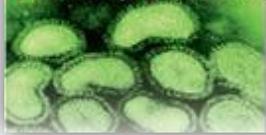


Weekly Update



California Department of Public Health Influenza Surveillance Program

California Influenza and Other Respiratory Disease Surveillance for Week 51 and 52 (December 16–December 29, 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 increased levels of influenza-like illness and laboratory detections, overall influenza activity in California during Week 52 was upgraded to “regional*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) increased 0.5% in Week 52 (1.8%) compared to Week 51 (1.3%).
- Of 3695 specimens tested during Week 51 and Week 52,
 - 293 (7.9%) were positive for influenza virus; of these
 - 39 (13.3%) were influenza B and
 - 254 (86.7%) were influenza A
 - 71 (28.0%) were subtyped as seasonal A (H3)
 - 6 (2.4%) were subtyped as 2009 A (H1)
 - 177 (70.0%) 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.
- One influenza-associated death in an adult less than 65 years of age was reported during Week 52.
- 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

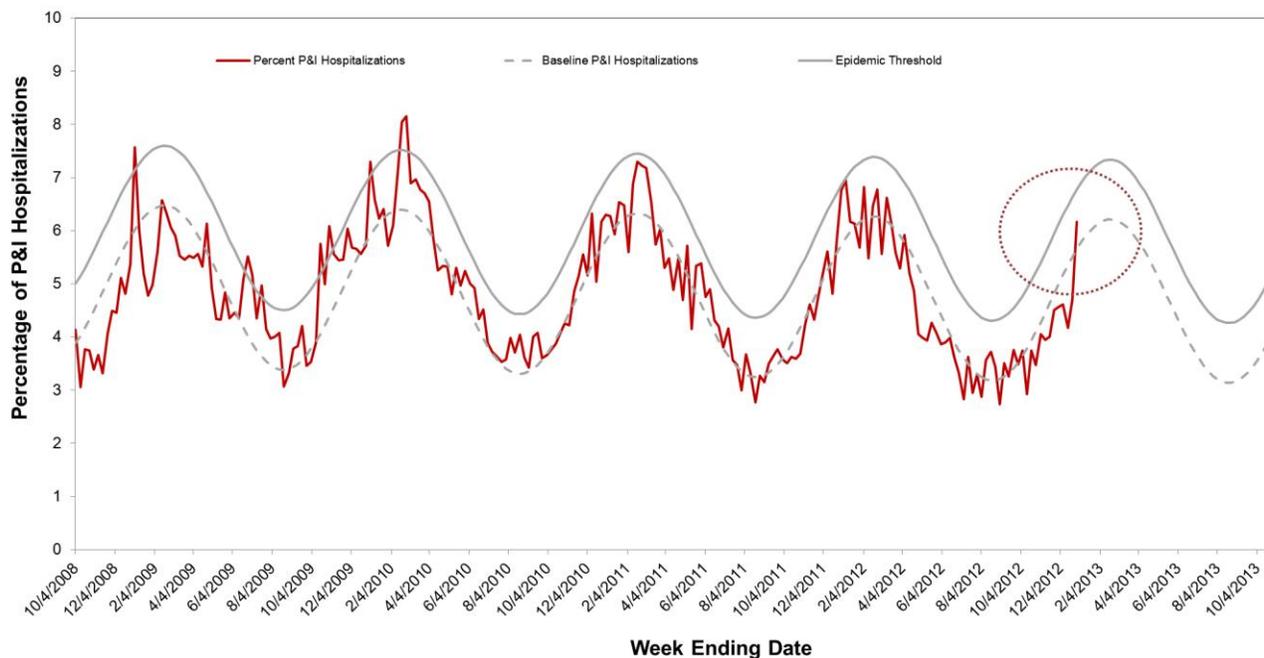
1. CDC Influenza Sentinel Providers

Only 42 and 63 enrolled sentinel providers have reported data for Week 51 and 52, respectively, compared to an average of 118 providers reporting for each of the previous weeks. Due to these low numbers, data are not shown.

2. Kaiser Permanente Hospitalization Data

The percentage of hospitalizations for pneumonia and influenza (P&I) in Kaiser Permanente facilities in northern California increased during Week 51 (4.7%) and again during Week 52 (6.2%), compared to Week 50 (4.2%) (Figure 1). The percentage increased to above baseline during Week 52.

