

California Influenza and Other Respiratory Disease Surveillance for Week 16 (April 15-21, 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 16, the geographic distribution of influenza in California remained “regional*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) decreased 0.5% in week 16 (1.3%) compared to week 15 (1.8%).
- Of 1292 specimens tested during week 16,
 - 334 (25.9%) were positive for influenza; of these
 - 105 (31.4%) were influenza B and
 - 229 (68.6%) were influenza A.
 - 17 (7.4%) were subtyped as 2009 A (H1),
 - 83 (36.2%) were subtyped as seasonal A (H3), and
 - 129 (56.3%) were not subtyped.
- Of the 113 influenza isolates tested during the 2011-12 influenza season, one was resistant to neuraminidase inhibitors.
- Of the 103 specimens from California residents that have been strain-typed this season, all but eight influenza B strains matched the 2011-12 influenza vaccine.
- Two laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 16.
- No suspected or confirmed influenza A (H3N2)v [variant influenza A (H3N2), formerly called swine-origin triple reassortant A (H3N2)] has been detected in California.

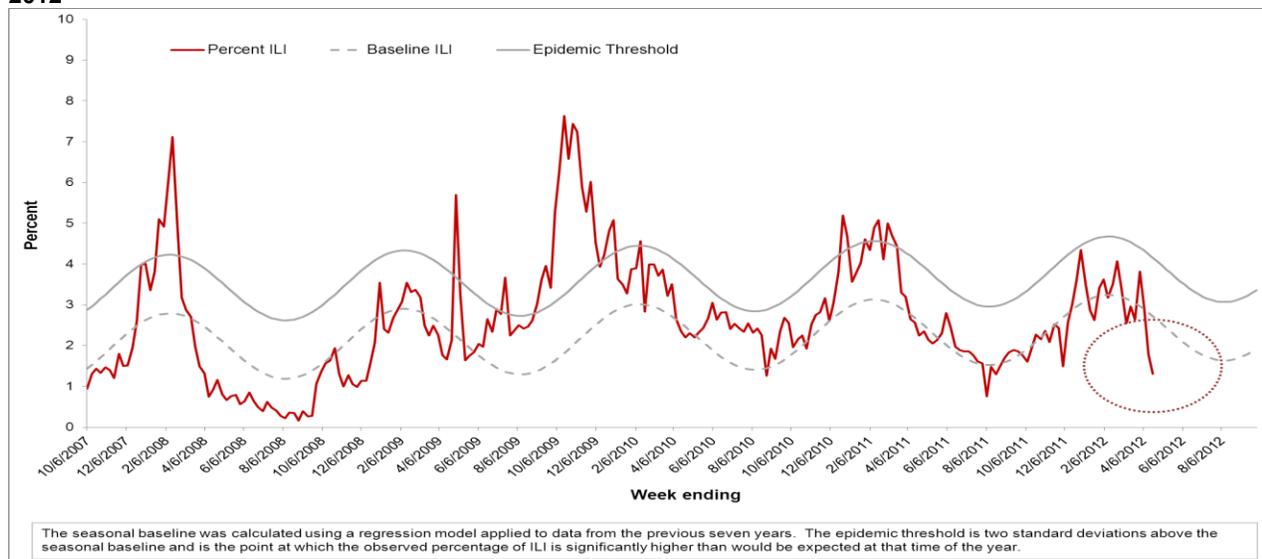
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 74 (37.6%) out of 197 enrolled sentinel providers have reported data for week 16. Based on available data, the percentage of ILI visits for week 16 (1.3%) was 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 slightly decreased in week 16 (5.2%) compared to week 15 (5.4%).

