

Weekly Update



California Department of Public Health Influenza Surveillance Program

California Influenza and Other Respiratory Disease Surveillance for Week 44 (October 27, 2013 to November 2, 2013)

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.

Overall influenza activity in California during Week 44 was “sporadic*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) increased in Week 44 (1.1%) compared to Week 43 (0.8%).
- Of 705 specimens tested during Week 44,
 - 12 (1.8%) were positive for influenza virus; of these
 - 2 (16.7%) were influenza B and
 - 10 (83.3%) were influenza A
 - 1 (10.0%) were subtyped as seasonal A (H3)
 - 6 (60.0%) were subtyped as 2009 A (H1)
 - 3 (30.0%) were not subtyped
- The California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH-VRDL) tested two 2009 A (H1) influenza isolates for antiviral resistance to date. Both specimens were sensitive to neuraminidase inhibitors.
- The Centers for Disease Control and Prevention (CDC) has not strain-typed any California specimens to date.
- No influenza-associated deaths were reported during Week 44.
- No cases of novel influenza have been detected in California to date.

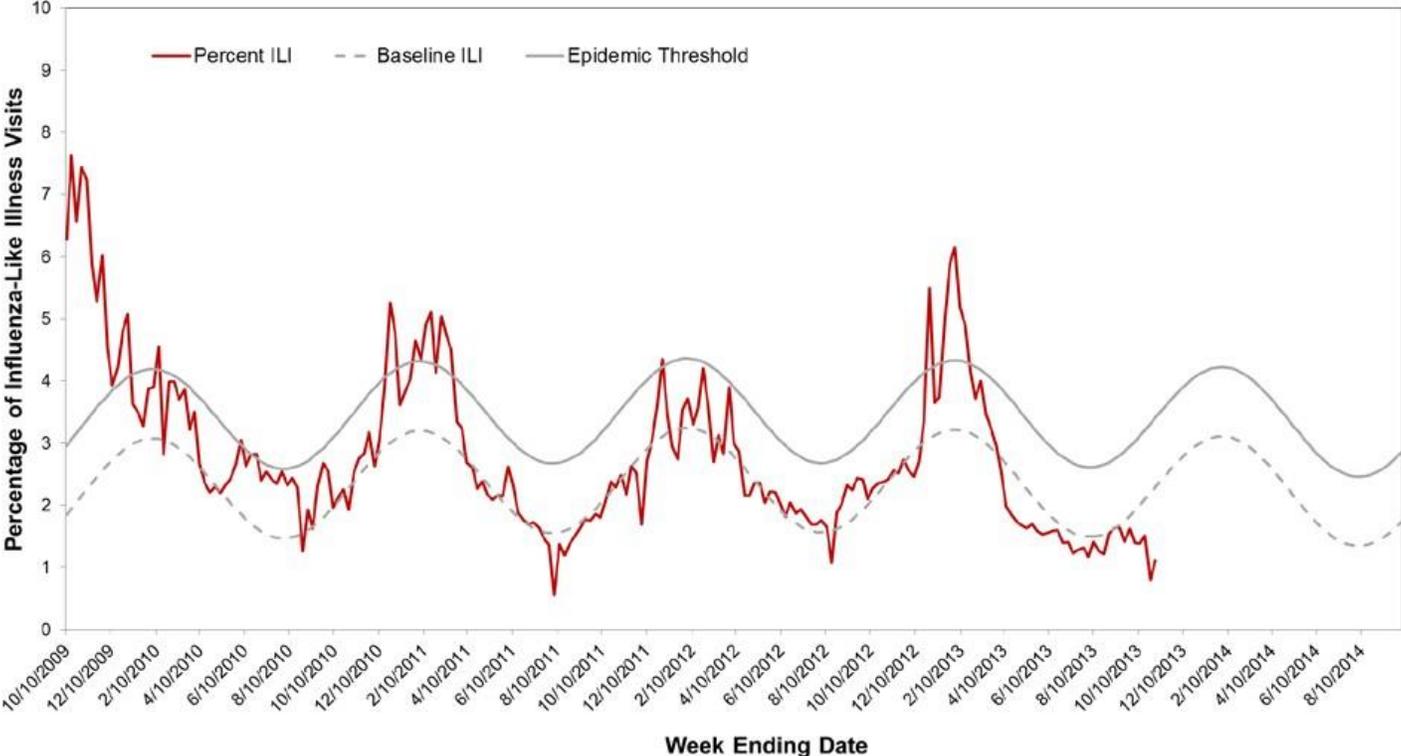
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to the [CDC Influenza page](http://www.cdc.gov/flu/weekly/overview.htm) (<http://www.cdc.gov/flu/weekly/overview.htm>).

