END OF SEASON INFLUENZA REPORT
SACRAMENTO COUNTY 2016-2017
Disease Week 40 (10/2/2016) to Disease Week 20 (5/20/2017)

This end of season influenza report provides preliminary surveillance data on influenza activity in Sacramento County for the 2016-2017 influenza season.

SACRAMENTO COUNTY

Figure 1. Percent of ILI Visits at Sentinel Provider Sites, 2016-2017 Influenza Season

SACRAMENTO COUNTY PUBLIC HEALTH LABORATORY

Most of the influenza tests performed by the Sacramento County Public Health Laboratory (SCPHL) were done between Week 49 and Week 5, with a peak during Week 1. Using polymerase chain reaction (PCR), 16 (88.9%) patients tested positive for influenza A (H3) and two (11.1%) tested positive for influenza B/Yamagata as of Week 20. Four influenza A outbreaks were also confirmed by PCR.

A total of 18 patients tested positive for influenza by PCR at SCPHL during the 2016-2017 influenza season. This is twice the number that tested positive compared to the 2015-2016 season but less than a third compared to the 2014-2015 season.

Note: The number of influenza tests processed at SCPHL vary each season. Data excludes tests performed at commercial labs.

Figure 2. Number of Influenza Detections by Type and Subtype at SCPHL, 2016-2017 Influenza Season

Figure 3. Number of Influenza Detections at SCPHL (2014-2017)

*The 2014-2015 season has a Week 53. Data have been shifted so that Week 1 aligns across all years.

SENTINEL PROVIDERS

Sacramento County is receiving reports from two sentinel providers this influenza season. Sentinel Provider 1 (SP1) began seeing patients for influenza-like illness (ILI) during Week 44, with a peak at Week 50 with 3.0% of total patients seen for ILI. Sentinel Provider 2 (SP2) began seeing patients for ILI during Week 41, with a peak at Week 2 with 1.7% of total patients seen for ILI. Patients seen for ILI declined in April for both SP1 and SP2.
Sacramento County Public Health (SCPH) received reports of influenza-associated intensive care unit (ICU) admissions among those less than 65 years of age from Week 49 through Week 14, with the highest incidence during Week 3. A total of 49 ICU admissions and six deaths associated with influenza were confirmed among those less than 65 years of age during the 2016-2017 influenza season, with patients 50-64 years of age accounting for the highest percent of ICU admissions (57.1%) and deaths (83.3%). Note: Number of influenza-associated deaths may have been influenced by increased case finding.

Figure 4. Incidence of Influenza-Associated ICU Hospitalizations among Persons <65 Years of Age (2014-2017)

As of Week 20,
- The overall influenza activity in California is "local."
- A total of 20,559 (16.5%) specimens have tested positive for influenza. Of these, 18,838 (91.6%) are influenza A [4,244 (22.5%) H3, 161 (0.9%) 2009 H1, 14,433 (76.6%) not subtyped] and 1,721 (8.4%) are influenza B.
- A total of 95 reports of laboratory-confirmed influenza-associated deaths among patients <65 years of age have been reported.
- A total of 275 laboratory-confirmed influenza outbreaks have been reported.

Nationally, influenza A (H3) was the predominant influenza virus subtype this season.

For the 2016-2017 influenza season,
- CDC recommended the use of the flu shot (inactivated influenza vaccine or IIV) and the recombinant influenza vaccine (RIV). The nasal spray flu vaccine (live attenuated influenza vaccine or LAIV) was not available this season.
- The trivalent vaccine contained A/California/7/2009 (H1N1)pdm09-like virus, A/Hong Kong/4801/2014 (H3N2)-like virus, and B/Brisbane/60/2008-like virus (B/Victoria lineage). The quadrivalent vaccine contained an additional B/Phuket/3073/2013-like virus (B/Yamagata lineage).
- Interim estimates (released February 2017) indicated that overall the vaccine was 48% effective, specifically 43% effective against influenza A (H3N2) and 73% effective against influenza B.

For more information about the California Sentinel Provider Program, contact the Immunization Branch:
- by phone at (510) 620-3737
- by email at InfluenzaSurveillance@cdph.ca.gov
- via website at https://www.cdph.ca.gov/programs/dcdc/Pages/CaliforniaSentinelProviderProgram.aspx