

California Influenza and Other Respiratory Disease Surveillance for Week 15 (April 8-14, 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 15, the geographic distribution of influenza in California was downgraded to “regional*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) decreased 1.0% in week 15 (2.1%) compared to week 14 (3.1%).
- Of 1615 specimens tested during week 15,
 - 365 (22.6%) were positive for influenza; of these
 - 124 (34.0%) were influenza B and
 - 241 (66.0%) were influenza A.
 - 13 (5.4%) were subtyped as 2009 A (H1),
 - 55 (22.8%) were subtyped as seasonal A (H3), and
 - 173 (71.8%) were not subtyped.
- Of the 113 influenza isolates tested during the 2011-12 influenza season, one was resistant to neuraminidase inhibitors.
- Eighty-two specimens from California residents have been strain-typed this season; all but eight influenza B strains match the 2011-12 influenza vaccine.
- Six laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 15.
- 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.

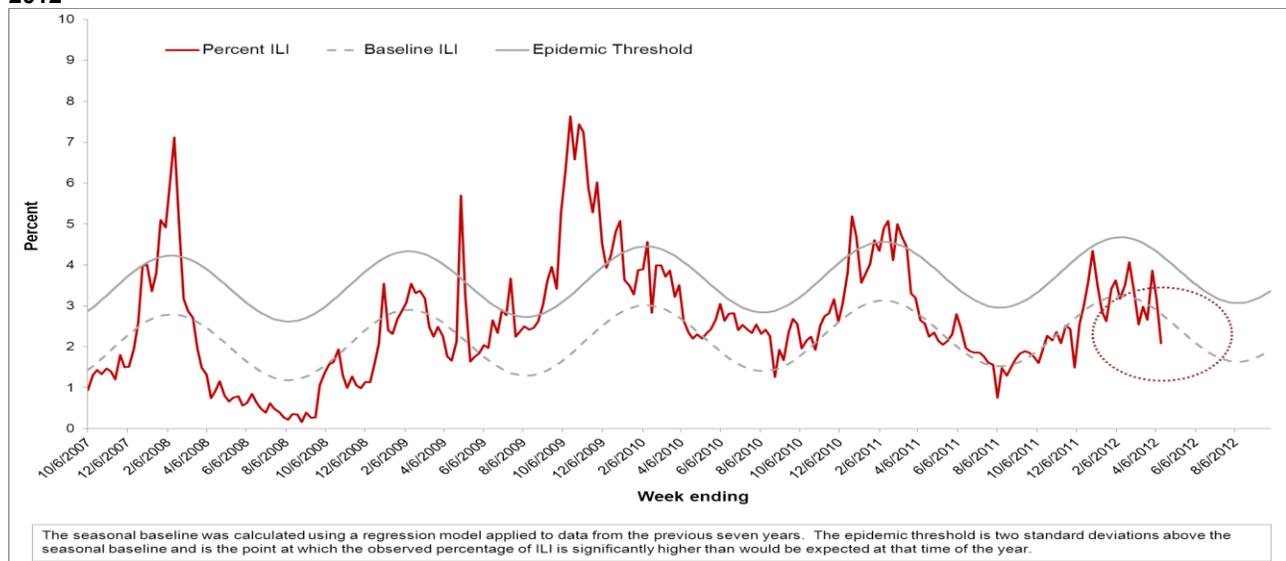
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 84 (42.6%) out of 197 enrolled sentinel providers have reported data for week 15. Based on available data, the percentage of ILI visits for week 15 (2.1%) 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 decreased in week 15 (5.4%) compared to week 14 (6.2%).

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 15 (22.6%) compared to week 14 (30.5%), (Figure 2). Of 1615 specimens tested by the RLN and sentinel laboratories, 124 (7.7%) were positive for influenza B and 241 (14.9%) were positive for influenza A (Figure 3). Of the 241 specimens that tested positive for influenza A, 13 (5.4%) were subtyped as 2009 A (H1), 55 (22.8%) were subtyped as seasonal A (H3), and 173 (71.8%) had no further subtyping performed. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 43,794 specimens tested, 6380 (14.6%) were positive for influenza; of these, 935 (14.7%) were influenza B and 5445 (85.3%) were influenza A. Of the 5445 specimens that tested positive for influenza A, 550 (10.1%) were subtyped as 2009 A (H1), 1298 (23.8%) were subtyped as seasonal A (H3), and 3597 (66.1%) 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

