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 1/28/2017)**

- 283 new influenza detections reported: *Elevated*
- 4% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 12 influenza-related deaths reported this week
- 8% of deaths registered with pneumonia and/or influenza: *Expected level*

**Virus Characteristics**

- 83.3% Influenza A
- 0.5% Influenza A (H1N1)pdm09
- 9.0% Influenza A (H3) Seasonal
- 5.5% Influenza B
- 1.7% Influenza A/B

**Current Season Summary**

- 2,399 Total Cases
- 52 ICU Cases
- 33 Deaths
- 15 Outbreaks

**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 4</td>
<td>Week 3</td>
<td>FYTD#</td>
</tr>
<tr>
<td>All influenza detections reported (rapid or PCR)</td>
<td>283</td>
<td>326</td>
<td>2,399</td>
</tr>
<tr>
<td>Percent of emergency department visits for ILI</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Percent of deaths registered with pneumonia and/or influenza</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Number of influenza-related deaths reported^</td>
<td>12</td>
<td>7</td>
<td>33</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.
Avian Influenza Notices Issued

Two recent health notices reinforce the importance of obtaining a travel history and an animal exposure history in individuals who present for care with respiratory illness.

On January 26, 2017, the World Health Organization (WHO) called for heightened vigilance to prevent and detect potential human cases of avian influenza as it continues to spread in birds across Europe. WHO noted that in the past 6 months, at least 24 European countries have reported outbreaks of highly pathogenic avian influenza (HPAI) A(H5N8) virus in wild birds and domestic poultry. Outbreaks have also been reported in countries in Africa, Asia and the Middle East. No human cases of this strain have been reported, and risk for transmission from birds to humans is low. Nonetheless, WHO stated that "similar influenza subtypes have caused human disease in the past, [so] the possibility of transmission cannot be excluded."

On January 27, 2017, the Centers for Disease Control and Prevention (CDC) issued a travel notice about new human cases of avian influenza A H7N9 in China. The notice came the day after the Hong Kong Centre for Health Protection reported that mainland China has recorded 229 human cases since November 2016. There are no recommendations against travel to China, but CDC advised those going there to "avoid contact with poultry (including poultry markets and farms), birds, and their droppings and to avoid eating undercooked poultry." CDC also advised clinicians to consider H7N9 infection in travelers who present with respiratory illness within 10 days of returning from China. Travel to China may have recently increased with the celebrations of the Lunar New Year on January 28.

Patients with suspected novel or avian influenza should be reported immediately to the County Epidemiology Program at 619-692-8499 to coordinate testing and case/contact investigation.

CDC is currently updating some avian influenza guidance documents, which will be posted as they are finalized at this webpage: Avian Influenza: Information for Health Professionals and Laboratorians. Where only avian H7N9 guidance is available, it is appropriate to use avian H7N9 guidance to address other avian influenza infections in people. CDC also provides guidance at a glance for clinicians evaluating and managing patients exposed to birds infected with avian influenza viruses of public health concern.

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

<table>
<thead>
<tr>
<th>Positive Test Type/Subtype</th>
<th>Week 4</th>
<th>Total To-Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A†</td>
<td>243</td>
<td>1,999</td>
</tr>
<tr>
<td>Influenza A(H1N1) Pandemic 2009</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Influenza A (H3) Seasonal</td>
<td>17</td>
<td>217</td>
</tr>
<tr>
<td>Influenza B†</td>
<td>16</td>
<td>131</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>7</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>283</td>
<td>2,399</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=2,399)
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 (Excluding 2009-10)
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+

Epidemiology and Immunization Services Branch
(619) 692-8499  EpiDiv.HHSA@sdcounty.ca.gov
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