For week 43, overall influenza activity in California remained “sporadic”.

**Influenza Highlights (Week 43)**

- In week 43, CDPH received no reports of cases of laboratory-confirmed influenza that were admitted to the ICU or died.
- Reports of influenza-like illness (ILI) from sentinel providers and the percentage of Kaiser Permanente hospitalizations for pneumonia and influenza (P&I) remained low. The ILI activity this week in California was “minimal”.
- The proportion of specimens tested by the Respiratory Laboratory Network (RLN) and the Sentinel Laboratories that were positive for respiratory syncytial virus (RSV) increased.
- Among 41 specimens tested by PCR statewide by the RLN, six were positive for influenza A and one for influenza B.
- As of October 30, 2010, no antiviral resistance testing has been performed by the Viral and Rickettsial Disease Laboratory (VRDL)

**A. Laboratory-confirmed case reports**

This week, CDPH received no reports of cases of laboratory-confirmed influenza that was either admitted to the ICU or died. From October 1-30, 2010, CDPH has received one report of a laboratory-confirmed influenza B in an adult.

**B. Syndrome Surveillance**

1. **CDC Influenza Sentinel Providers**

Sentinel providers report the number of outpatient visits for ILI and the total number of visits per week. These data are reported weekly as a percentage of total visits due to ILI. The ILI case definition is fever ≥ 100°F (37.8°C), oral or equivalent, AND cough and/or sore throat (in the absence of a known cause other than influenza).

ILI decreased slightly in Week 43 (October 24-30, 2010) compared to the previous week (Figure 1). A total of 80 sentinel providers reported in Week 43

*Sporadic is defined by the Centers for Disease Control and Prevention (CDC) as “small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of influenza-like-illness (ILI)*
C. Laboratory Update

1. Respiratory Laboratory Network (RLN) Influenza PCR Surveillance Results

The Respiratory Laboratory Network is composed of 23 local public health laboratories that offer PCR testing for influenza A and B and testing using the R-mix shell vial culture system to identify five other common respiratory viruses (RSV, adenovirus, parainfluenza virus type 1-3)

During Week 43 (October 24-30, 2010), of 41 specimens tested by the RLN three (7%) were positive for influenza, including influenza A/H3 (2) and A/2009 H1N1 (1).
Table 1. Respiratory Laboratory Network (RLN) Influenza PCR Surveillance Results from Selected Laboratories\(^d\), Week 43 (October 24-30, 2010)

<table>
<thead>
<tr>
<th>California RLN Region</th>
<th>Total Flu tested (PCR)</th>
<th>Flu A Number (%)(^a)</th>
<th>H1 Number (%)(^b)</th>
<th>H3 Number (%)(^b)</th>
<th>2009 H1N1 (confirmed or probable) Number (%)(^b)</th>
<th>Flu B Number (%)(^a)</th>
<th>Total R-mix tested</th>
<th>RSV Number (%)(^c)</th>
<th>Other Respiratory Viruses Number (%)(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total RLN(^d)</td>
<td>41</td>
<td>3 (7)</td>
<td>0 (0)</td>
<td>2 (67)</td>
<td>1 (33)</td>
<td>0 (0)</td>
<td>25</td>
<td>0 (0)</td>
<td>2 (8)</td>
</tr>
<tr>
<td>Northern</td>
<td>15</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Central</td>
<td>5</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>10</td>
<td>0 (0)</td>
<td>2 (20)(^e)</td>
</tr>
<tr>
<td>Southern</td>
<td>21</td>
<td>3 (14)</td>
<td>0 (0)</td>
<td>2 (67)</td>
<td>1 (33)</td>
<td>0 (0)</td>
<td>15</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

\(^a\) Percent of "Total flu tested (PCR)"
\(^b\) Percent of positive "Flu A"
\(^c\) Percent of "Total R-mix tested"
\(^d\) Northern CA: Contra Costa, El Dorado, San Mateo, Santa Clara, Shasta
   Central CA: Fresno, Tulare
   Southern CA: Long Beach, Los Angeles, Riverside, San Diego, San Luis Obispo
\(^e\) parainfluenza type 2 (1); adenovirus (1)

2. Sentinel Laboratory Positive Results Data

Sentinel laboratories are a network of clinical, commercial, academic and hospital laboratories located throughout California that provide weekly data on the number of laboratory-confirmed influenza and other respiratory virus detections and isolations.

Table 2 shows positive influenza and other virus results in the past week (October 24-30, 2010) from sentinel laboratories. Of the 440 tested for influenza, 3 (1%) were positive for influenza A and 1 (0.2%) was positive for influenza B. The other most frequently detected virus was RSV.
Table 2. Influenza and other respiratory virus detections from 8 Sentinel Laboratories for Week 43, October 24-30, 2010.

<table>
<thead>
<tr>
<th>Virus Strains</th>
<th>Number (%) and Total Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A</td>
<td>3 (1%)&lt;sup&gt;a&lt;/sup&gt; Total tested week 43: 440</td>
</tr>
<tr>
<td>Influenza B</td>
<td>1 (0.2%)&lt;sup&gt;b&lt;/sup&gt; Total tested week 43: 440</td>
</tr>
<tr>
<td>RSV</td>
<td>24 (7%)&lt;sup&gt;c&lt;/sup&gt; Total tested week 43: 361</td>
</tr>
<tr>
<td>Other Respiratory Viruses</td>
<td>17 (9%)&lt;sup&gt;d&lt;/sup&gt; Total tested week 43: 199</td>
</tr>
</tbody>
</table>

<sup>a</sup> Alameda (1); San Francisco (1); Santa Clara (1)
<sup>b</sup> Los Angeles (1)
<sup>c</sup> Alameda (5); Contra Costa (1); Fresno (3); Imperial (1); Los Angeles (3); Orange (1); San Francisco (3); San Joaquin (1); San Mateo (1); Santa Clara (1); Sonoma (1); Stanislaus (2); Tulare (1)
<sup>d</sup> parainfluenza type 2 (7); rhinovirus (7); parainfluenza type 3 (2); parainfluenza type 1 (1)

Figures 2 and 3 summarize the combined laboratory data from both the RLN and the Sentinel Laboratories.

Figure 2 shows that detections of influenza decreased during Week 43 (October 24-30, 2010). Of all the samples tested, 1% was influenza A; no influenza B was detected. Figure 3 shows that RSV increased during Week 43.
Figure 2. Influenza detections at Sentinel Laboratories/Respiratory Laboratory Network, 2007-2011.
Figure 3. RSV detections at Sentinel Laboratories/Respiratory Laboratory Network, 2006-2011.