

## California Influenza and Other Respiratory Disease Surveillance for Week 5 (January 29-February 4, 2012)

Note: This report includes data from many different sources of influenza surveillance, including syndromic surveillance, laboratory surveillance, and mandatory reporting of influenza deaths for cases ages 0-64 years. The information contained in this report should be viewed as a “snapshot” of influenza activity for each surveillance week, and should not be considered as population-based data or representative of all California public health jurisdictions.

**In Week 5, the geographic distribution of influenza in California was upgraded to “widespread\*.”**

### Influenza Report Highlights

- Outpatient influenza-like illness (ILI) remained low in Week 5 (2.5%).
- Of 1889 specimens tested during Week 5,
  - 270 (14.3%) were positive for influenza; of these
    - 26 (9.6%) were influenza B and
    - 244 (90.4%) were influenza A.
      - 38 (15.6%) were subtyped as seasonal A (H3),
      - 17 (7.0%) were subtyped as 2009 A (H1), and
      - 189 (77.5%) were not subtyped.
- No resistance to neuraminidase inhibitors has been identified in 28 influenza isolates tested during the 2011-2012 influenza season.
- Twenty-seven specimens from California residents have been strain-typed this season; all but four influenza B strains match the 2011-12 influenza vaccine.
- Two laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 5.
- No suspected or confirmed influenza A (H3N2)v [variant influenza A (H3N2), formerly called swine-origin triple reassortant A (H3N2)] have been detected in California.

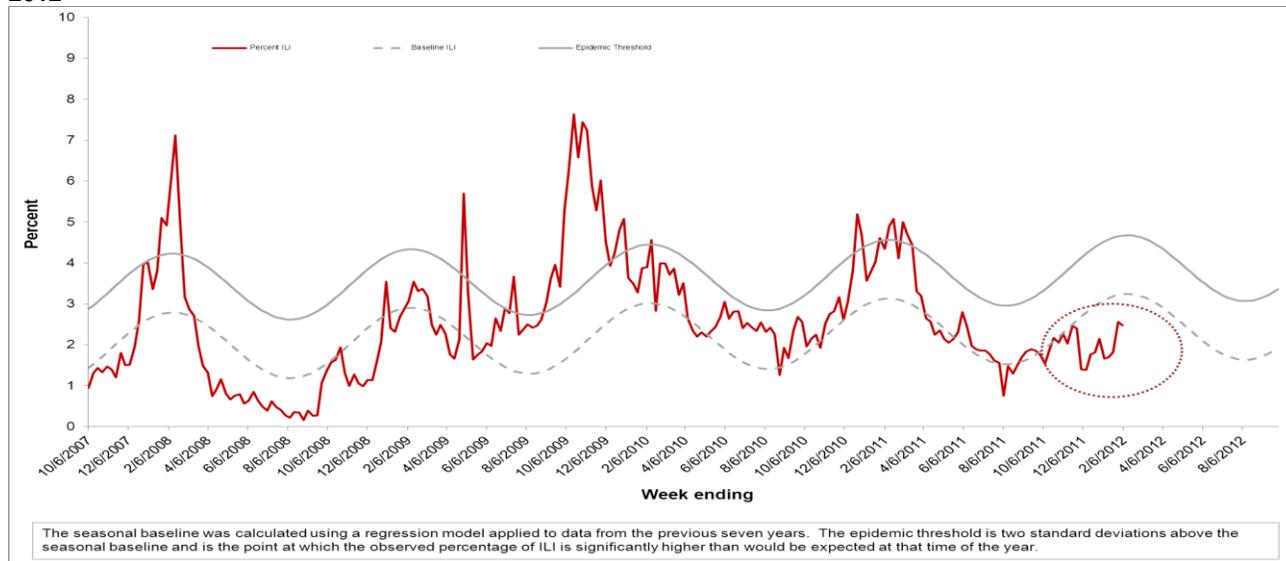
\*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

### A. Syndromic Surveillance Update

#### 1. CDC Influenza Sentinel Providers

A total of 84 (42.4%) out of 198 enrolled sentinel providers have reported data for Week 5. Based on available data, the percentage of ILI visits for Week 5 (2.5%) remained below baseline (Figure 1).

**Figure 1. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2007–2012**



## 2. Kaiser Permanente Hospitalization Data (“Flu Admissions”)

The percentage of Kaiser Permanente hospitalizations for pneumonia and influenza in Northern California increased in Week 5 (7.2%) compared to Week 4 (6.0%).

