Influenza Surveillance Update

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Advisory Committee on Immunization Practices
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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
Influenza Positive Specimens Reported by U.S. Public Health Laboratories, Cumulative, 2016-2017 season

Sequence Results, by Genetic Group, of Specimens Submitted to CDC by U.S. Public Health Laboratories, Cumulative, 2016-2017 season

- **Influenza A (H3)**: 16687
  - 3C.2a: 567 (96%)
  - 3C.3a: 26 (4%)
- **Influenza A (H1pdm09)**: 6B.1: 126 (100%)
- **Influenza B Victoria**: V1A: 121 (100%)
- **Influenza B Yamagata**: Y3: 130 (100%)

Legend:
- Red: Influenza A (H3)
- Orange: Influenza A (H1pdm09)
- Yellow: Influenza A (subtype unknown)
- Green: Influenza B Victoria
- Dark Green: Influenza B Yamagata
- Gray: Influenza B (lineage not determined)
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 lineage: 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

ILI Activity Level
- Red: High
- Orange: Moderate
- Yellow: Low
- Green: Minimal
- Light Green: Insufficient Data

Map showing the distribution of ILI activity levels across the United States for the week ending February 11, 2017.
Laboratory-Confirmed Influenza Hospitalizations
Cumulative October 1, 2016 – February 11, 2017
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
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.