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 77 enrolled sentinel providers have reported data for Week 44, compared to an average of 112 providers reporting for each of the previous weeks. Based on available data, the percentage of visits for ILI in Week 44 (1.1%) was below the epidemic threshold (3.4%) (Figure 1). Data from a sentinel provider with a large patient population has not been submitted at this time. However, inclusion of this data is not expected to change our assessment of influenza activity in California.

Figure 1. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2009–2014

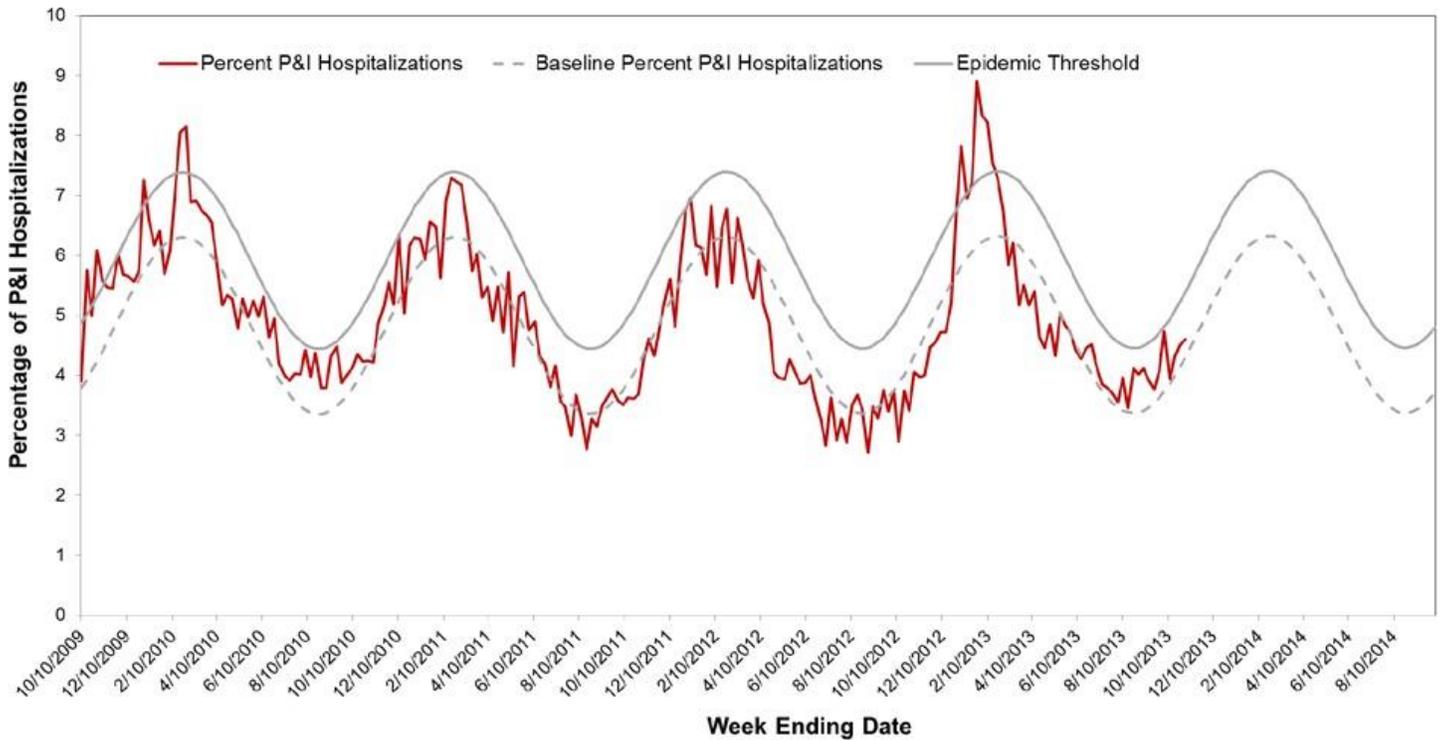


The seasonal baseline was calculated using a regression model applied to data from the previous eight years. The epidemic threshold is two standard deviations above the seasonal baseline and is the point at which the observed percentage of ILI is significantly higher than would be expected at that time of the year.

2. Kaiser Permanente Hospitalization Data

The percentage of hospitalizations for pneumonia and influenza (P&I) in Kaiser Permanente facilities in northern and southern California increased during Week 44 (4.6%), compared to Week 43 (4.5%) (Figure 2). The percentage was below the epidemic threshold (5.4%) during Week 44.

Figure 2. Percentage of P&I Hospitalizations in Kaiser Permanente Northern and Southern California Hospitals, 2009–2014



The seasonal baseline was calculated using a regression model applied to data from the previous six years. The epidemic threshold is two standard deviations above the seasonal baseline and is the point at which the observed percentage of pneumonia and influenza hospitalizations in Kaiser Permanente hospitals in northern California is significantly higher than would be expected at that time of the year.

B. Laboratory Update

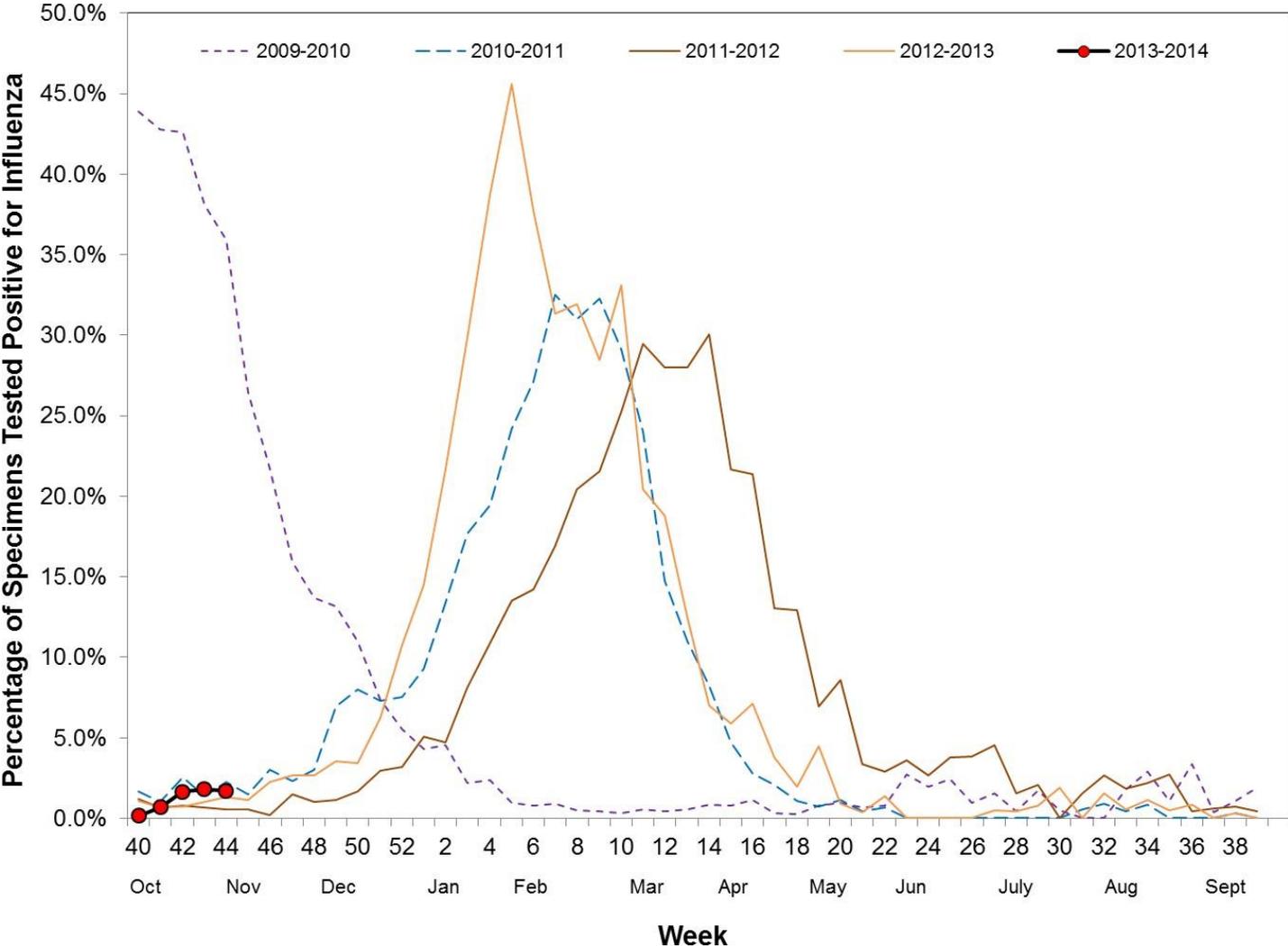
1. Respiratory Laboratory Network (RLN) and Sentinel Laboratory Surveillance Results

The percentage of influenza detections in the RLN and sentinel laboratories decreased in Week 44 (1.7%, compared to 1.8% in Week 43) (Figure 3). In Week 44, of 705 specimens tested by the RLN and sentinel laboratories, 2 (0.3%) were positive for influenza B and 10 (1.4%) were positive for influenza A. Of the 10 specimens that tested positive for influenza A, 1 (10.0%) were subtyped as seasonal A (H3), 6 (60.0%) were subtyped as 2009 A (H1), and 3 (30.0%) had no further subtyping performed.

To date for the 2013–2014 season, of 3,502 specimens tested, 43 (1.2%) were positive for influenza; of these, 5 (11.6%) were influenza B and 38 (88.4%) were influenza A. Of the 38 specimens that tested positive for influenza A, 9 (23.7%) were subtyped as seasonal A (H3), 14 (36.8%) were subtyped as 2009 A (H1), and 15 (39.5%) had no further subtyping performed. Positive specimens have been detected throughout the state.

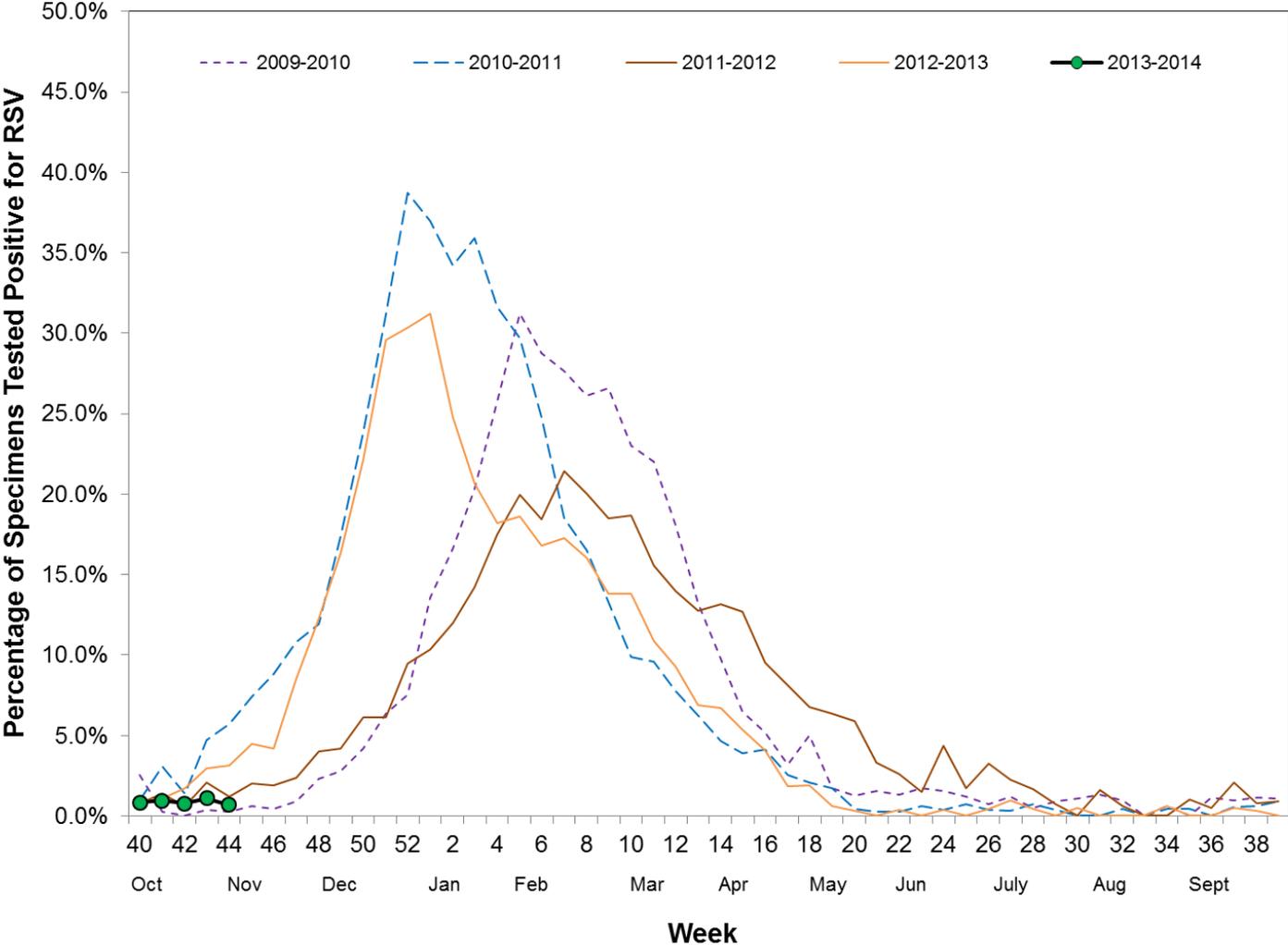
Neither the RLN nor CDPH-VRDL have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of a novel influenza virus.

Figure 3. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2009–2014



Respiratory syncytial virus (RSV) detections decreased in Week 44 (0.7% compared to 1.1% in Week 43) (Figure 4).

Figure 4. Percentage of RSV Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2009–2014



2. Antiviral Resistance Testing

The CDPH-VRDL has tested two 2009 A (H1) specimens for antiviral resistance to date during the 2013–2014 influenza season. Both specimens were sensitive to neuraminidase inhibitors.

3. Influenza Virus Strain Characterization

No California specimens have been strain-typed to date during the 2013–2014 influenza season.

C. Laboratory-confirmed Fatal Case Reports

Currently, as mandated under Section 2500 of the California Code of Regulations, deaths among patients aged 0–64 years with laboratory-confirmed influenza are reportable to CDPH.

In Week 44, no laboratory-confirmed influenza deaths were reported. To date, one laboratory-

confirmed influenza death from Southern California has been reported for the 2013-2014 season.

D. Influenza-associated Outbreaks

CDPH has received no reports of laboratory-confirmed influenza outbreaks to date during the 2013–2014 influenza season.

For questions regarding influenza surveillance and reporting in California, please email 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](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Flu-Reports.aspx) at <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Flu-Reports.aspx>

To obtain additional information regarding influenza, please visit the [CDPH influenza website](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.aspx) at <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.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 the [Severe Influenza Case History Form Link](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph9070.pdf) at <https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph9070.pdf>.