### B. Laboratory Update

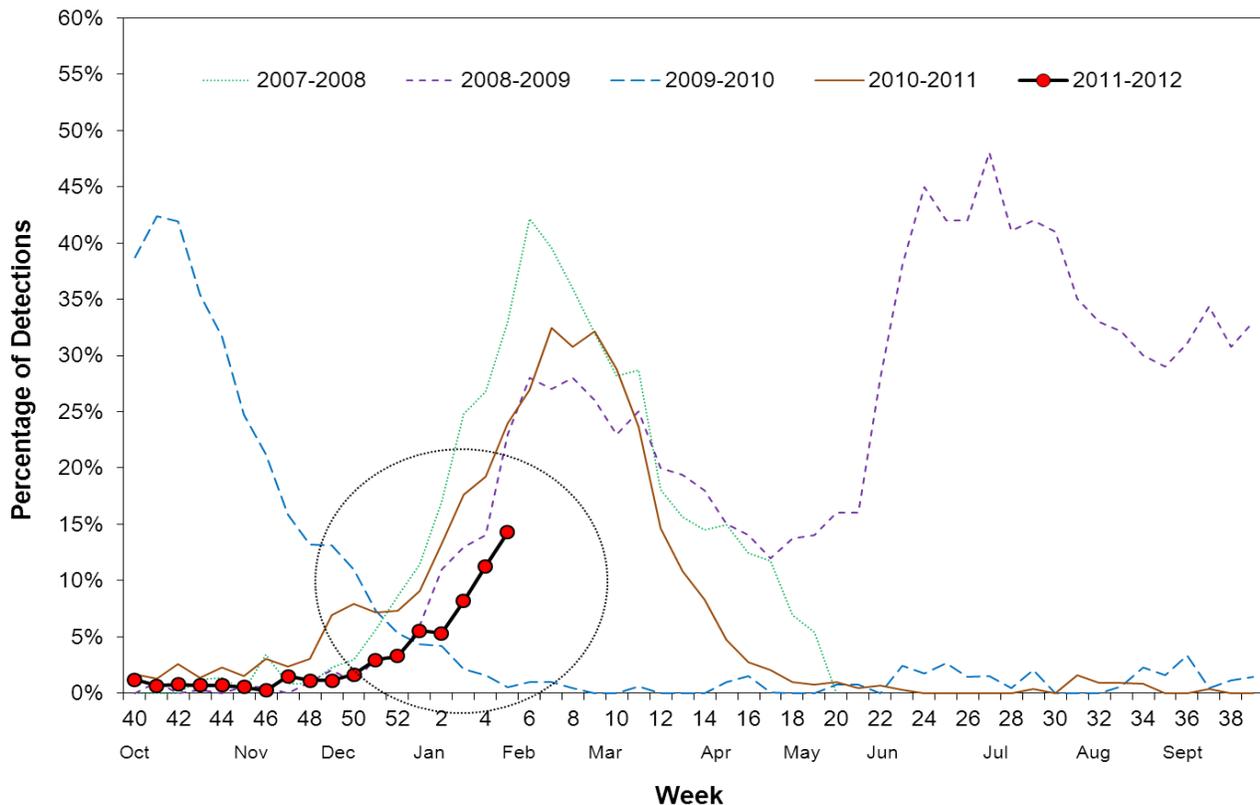
#### 1. Respiratory Laboratory Network (RLN) and Sentinel Laboratory Surveillance Results

The percentage of influenza detections in the RLN and sentinel laboratories continued an upward trend, with an increase of 3.0% in Week 5 (14.3%) compared to Week 4 (11.3%), (Figure 2). Of 1889 specimens tested by the RLN and sentinel laboratories, 26 (1.4%) were positive for influenza B and 244 (12.9%) were positive for influenza A. Of the 244 specimens that tested positive for influenza A, 38 (15.6%) were subtyped as seasonal A (H3), 17 (7.0%) were subtyped as 2009 A (H1), and 189 (77.5%) were not subtyped. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 20,290 specimens tested, 935 (4.6%) were positive for influenza; of these, 119 (12.7%) were influenza B and 816 (87.3%) were influenza A. Of the 816 specimens that tested positive for influenza A, 183 (22.4%) were subtyped as seasonal A (H3), 70 (8.6%) were subtyped as 2009 A (H1), and 563 (69.0%) had no further subtyping performed.

