National Center for Immunization & Respiratory Diseases

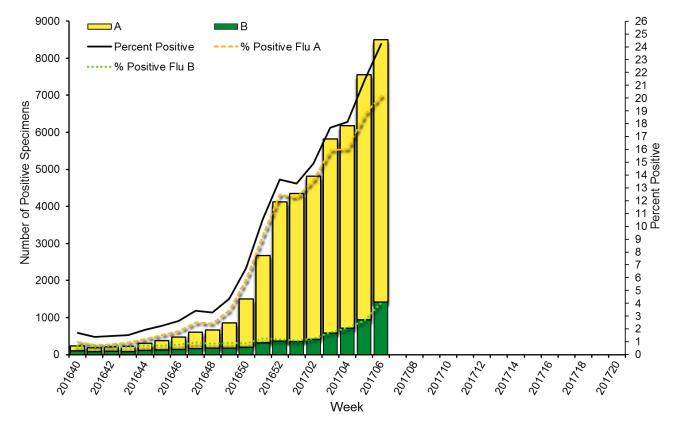


Influenza Surveillance Update

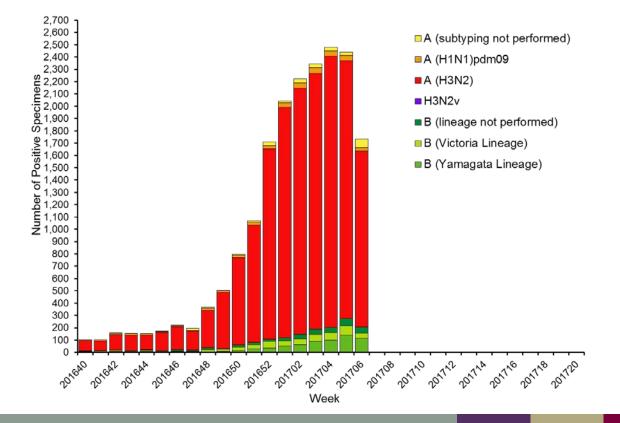
Lynnette Brammer, MPH

Advisory Committee on Immunization Practices February 22, 2017

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, 2016-2017 Season



Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, 2016-2017 Season



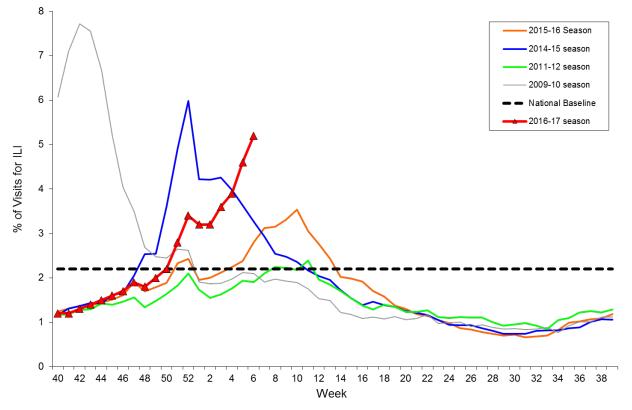
Submitted to CDC by U.S. Public Health Laboratories, Influenza Positive Specimens Cumulative, 2016-2017 season Reported by U.S. Public Health Influenza A (H3) Influenza A (H1pdm09) Laboratories, Cumulative, 3C.3a 2016-2017 season 26 4% 533 288___678 365 414 3C.2a 6B.1 567 126 96% 100% Influenza B Victoria Influenza B Yamagata 16687 Influenza A (H3) Influenza A (H1pdm09) Y3 V1A □ Influenza A (subtype unknown) 130 121 Influenza B Victoria 100% 100% Influenza B Yamagata ■ Influenza B (lineage not determined)

Sequence Results, by Genetic Group, of Specimens

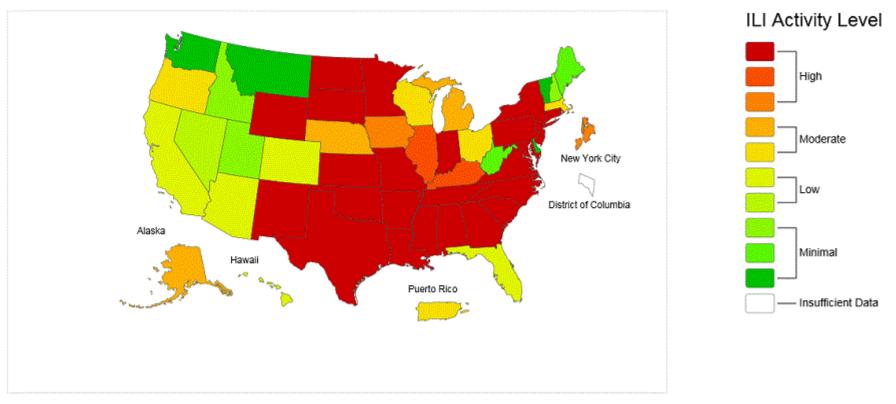
Antigenic Characterization of U.S. Influenza Viruses Collected October 1, 2016 to Present

