

Weekly Update



California Department of Public Health Influenza Surveillance Program

California Influenza and Other Respiratory Disease Surveillance for Week 49 (December 2–December 8, 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.

Based on low levels of influenza-like illness and laboratory detections, overall influenza activity in California during Week 49 remained “sporadic*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) increased 0.2 percentage points in Week 49 (2.8%) compared to Week 48 (2.6%).
- Of 969 specimens tested during Week 49,
 - 36 (3.7%) were positive for influenza virus; of these
 - 12 (33.3%) were influenza B and
 - 24 (66.7%) were influenza A.
 - 10 (41.7%) were subtyped as seasonal A (H3)
 - 1 (4.2%) was subtyped as 2009 A (H1N1)
 - 13 (54.2%) were not subtyped
- The California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH-VRDL) has not tested any specimens for antiviral resistance to date.
- The Centers for Disease Control and Prevention (CDC) has not strain-typed any California specimens to date.
- CDPH has received one report of an influenza-associated death in a person less than 65 years of age to date.
- No cases of novel influenza have been detected in California to date.

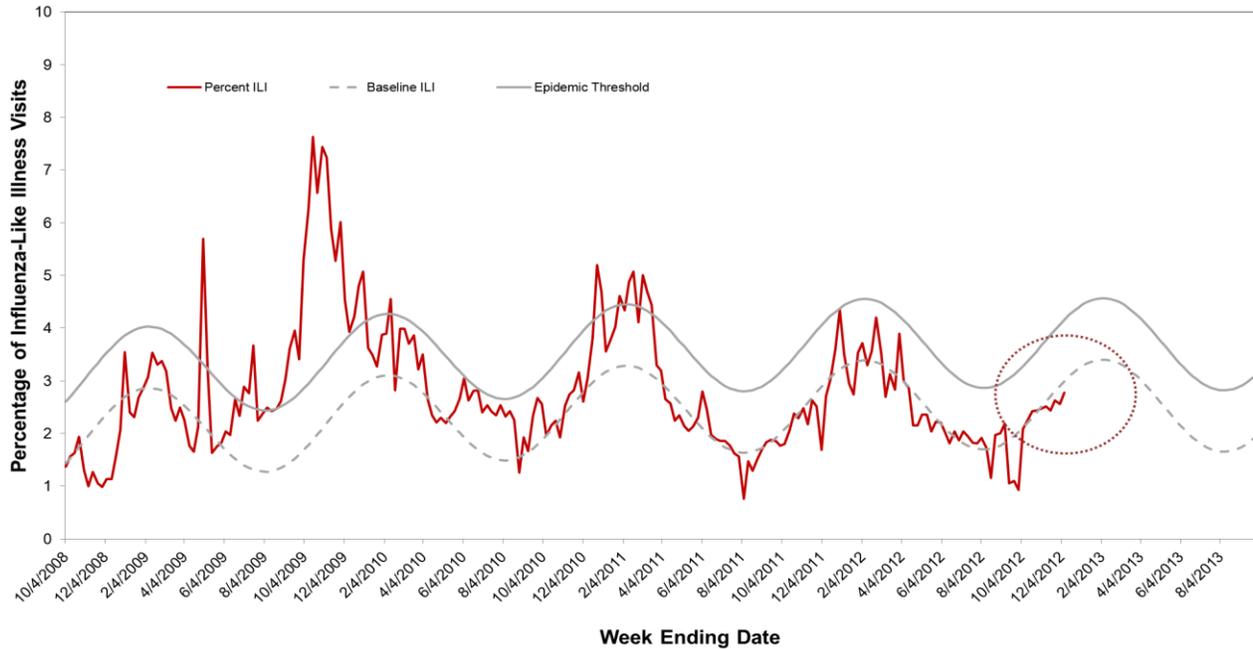
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 93 enrolled sentinel providers have reported data for Week 49, compared to an average of 116 providers reporting for each of the previous weeks. Based on available data, the percentage of visits for ILI in Week 49 (2.8%) was below baseline (3.0%) (Figure 1).

Figure 1. Percentage of Influenza-like Illness Visits Among Patients Seen by California Sentinel Providers, 2008–2012

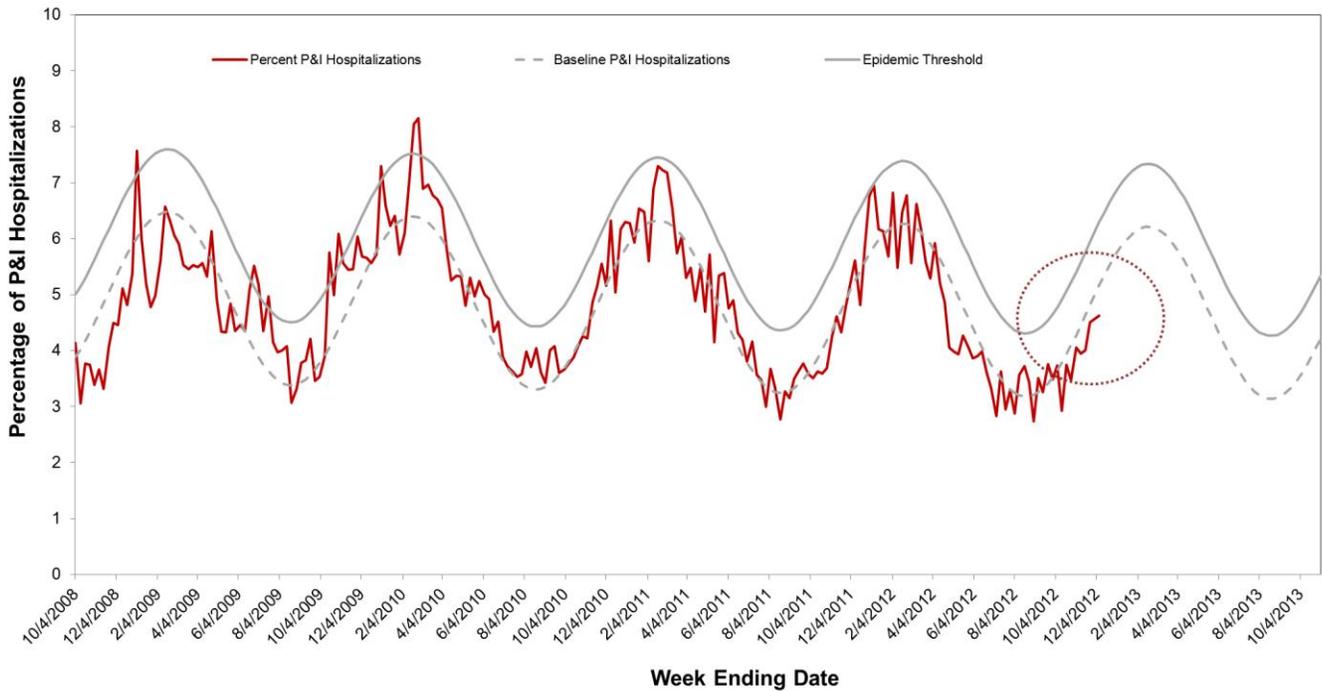


The seasonal baseline was calculated using a regression model applied to data from the previous seven years. The epidemic threshold is two standard deviations above the seasonal baseline and is the point at which the observed percentage of ILI is significantly higher than would be expected at that time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

2. Kaiser Permanente Hospitalization Data

The percentage of hospitalizations for pneumonia and influenza (P&I) in Kaiser Permanente facilities in northern California was below baseline (5.2%) during Week 49 (Figure 2). During Week 49, 4.6% of hospitalizations were due to P&I, compared to 4.6% of hospitalizations in the previous week.

Figure 2. Percentage of P&I Hospitalizations in Kaiser Permanente Northern California Hospitals, 2008–2012



The seasonal baseline was calculated using a regression model applied to data from the previous five 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

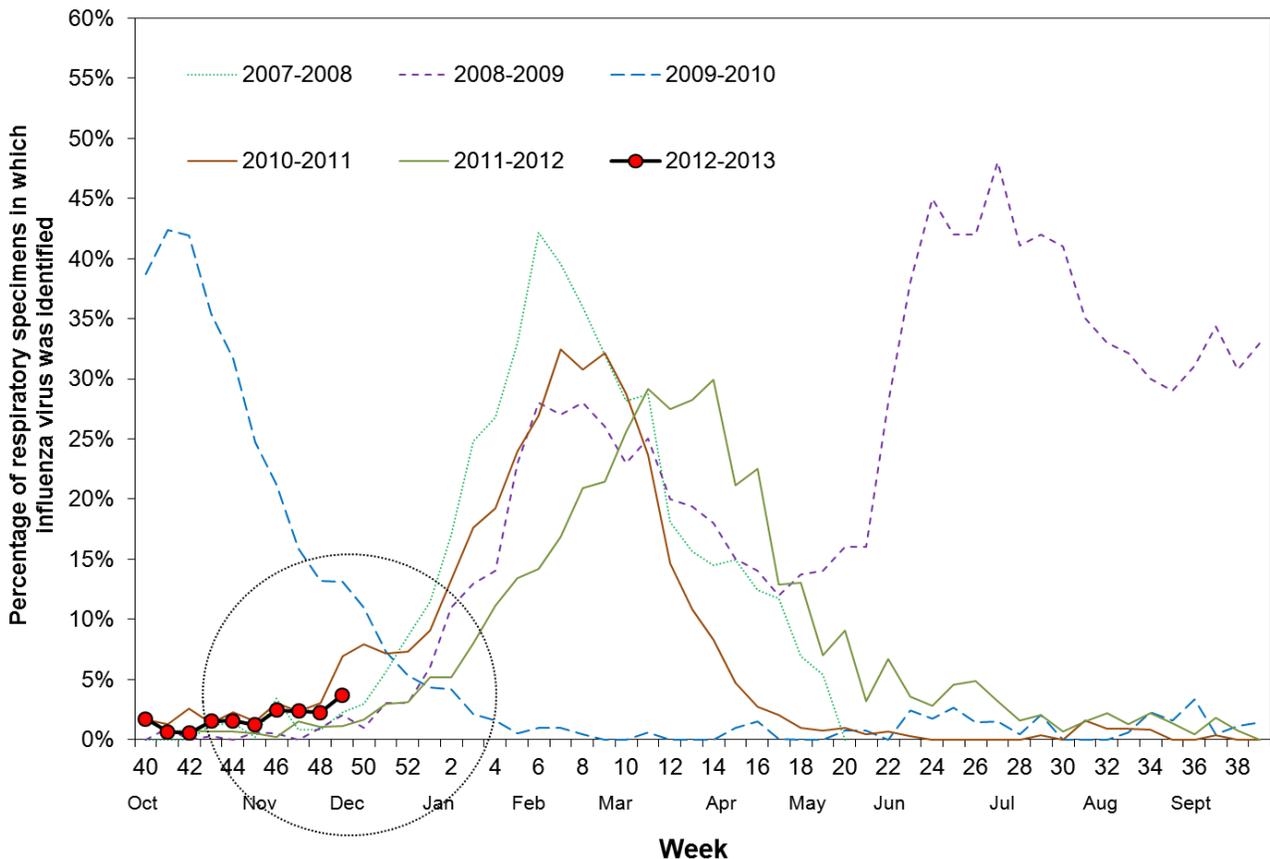
1. Respiratory Laboratory Network (RLN) and Sentinel Laboratory Surveillance Results

The percentage of influenza detections in the RLN and sentinel laboratories remained low (3.7%) in Week 49 (Figure 3). In Week 49, of 969 specimens tested by the RLN and sentinel laboratories, 12 (1.2%) were positive for influenza B and 24 (2.5%) were positive for influenza A. Of the 24 specimens that tested positive for influenza A, 10 (41.7%) were subtyped as seasonal A (H3), 1 (4.2%) was subtyped as 2009 A (H1N1), and 13 (54.2%) had no further subtyping performed. The influenza-positive specimens were reported from Alameda, Contra Costa, Los Angeles, Madera, Monterey, Orange, Placer, Sacramento, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Solano, and Sonoma counties.