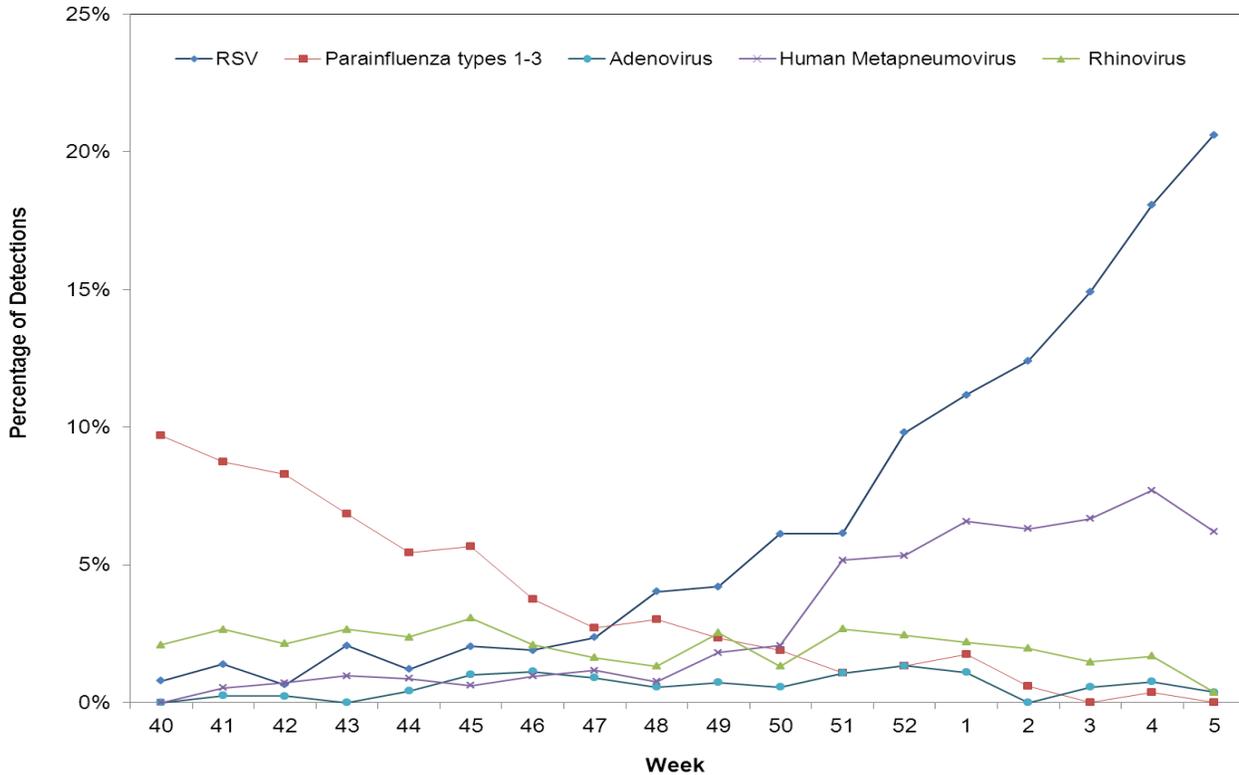
Neither the RLN nor California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH-VRDL) have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of the influenza A (H3N2)v infection.

**Figure 2. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2012**



The proportion of respiratory syncytial virus (RSV) detections continued to increase in Week 5 (20.6%, compared to 18.1% in Week 4). The proportion of human metapneumovirus (hMPV) detections decreased in Week 5 (6.2%) compared to Week 4 (7.7%), (Figure 3).

**Figure 3. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-4 (October 2, 2011 – February 4, 2011)**



**2. Antiviral Resistance Testing (AVR)**

CDPH-VRDL has tested 28 influenza specimens to date during the 2011-2012 influenza season; all have been sensitive to neuraminidase inhibitors (Table 1).

**Table 1. Number of specimens tested for antiviral resistance**

	Neuraminidase Inhibitors Resistance
Influenza A (2009 H1N1)	0/9
Influenza A (H3N2)	0/19

**3. Influenza Virus Strain Characterization**

Twenty-seven California specimens have been strain-typed to date during the 2011-2012 influenza season; all but four matched with components of the 2011-2012 vaccine for the Northern Hemisphere (Table 2).

**Table 2. Influenza virus antigenic characterization for the 2011-12 season**

	Total (N=27)
<b>Influenza A</b>	<b>18</b>
A/Perth/16/2009-like (H3N2)*	17
A/California/07/2009-like (H1N1)*	1
<b>Influenza B</b>	<b>9</b>
B/Brisbane/60/2008-like*	5
B/Wisconsin/01/2010-like	4

\*Matches components of the 2011-12 Northern Hemisphere influenza vaccine

### **C. Laboratory-confirmed Fatal Case Reports**

CDPH received two reports of influenza-associated deaths in adults; one each in the 30-49 and 50-64 year age groups. To date during the 2011-2012 influenza season, CDPH has received five reports of influenza-associated deaths, including one child in the 10-14 year age group, three adults in the 30-49 year age group and one in the 50-64 year age group.

### **D. Influenza-associated Outbreaks**

CDPH received two reports of laboratory-confirmed influenza outbreaks in the southern California region. One was at a skilled nursing facility and it was associated with influenza A and the other was at a state prison and was associated with A (2009 H1N1).

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For questions regarding influenza surveillance and reporting in California, please email [InfluenzaSurveillance@cdph.ca.gov](mailto:InfluenzaSurveillance@cdph.ca.gov). This account is monitored daily by several epidemiologists.

For more information regarding the different influenza surveillance data sources, please visit the CDPH Influenza Surveillance Program at <http://www.cdph.ca.gov/programs/dcdc/Pages/CaliforniaInfluenzaSurveillanceProject.aspx>.

To obtain additional information regarding influenza, please visit the CDPH influenza website at [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).

A copy of the case report form for reporting any laboratory-confirmed influenza case that was either admitted to the ICU or died can be downloaded from [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx).