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 42 (ending 10/22/2016)**
- 7 new influenza detections reported: Expected level
- 4% influenza-like-illness (ILI) among emergency department visits: Expected level
- 0 influenza-related deaths reported this week
- 5% of deaths registered with pneumonia and/or influenza: Expected level

**Current Season Summary**
- 86 Total Cases
- 2 ICU Cases
- 1 Death
- 1 Outbreak

**Virus Characteristics**
- 62% Influenza B
- 22% Influenza B/Yamagata
- 12% Influenza B/Victoria
- 2% Influenza A
- 2% Influenza A (H3) Seasonal
- 1% Influenza A (H1N1)pdm09

**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></td>
<td>Week 42</td>
<td>Week 41</td>
<td>FYTD³</td>
</tr>
<tr>
<td>All influenza detections reported (rapid or PCR)</td>
<td>7</td>
<td>13</td>
<td>86</td>
</tr>
<tr>
<td>Percent of emergency department visits for ILI</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Percent of deaths registered with pneumonia and/or influenza</td>
<td>5%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Number of influenza-related deaths reported⁴</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

* FYTD³=Fiscal Year To Date (FY is July 1- June 30, Weeks 27-28). 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.
* Current FY deaths are shown by week of report; by week of death for prior FYs.
Influenza and Parotitis

During the 2014-2015 influenza season, several hundred cases of confirmed influenza infection with parotitis were reported to the Centers for Disease Control and Prevention (CDC). Before 2014, only about a dozen such cases had been reported in the scientific literature.

Parotitis after influenza infection occurs in people of all ages, but is most common in school-aged children and in males. Parotitis appears to occur more often after infection with influenza A (H3N2) viruses than other strains of influenza. Among patients who had parotitis with influenza during the 2014-2015 influenza season, more than 80% had one respiratory symptom or more (cough, sore throat, or runny nose); most had mild illness. There is no evidence of increased severity of illness and no deaths have been reported in patients with influenza-associated parotitis.

CDC issued an update to providers on October 20, 2016 indicating that a case of influenza A (H3N2) infection with parotitis has been reported this year. If influenza A (H3N2) viruses predominate this season, more cases of influenza with parotitis may occur. CDC recommended that clinicians evaluating patients with acute parotitis should include influenza in the differential diagnosis and consider testing these patients for influenza viruses, even in the absence of respiratory symptoms.

Because mumps cases have been recently reported on three college and university campuses in San Diego County, clinicians should test local patients with acute parotitis for mumps, regardless of MMR vaccination status, and contact the San Diego County Epidemiology Program to report the case by calling 619-692-8499, or by faxing a confidential morbidity report to 858-715-6458.

The best way to test for mumps virus infection is with a properly collected buccal swab and blood tests (see Mumps Laboratory Testing Guidance). The best way to test for influenza is with a nasopharyngeal or oropharyngeal swab (see Influenza Specimen Collection). Note that a buccal swab is not an approved specimen for influenza diagnostic testing.

Influenza antiviral treatment is not recommended solely because a patient has influenza-associated parotitis, but it may be warranted for other reasons (see CDC Influenza Antiviral Treatment Guidelines).

CDC is monitoring this situation and will provide updates as more information becomes available. More information about influenza and parotitis is available at Influenza & Parotitis: Question & Answers for Health Care Providers.

The recent health advisory on mumps cases in San Diego County can be found at CAHAN Update #2 - Mumps at Colleges and Universities.

---

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

<table>
<thead>
<tr>
<th>Positive Test Type/Subtype</th>
<th>Week 42</th>
<th>Total To-Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A†</td>
<td>2</td>
<td>53</td>
</tr>
<tr>
<td>Influenza A(H1N1) Pandemic 2009</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Influenza A (H3) Seasonal</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Influenza B†</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Influenza B/Victoria</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza B/Yamagata</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Influenza A/B†</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>86</strong></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=86)
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

Figure 8. Influenza Deaths by Age and Season
**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**
- County of San Diego Immunization Program [www.sdiz.org](http://www.sdiz.org)
- California Department of Public Health [Influenza](https://www.cdph.ca.gov)