Figure 1. Percentage of P&I Hospitalizations in Kaiser Permanente Northern California Hospitals, 2008–2013



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 increased in Weeks 51 (5.8%) and 52 (10.0%) (Figure 2).

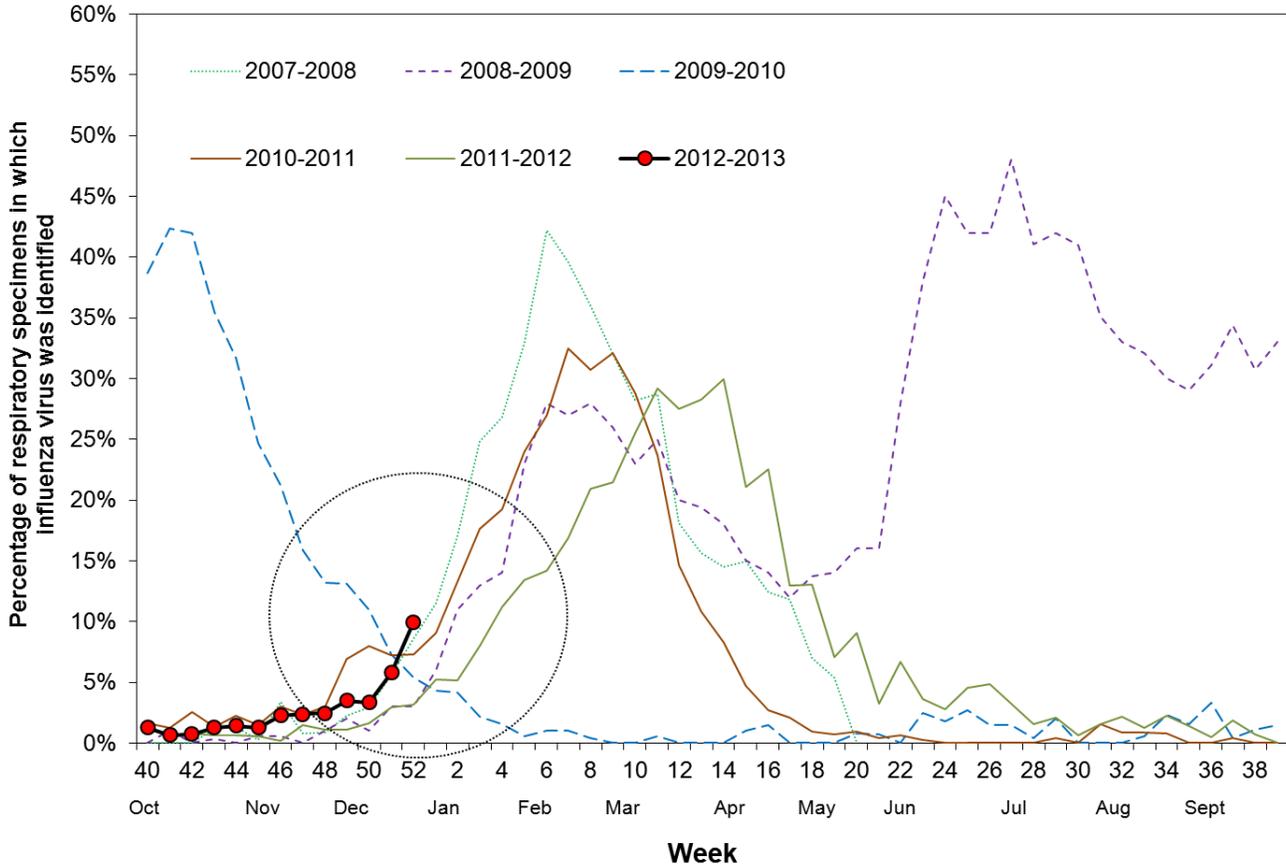
In Week 51, of 1800 specimens tested by the RLN and sentinel laboratories, 19 (1.1%) were positive for influenza B and 85 (4.7%) were positive for influenza A. Of the 85 specimens that tested positive for influenza A, 30 (35.3%) were subtyped as seasonal A (H3), 2 (2.4%) were subtyped as 2009 A (H1), and 53 (62.4%) had no further subtyping performed.

