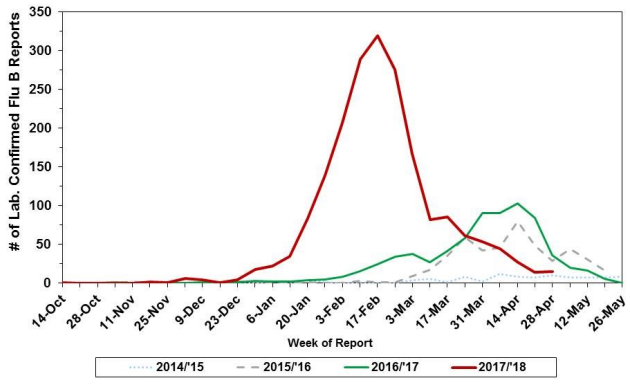
Laboratory-Based Surveillance for Influenza A Philadelphia, 2014/2015 through 2017/2018 Seasons*

**Based on select hospital laboratories participating in surveillance across respiratory virus seasons*



Laboratory-Based Surveillance for Influenza B Philadelphia, 2014/2015 through 2017/2018 Seasons*

**Based on select hospital laboratories participating in surveillance across respiratory virus seasons*



Pennsylvania

The Pennsylvania Department of Health (PADOH) has reported "local" influenza activity, which is defined by CDC as outbreaks of influenza or increases in influenza like illness and recent laboratory-confirmed influenza in a single region of the state. Laboratory, hospital emergency department, and sentinel medical provider data indicate flu activity continues to decrease, however influenza B has been identified in up to 68% of the reported confirmed cases during week 17. The overall influenza activity has peaked at week 6 (week ending 2/10/2018). From 10/1/17 to 4/28/18, there have been 119,187 reports of influenza (positive by rapid test, PCR, or culture). The majority of influenza throughout the state has been identified as influenza A (78,933 reports, 66.2%). There have been 248 influenza related deaths reported this season, including six pediatric deaths, with one death identified during week 17.

United States

Influenza activity continued to decrease in the U.S. during week 17. Widespread activity was reported in three states (NY, MA, CT), while seven states, Puerto Rico and Guam reported regional activity. Local activity was reported by 24 states and sporadic activity was reported by the District of Columbia and 14 states. Two states reported no influenza activity.
The percentage of respiratory specimens that tested positive for influenza decreased during week 17. Specifically, 12,794 specimens were tested at US clinical laboratories, and 948 (7.4%) specimens tested positive for influenza. Of those positive, 319 (33.6%) specimens tested positive for influenza A and 629 (66.4%) specimens tested positive for influenza B. Among the 135 positive influenza specimens received by public health laboratories for confirmatory testing and subtyping, 39 (28.9%) were influenza A and 96 (71.1%) were influenza B. Of the influenza A specimens, 15 (38.5%) were subtyped as H3N2 and 21 (53.8%) were subtyped as A(H1N1)pmd09.
During October 1, 2017-April 28, 2018, CDC has antigenically or genetically characterized 2,942 influenza viruses [736 influenza A(H1N1)pdm09, 1,225 influenza A(H3N2), and 981 influenza B viruses] collected by U.S. laboratories. The majority of influenza A viruses collected were antigenically similar to the cell-grown reference viruses representing the 2017-2018 Northern Hemisphere influenza vaccine viruses, although some genetic diversity exists for the H3N2 viruses. In a smaller sample tested, the majority of influenza B viruses were antigenically similar to the vaccine strain, although a majority (75.6%) of the influenza B Victoria viruses contained a 6-nucleotide deletion. Sporadic instances of oseltamivir resistant and peramivir resistant influenza A(H1N1)pdm09 has been identified. A total of 163 influenza-associated pediatric deaths have been identified nationally this season, three during week 17.
Two novel infections of influenza A (1 H3N2v and 1 H1N1v) were identified this season in persons who reported direct contact with swine. No human to human transmission has been identified.

All institutional outbreaks and hospitalized and fatal cases of influenza are to be reported to PDPH.
Phone: (215) 685-6742 Fax: (215) 238-6947 Email: ACD@phila.gov Reporting requirements and forms are posted online at hip.phila.gov