The purpose of the weekly *Influenza Watch* is to summarize current influenza surveillance in San Diego County. *Please note that reported weekly data are preliminary and may change due to delayed submissions and additional laboratory results.*

**Current Week 7 (ending 2/18/2017)**

- 418 new influenza detections reported: *Elevated*
- 5% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 5 influenza-related deaths reported this week
- 7% of deaths registered with pneumonia and/or influenza: *Expected level*

**Current Season Summary**

- 3,786 Total Cases
- 79 ICU Cases
- 49 Deaths
- 30 Outbreaks

**Virus Characteristics**

- Influenza A: 82.9%
- Influenza A (H1N1)pdm09: 0.0%
- Influenza A (H3) Seasonal: 1.5%
- Influenza B: 5.6%
- Influenza B/Victoria: 0.0%
- Influenza A/B: 9.6%

### Table 1. Influenza Surveillance Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY 2016-17*</th>
<th>FY 2015-16</th>
<th>Prior 3-Year Average**</th>
</tr>
</thead>
<tbody>
<tr>
<td>All influenza detections reported (rapid or PCR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Week 7*</td>
<td>418</td>
<td>901</td>
<td>489</td>
</tr>
<tr>
<td>* Week 6*</td>
<td>594</td>
<td>2,840</td>
<td>4,294</td>
</tr>
<tr>
<td>* FYTD*</td>
<td>3,786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of emergency department visits for ILI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Week 7*</td>
<td>5%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>* Week 6*</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of deaths registered with pneumonia and/or influenza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Week 7*</td>
<td>7%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Number of influenza-related deaths reported^</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Week 7*</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>* Week 6*</td>
<td>49</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>* FYTD*</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* FYTD=Fiscal Year To Date (FY is July 1 - June 30, Weeks 27-26). Total deaths reported in prior years: 68 in 2015-16, 97 in 2014-15, and 70 in 2013-14.

* Previous weeks case counts or percentages may change due to delayed processing or reporting.

** Includes FYs 2013-14, 2014-15, and 2015-16.

^ Current FY deaths are shown by week of report; by week of death for prior FYs.
Influenza Vaccine Effectiveness Data Released

On February 16, 2017, the Centers for Disease Control and Prevention (CDC) released interim influenza vaccine effectiveness (VE) estimates suggesting that this year's vaccine protects roughly half of recipients. These numbers are similar to a report released the same day in Europe.

According to new data published in *Morbidity and Mortality Weekly Report (MMWR)*, the overall estimated vaccine effectiveness (VE) of the 2016-17 seasonal influenza vaccine for preventing laboratory-confirmed influenza virus infection was 48%.

The CDC data came from 3,144 children and adults with acute respiratory illness enrolled at five study sites (outpatient clinics) from November 28, 2016, to February 4, 2017. VE was 43% against the predominant influenza A (H3N2) virus and 73% against illness caused by influenza B virus. Influenza A caused 88% of the cases studied, which mirrors the current national and local trends.

Reports from European outpatient clinics and hospitals showed a low to moderate vaccine performance so far this season. In the February 16, 2017 issue of *Eurosurveillance*, researchers across several countries found that VE for this year’s seasonal vaccine against influenza A(H3N2) was 44.1%, 46.9%, and 23.4% among those in the 0-to-14, 15-to-64, and 65-and-older age groups, respectively. They also calculated a VE of 25.7% in an influenza vaccination target group, such as older people or those with underlying health conditions.

The preliminary VE data for this season’s influenza vaccine are very similar to previous A(H3N2)-dominant seasons when the circulating strains match the vaccine components, such as 2012-13. With national and local influenza activity currently remaining high, anyone over 6 months of age who has not yet been vaccinated this season should get a flu shot as soon as possible. The *San Diego Immunization Program website* lists some locations in the county where vaccine is currently available.

To learn more about the recent VE reports, use the following links:

Interim Estimates of 2016–17 Seasonal Influenza Vaccine Effectiveness — United States, February 2017

Early 2016/17 Vaccine Effectiveness Estimates against Influenza A(H3N2): I-MOVE Multicentre Case Control Studies at Primary Care and Hospital Levels in Europe.

### Table 2. Influenza Detections Reported, FY 2016-17*

<table>
<thead>
<tr>
<th>Positive Test Type/Subtype</th>
<th>Week 7</th>
<th>Total To-Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A†</td>
<td>338</td>
<td>3,138</td>
</tr>
<tr>
<td>Influenza A(H1N1) Pandemic 2009</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Influenza A (H3) Seasonal</td>
<td>41</td>
<td>364</td>
</tr>
<tr>
<td>Influenza B†</td>
<td>31</td>
<td>213</td>
</tr>
<tr>
<td>Influenza B/Victoria</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Influenza B/Yamagata</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza A/B†</td>
<td>7</td>
<td>57</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>418</td>
<td>3,786</td>
</tr>
</tbody>
</table>

* FY is July 1 - June 30.
† No further characterization performed, or results were not yet available at time of publication.

Note: Totals may change due to further laboratory findings.
Figure 1. Percent of Emergency Department Visits for Influenza-like Illness by Week and FY

Figure 2. San Diego County Influenza Detections by Type and Week of Report, 2016-17 (N=3,786)
Figure 3. Percent of Reported Influenza Cases by Age Group and Season, 2011-12 to 2016-17 YTD

Figure 4. Cumulative Influenza Case Reports by Week & Season
Figure 5. Percent of San Diego County Emergency Department visits for influenza-like illness by week and FY compared to 5-year baseline & upper 95% threshold values (Serfling method).

Figure 6. Percent of San Diego County deaths registered with pneumonia and/or influenza by week and FY compared to prior 5-year baseline & upper 95% threshold values (Serfling method).
Figure 7. Influenza Deaths by Type, and Season

- Influenza A/B, Type Unknown
- Influenza B
- Pandemic H1N1
- Influenza A/H3
- Influenza A, No Subtype

Figure 8. Influenza Deaths by Age and Season

- <1 yr
- 1-17
- 18-34
- 35-64
- 65+

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Week 7
Ending 2/18/2017
Influenza Reporting in San Diego County

Local providers are encouraged to report laboratory positive influenza detections to the County Epidemiology Program by FAX (858) 715-6458. Please fax a Case Report Form and/or a printed laboratory result, and indicate if the patient was admitted to ICU or died, and/or is a resident of a congregate living facility.

For questions regarding sending specimens to Public Health Laboratory (PHL), call (619) 692-8500. Click here for the updated PHL PCR Test Request Form. Contact the Epidemiology Program with any questions at (619) 692-8499 or by email to: EpiDiv.HHSA@sdcounty.ca.gov.

Resources
San Diego County Influenza Surveillance Weekly Slide Deck - presentation version of this report
County of San Diego Immunization Program www.sdiz.org
California Department of Public Health Influenza
Centers for Disease Control and Prevention Influenza Surveillance Weekly Report