

California Influenza and Other Respiratory Disease Surveillance for Week 10 (March 4 - 10, 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 10, the geographic distribution of influenza in California remained “widespread*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) was down 0.5% in week 10 (3.1%) compared to week 9 (3.6%).
- Of 1865 specimens tested during week 10,
 - 509 (27.3%) were positive for influenza; of these
 - 73 (14.3%) were influenza B and
 - 436 (85.7%) were influenza A.
 - 102 (23.4%) were subtyped as seasonal A (H3),
 - 46 (10.6%) were subtyped as 2009 A (H1), and
 - 288 (66.1%) were not subtyped.
- No resistance to neuraminidase inhibitors has been identified in 60 influenza isolates tested during the 2011-2012 influenza season.
- Eighty-two specimens from California residents have been strain-typed this season; all but eight influenza B strains match the 2011-12 influenza vaccine.
- Two laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 10.
- No suspected or confirmed influenza A (H3N2)v [variant influenza A (H3N2), formerly called swine-origin triple reassortant A (H3N2)] have been detected in California.

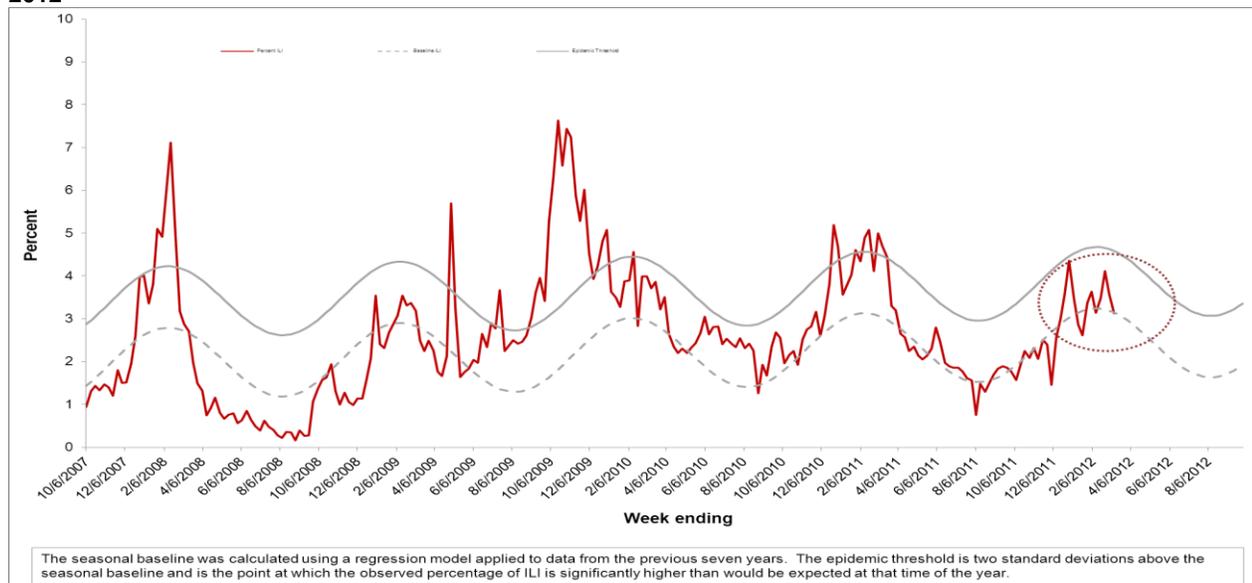
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 97 (49.0%) out of 198 enrolled sentinel providers have reported data for week 10. Based on available data, the percentage of ILI visits for week 10 (3.1%) was at 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 increased in week 10 (7.0%) compared to week 9 (5.9%).

B. Laboratory Update

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

The percentage of influenza detections in the RLN and sentinel laboratories continued an upward trend that started in week 3, with an increase of 6.9% in week 10 (27.3%) compared to week 9 (20.4%), (Figure 2). Of 1865 specimens tested by the RLN and sentinel laboratories, 73 (3.9%) were positive for influenza B and 436 (23.4%) were positive for influenza A (Figure 3). Of the 436 specimens that tested positive for influenza A, 102 (23.4%) were subtyped as seasonal A (H3), 46 (10.6%) were subtyped as 2009 A (H1), and 288 (66.1%) were not subtyped. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 32,509 specimens tested, 3173 (9.8%) were positive for influenza; of these, 322 (10.1%) were influenza B and 2851 (89.9%) were influenza A. Of the 2851 specimens that tested positive for influenza A, 615 (21.6%) were subtyped as seasonal A (H3), 330 (11.6%) were subtyped as 2009 A (H1), and 1906 (66.9%) 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