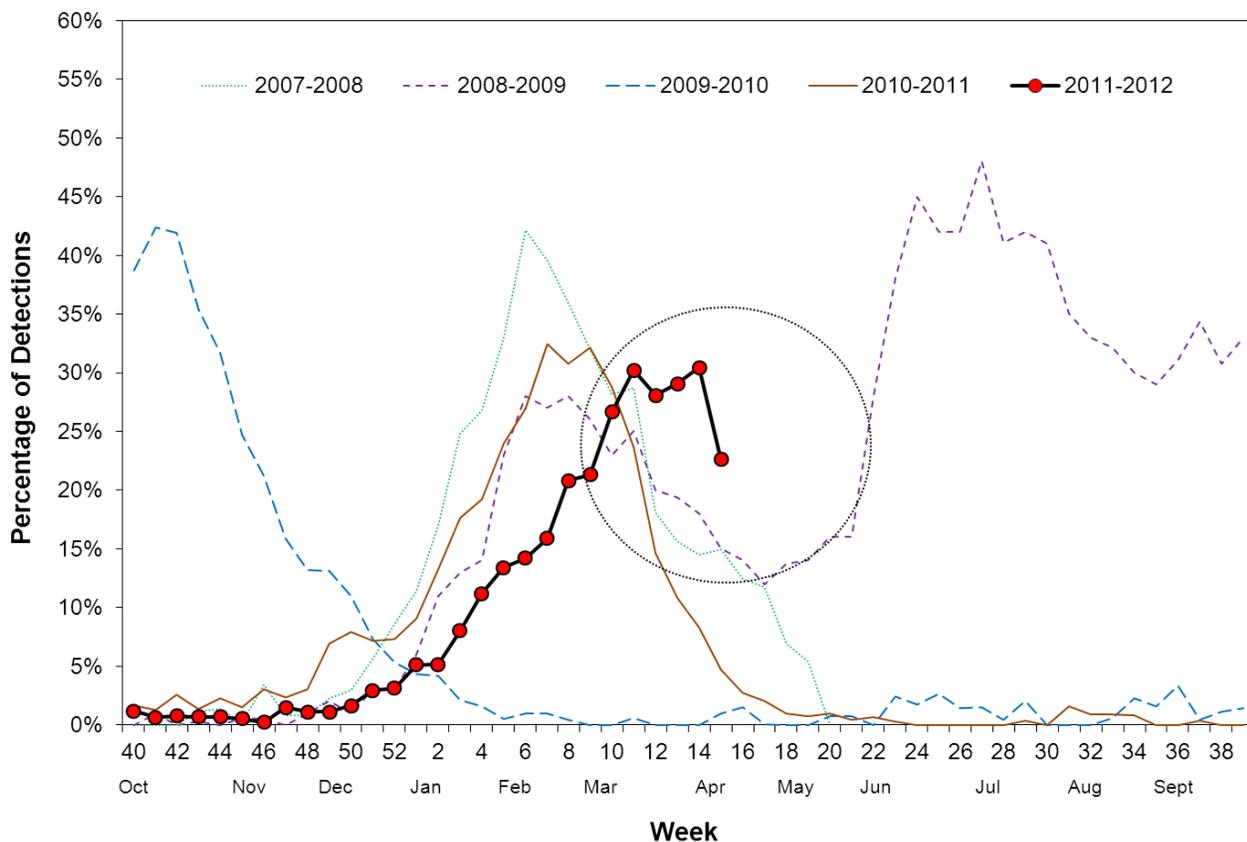
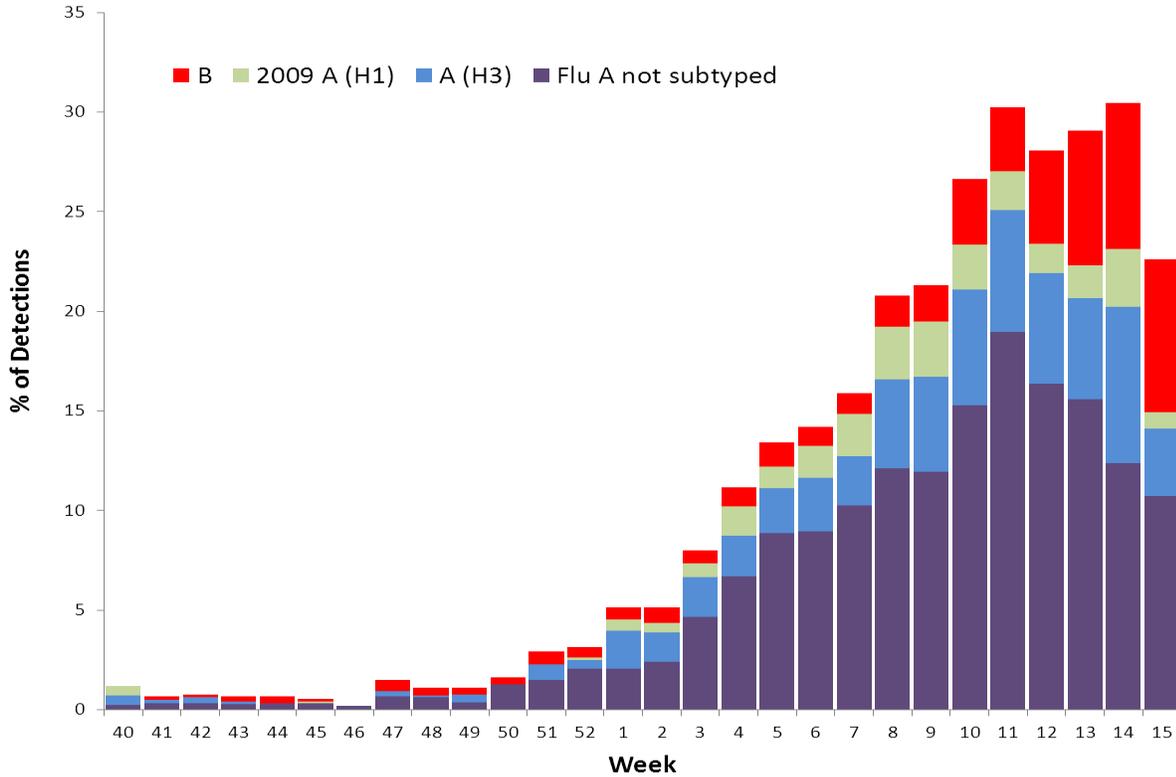
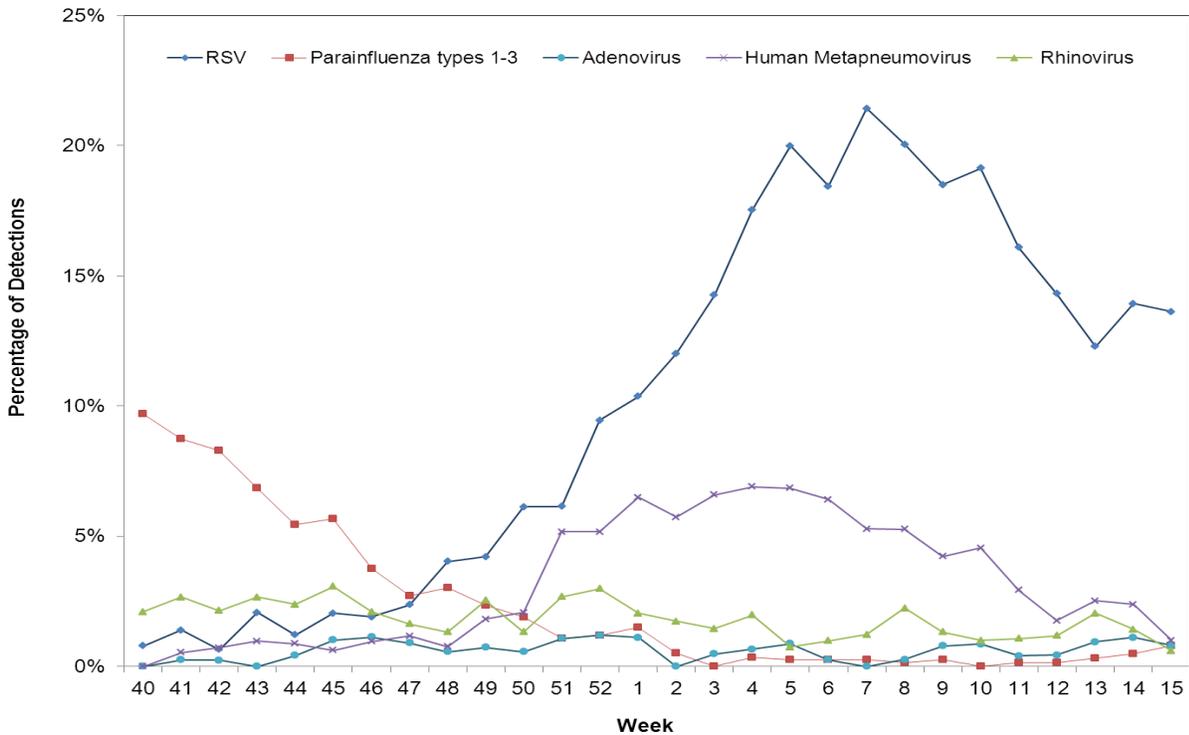