For the 2012–2013 season (October 6, 2012 - December 8, 2012), of 6984 specimens tested, 137 (2.0%) were positive for influenza; of these, 35 (25.5%) were influenza B and 102 (74.5%) were influenza A. Of the 102 specimens that tested positive for influenza A, 45 (44.1%) were subtyped as seasonal A (H3), 2 (2.0%) were subtyped as 2009 A (H1N1), and 55 (53.9%) had no further subtyping performed.

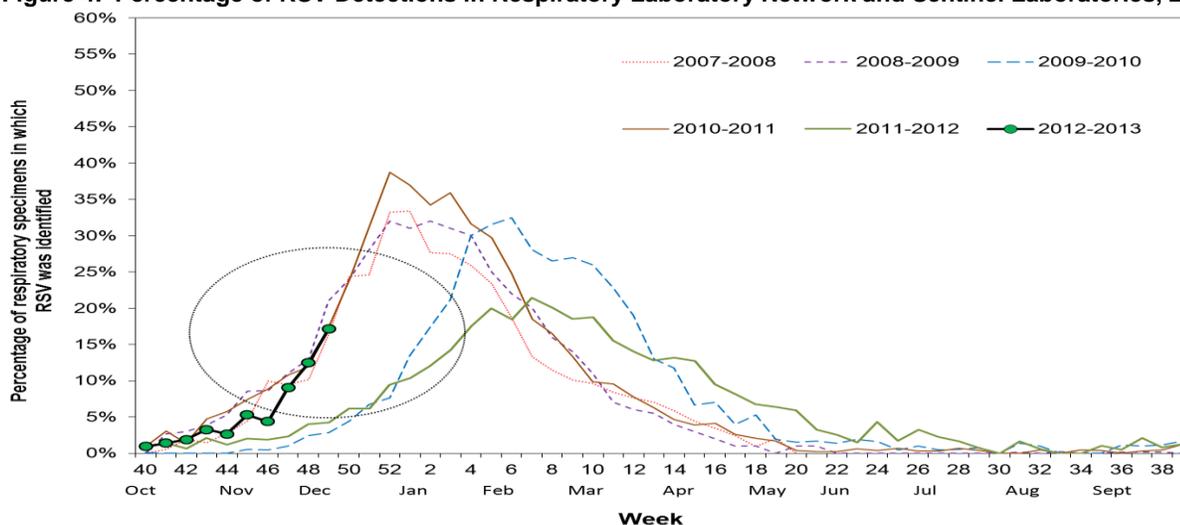
Neither the RLN nor CDPH-VRDL have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of a novel influenza virus.

Figure 3. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2012



The proportion of respiratory syncytial virus (RSV) detections increased in Week 49 (17.1%, compared to 12.5% in Week 48) (Figure 4).

Figure 4. Percentage of RSV Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2012



2. Antiviral Resistance Testing

CDPH-VRDL has not tested any influenza specimens for antiviral resistance in any influenza specimens recovered to date during the 2012–2013 influenza season.

3. Influenza Virus Strain Characterization

No California specimens have been strain-typed to date during the 2012–2013 influenza season.

C. Laboratory-confirmed Fatal Case Reports

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

CDPH has received one report of an influenza-associated death in a person under 65 years of age during the 2012–2013 influenza season. No new reports were received during Week 49.

D. Influenza-associated Outbreaks

CDPH has received no reports of laboratory-confirmed influenza outbreaks during the 2012–2013 influenza season to date.

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 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).