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 4 (ending 1/27/2018)
- 601 new influenza detections reported: **Elevated level**
- 6% influenza-like-illness (ILI) among emergency department visits: **Expected level**
- 32 new influenza-related deaths reported this week
- 8 new ICU cases reported this week
- 15% of deaths registered with pneumonia and/or influenza: **Elevated level**

### Virus Characteristics

<table>
<thead>
<tr>
<th>Virus Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td>77.6%</td>
</tr>
<tr>
<td>Influenza A (H1N1)pdm09</td>
<td>0.3%</td>
</tr>
<tr>
<td>Influenza A (H3) Seasonal</td>
<td>0.9%</td>
</tr>
<tr>
<td>Influenza B</td>
<td>0.2%</td>
</tr>
<tr>
<td>Influenza B/Yamagata</td>
<td>0.1%</td>
</tr>
<tr>
<td>Influenza B/Victoria</td>
<td>2.7%</td>
</tr>
<tr>
<td>Influenza A/B</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

### Table 1. Influenza Surveillance Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY 2017-18*</th>
<th>FY 2016-17</th>
<th>Prior 3-Year Average**</th>
</tr>
</thead>
<tbody>
<tr>
<td>All influenza detections reported (rapid or PCR)</td>
<td>Week 4</td>
<td>Week 3</td>
<td>FYTD#</td>
</tr>
<tr>
<td></td>
<td>601</td>
<td>1,168</td>
<td>14,289</td>
</tr>
<tr>
<td>Percent of emergency department visits for ILI</td>
<td>6%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Percent of deaths registered with pneumonia and/or influenza</td>
<td>15%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>Number of influenza-related deaths reported^</td>
<td>32</td>
<td>32</td>
<td>206</td>
</tr>
</tbody>
</table>

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* FYTD = Fiscal Year To Date (FY is July 1 - June 30, Weeks 27-26). Total deaths reported in prior years: 87 in 2016-17, 68 in 2015-16, and 97 in 2014-15.
* Previous weeks case counts or percentages may change due to delayed processing or reporting.
^ Current FY deaths are shown by week of report; by week of death for prior FYs.
Influenza Linked to Myocardial Infarction

Evidence of an association between influenza and acute myocardial infarction (AMI) was reinforced in a new study published last week in the *New England Journal of Medicine* (NEJM). Canadian researchers compared databases of respiratory virus tests with those of hospital admissions in Ontario and found that the risk of AMI increases six-fold during the first seven days after a lab-confirmed flu diagnosis in adults 35 and older.

The researchers noted that the AMI risk may be higher for older adults, those sick with influenza B, and people experiencing their first AMI. The team indicated that there is stronger evidence that flu can trigger cardiac events. These findings may drive more efforts to elevate vaccine coverage in people who are at risk for AMI. This supports a study published last year that estimated the efficacy of influenza vaccine, in preventing AMI, ranges from 15% to 45%. This is a similar range of efficacy compared with the accepted routine coronary prevention measures, such as smoking cessation (32–43%), statins (19–30%) and antihypertensive therapy (17–25%).

Influenza vaccine should be considered an integral part of cardiovascular disease management and prevention. The NEJM study can be found here: [Acute Myocardial Infarction after Laboratory-Confirmed Influenza Infection](NEJM).
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, 2017-18 FYTD (N=14,289)
Figure 3. Percent of Reported Influenza Cases by Age Group and Season, 2011-12 to 2017-18 FYTD

Figure 4. Cumulative Influenza Case Reports by Episode 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

- Both Influenza A and Influenza B
- 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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Influenza Watch

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