- A (H1N1)pdm09: all 74 viruses antigenically characterized using ferret post-infection antisera are A/California/07/2009-like, the H1N1 component of the 2016-17 vaccine
- A(H3N2): 311 of 322 (96.6%) were antigenically characterized as A/Hong Kong/4801/2014-like, the H3N2 component of the 2016-17 vaccine
- B/Victoria linage: 71 of 78 (91%) were antigenically characterized as B/Brisbane/60/2008-like, which is included in both quadrivalent and trivalent influenza vaccines for the 2016-17 season
- B/Yamagata lineage: All 67 were antigenically characterized as B/Phuket/3073/2013-like, an influenza B virus included in the quadrivalent influenza vaccines for the 2016-17 season

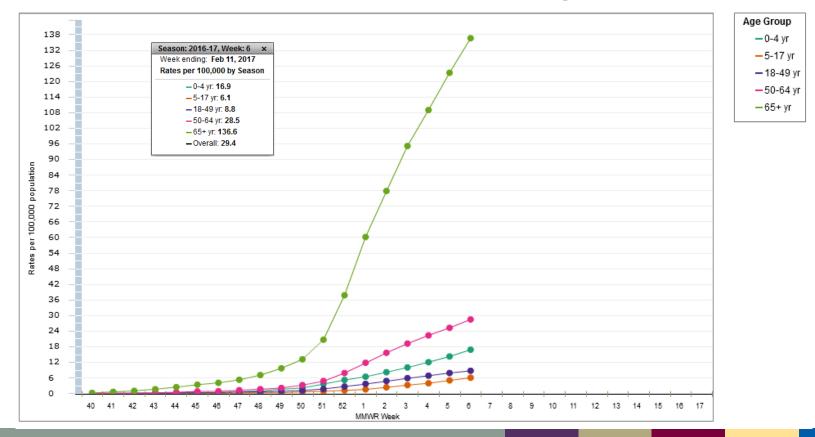
Percentage of Visits for Influenza-like Illness (ILI), 2016-2017 and Selected Previous Seasons



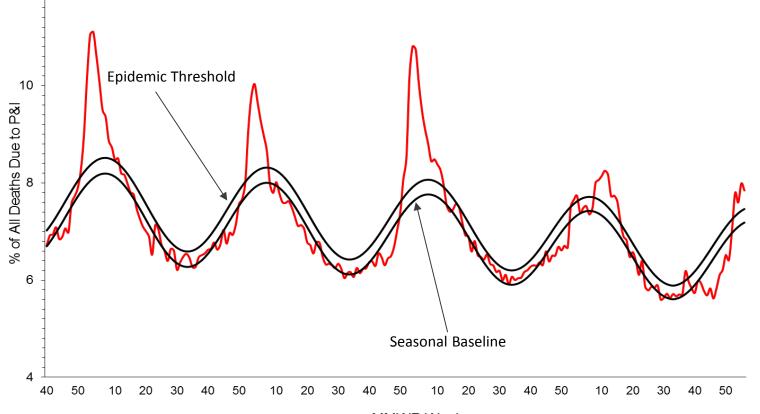
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2016-17 Influenza Season Week 6 ending Feb 11, 2017



Laboratory-Confirmed Influenza Hospitalizations Cumulative October 1, 2016 – February 11, 2017



Pneumonia and Influenza Mortality NCHS Mortality Surveillance System, September 30, 2012 – January 28, 2017



MMWR Week

Vaccine Virus Selection for 2017-18

- WHO Consultation on the Composition of Influenza Virus Vaccines for Use in the 2017-2018 Northern Hemisphere Influenza Season - February 27 – March 2
- March 9, 2017: Vaccines and Related Biological Products Committee Meeting

Summary

- Influenza A(H3N2) viruses have predominated during the 2016-17 season
 - Influenza B activity may be starting to increase
- So far, influenza activity has been moderate but may not have peaked yet
- The circulating stains are similar to those contained in the 2016-17 vaccine
- Vaccine virus recommendations for the 2017-18 influenza season will be made in the next 2 weeks

For more information, contact CDC 1-800-CDC-INFO (232-4636) TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