Figure 3. Percentage of Influenza Types and Subtypes in Respiratory Laboratory Network and Sentinel Laboratories, 2011–2012



The proportion of respiratory syncytial virus (RSV) detections decreased slightly in week 15 (13.6%, compared to 13.9% in week 14), (Figure 4).

Figure 4. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-15 (October 2, 2011 – April 14, 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

Eighty-two California specimens have been strain-typed to date during the 2011-2012 influenza season; all but eight 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=82)
Influenza A	62
A/Perth/16/2009-like (H3N2)*	42
A/California/07/2009-like (H1N1)*	20
Influenza B	20
B/Brisbane/60/2008-like*	12
B/Wisconsin/01/2010-like	8

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

C. Laboratory-confirmed Fatal Case Reports

CDPH received six reports of influenza-associated deaths among persons less than 65 years old in week 15 with dates of death ranging from January 29-March 5, 2012; one was in a child under 18 years and 5 were in adults aged 22-58 years. To date during the 2011-2012 influenza season, CDPH has received 26 reports of influenza-associated deaths among persons less than 65 years old; 5 were among children 0-17 years and 21 were among adults 18-64 years.

D. Influenza-associated Outbreaks

CDPH received two reports of laboratory-confirmed influenza outbreaks in week 15; both were in congregate living facilities and were associated with influenza A (H3).

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).