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 week 16 (25.9%) compared to week 15 (22.0%), (Figure 2). Of 1292 specimens tested by the RLN and sentinel laboratories, 105 (8.1%) were positive for influenza B and 229 (17.7%) were positive for influenza A (Figure 3). Of the 229 specimens that tested positive for influenza A, 17 (7.4%) were subtyped as 2009 A (H1), 83 (36.2%) were subtyped as seasonal A (H3), and 129 (56.3%) had no further subtyping performed. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 45,494 specimens tested, 6793 (14.9%) were positive for influenza; of these, 1052 (15.5%) were influenza B and 5741 (84.5%) were influenza A. Of the 5741 specimens that tested positive for influenza A, 568 (9.9%) were subtyped as 2009 A (H1), 1384 (24.1%) were subtyped as seasonal A (H3), and 3789 (66.0%) had no further subtyping performed.

Neither the RLN nor the 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

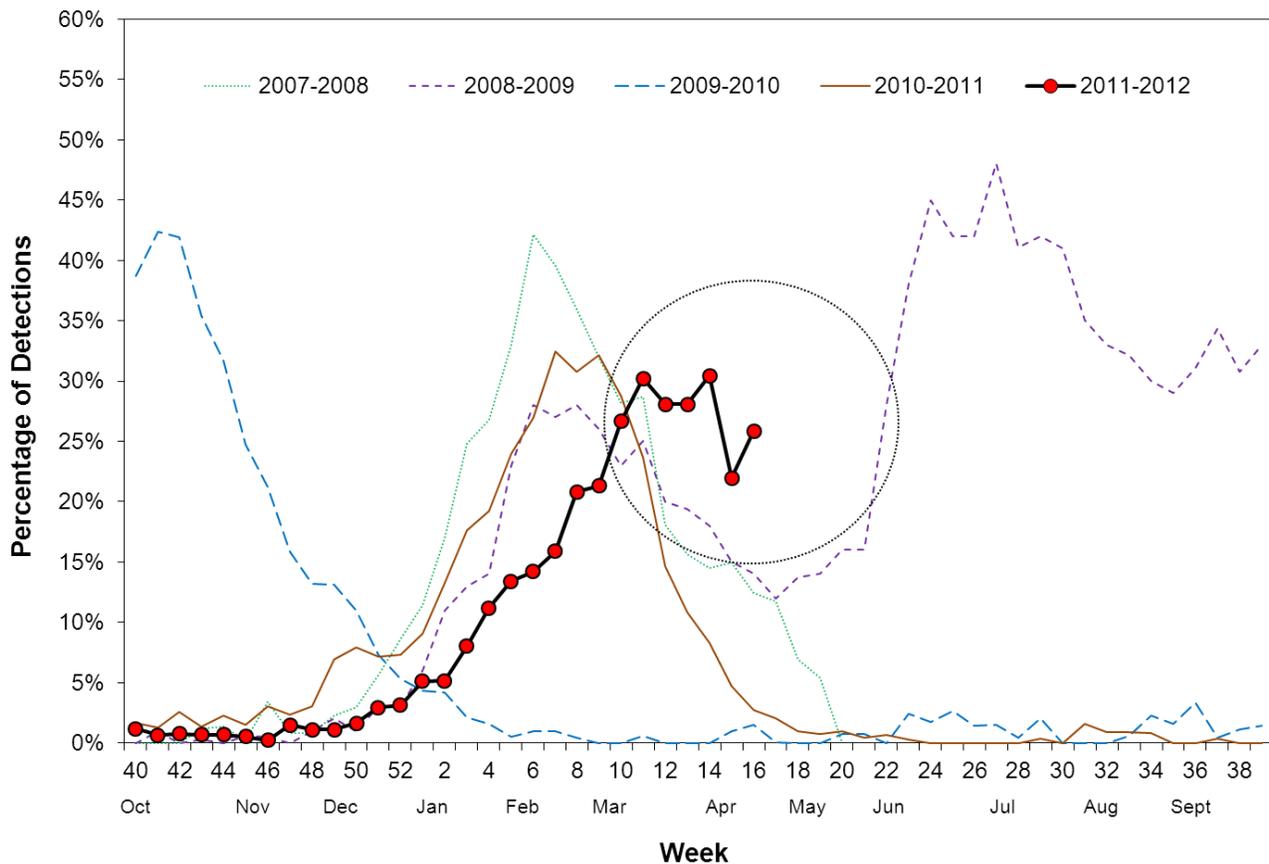
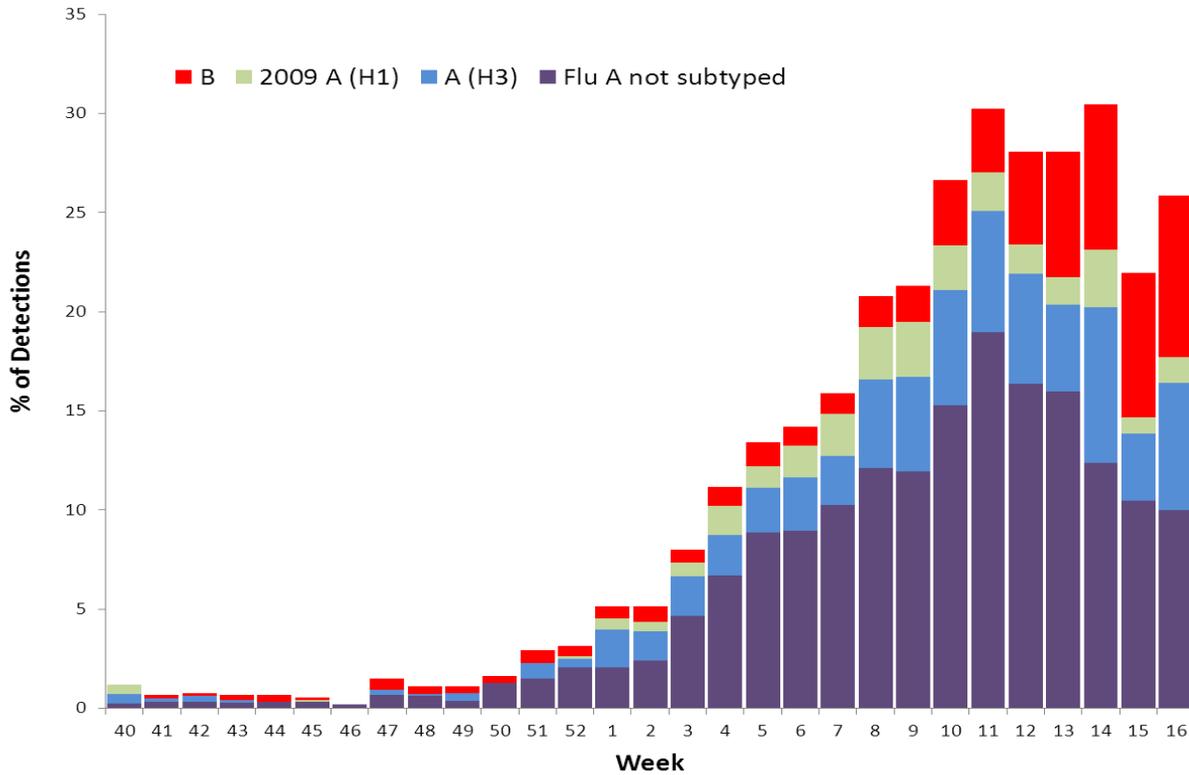
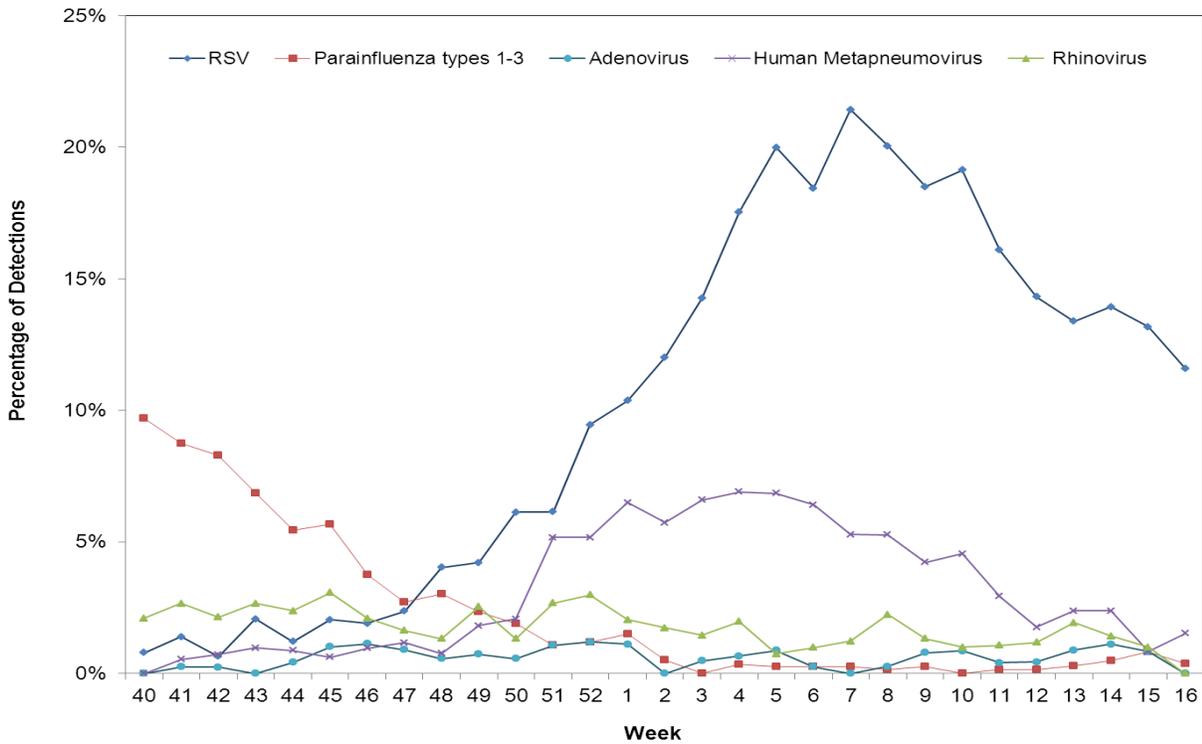