In Week 52, of 1895 specimens tested by the RLN and sentinel laboratories, 20 (1.1%) were positive for influenza B and 169 (8.9%) were positive for influenza A. Of the 169 specimens that tested positive for influenza A, 41 (24.3%) were subtyped as seasonal A (H3), 4 (2.4%) were subtyped as 2009 A (H1), and 124 (73.4%) had no further subtyping performed.

To date for the 2012–2013 season, of 13,620 specimens tested, 504 (3.7%) were positive for influenza; of these, 91 (18.1%) were influenza B and 413 (81.9%) were influenza A. Of the 413 specimens that tested positive for influenza A, 139 (33.7%) were subtyped as seasonal A (H3), 8 (1.9%) were subtyped as 2009 A (H1), and 266 (64.4%) had no further subtyping performed.

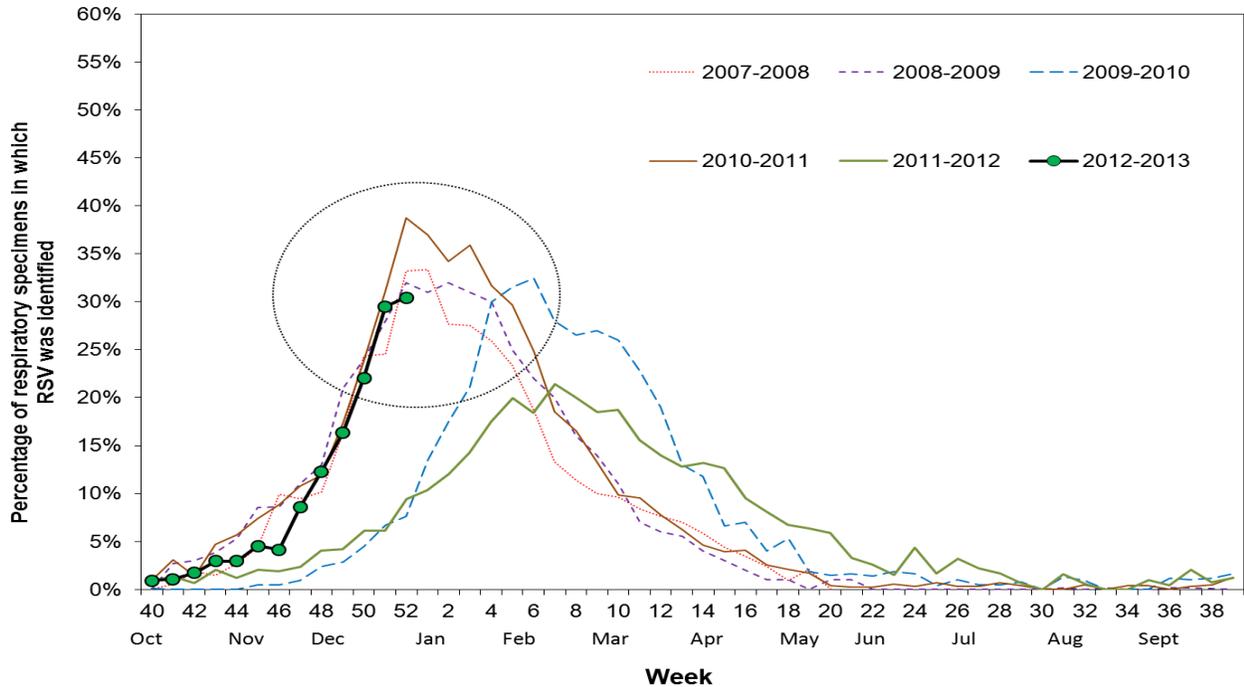
Neither the RLN nor CDPH-VRDL have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of a novel influenza virus.

Figure 2. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2013



Respiratory syncytial virus (RSV) detections increased in Week 51 and Week 52 (29.5% and 30.4%, respectively, compared to 22.1% in Week 50) (Figure 3).

Figure 3. Percentage of RSV Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007–2013



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 patients aged 0-64 years with laboratory-confirmed influenza are reportable to CDPH.

CDPH received one report of an influenza-associated death in an adult less than 65 years of age during Week 52. A total of two influenza-associated deaths among persons less than 65 years of age have been reported to CDPH to date during the 2012–2013 influenza season.

D. Influenza-associated Outbreaks

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