Figure 3. Percentage of Influenza Types and Subtypes in Respiratory Laboratory Network and Sentinel Laboratories, 2011–2012



The proportion of respiratory syncytial virus (RSV) detections decreased in week 16 (11.6%, compared to 13.2% in week 15), (Figure 4).

Figure 4. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-16 (October 2, 2011 – April 21, 2012)



2. Antiviral Resistance Testing (AVR)

CDPH-VRDL has tested 113 influenza specimens for antiviral resistance to date during the 2011-2012 influenza season; all but one influenza A (2009 H1N1) have been sensitive to neuraminidase inhibitors (Table 1).

Table 1. Number of Specimens Tested for Antiviral Resistance

	Neuraminidase Inhibitors Resistance
Influenza A (2009 H1N1)	1/34
Influenza A (H3N2)	0/79

3. Influenza Virus Strain Characterization

Of the 103 California specimens that have been strain-typed to date during the 2011-2012 influenza season, all but eight influenza B 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=103)
Influenza A	82
A/Perth/16/2009-like (H3N2)*	52
A/California/07/2009-like (H1N1)*	30
Influenza B	21
B/Brisbane/60/2008-like*	13
B/Wisconsin/01/2010-like	8

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

C. Laboratory-confirmed Fatal Case Reports

CDPH received two reports of influenza-associated deaths among persons less than 65 years old in week 16; one was in a child under 18 years and one was in an adult in the 55-64 year age-range. To date during the 2011-2012 influenza season, CDPH has received 29 reports of influenza-associated deaths among persons less than 65 years old; 6 were among children 0-17 years and 23 were among adults 18-64 years.

D. Influenza-associated Outbreaks

CDPH received three reports of laboratory-confirmed influenza outbreaks in week 16; all were in congregate living facilities and were associated with influenza A (2009 H1N1) and influenza A (subtype not done).

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).