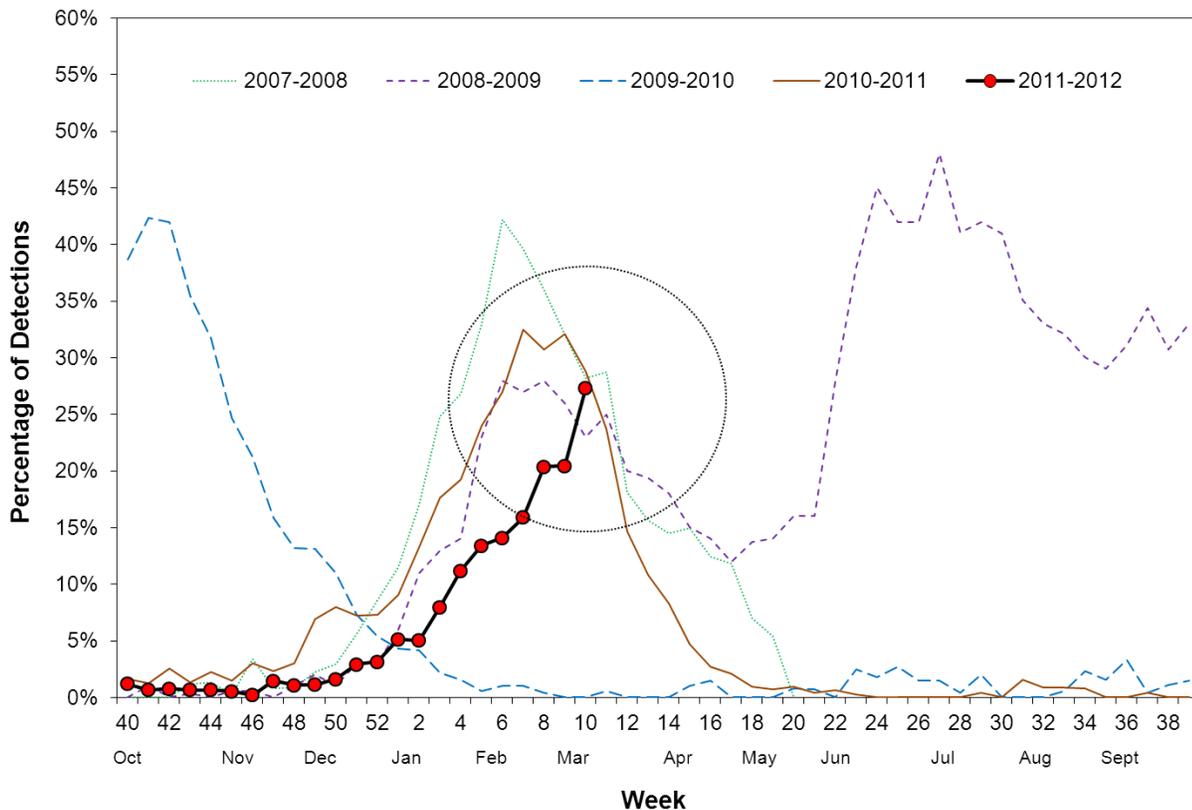
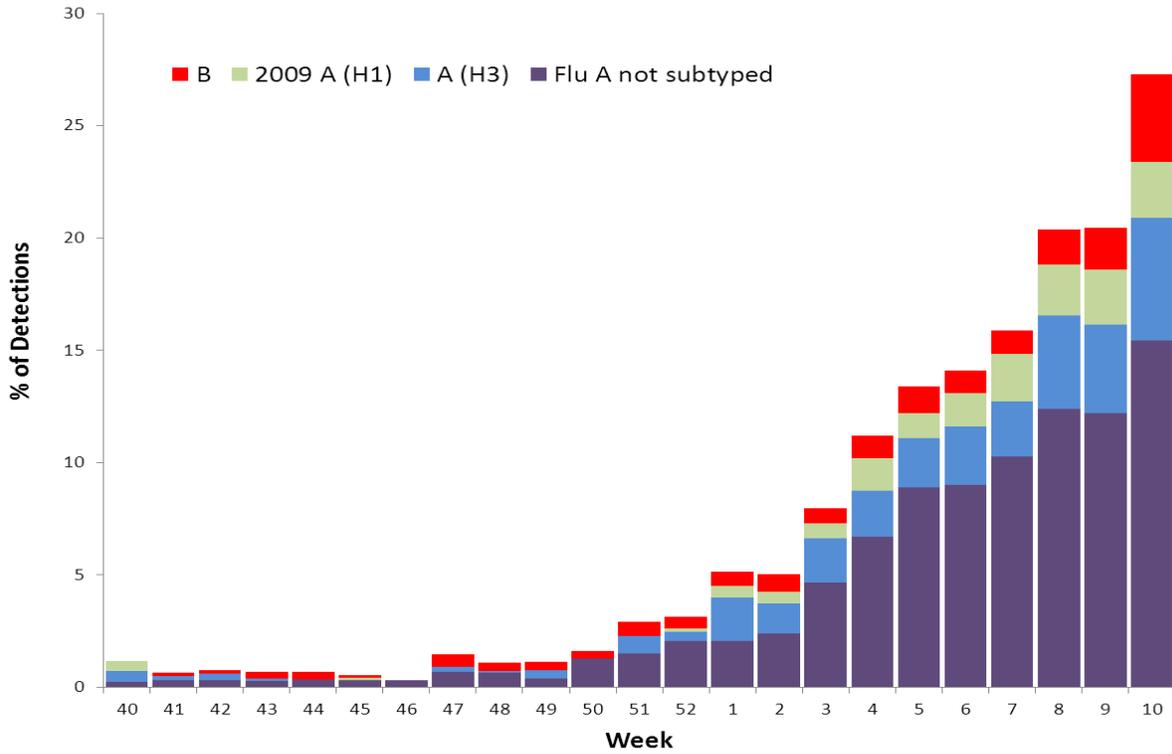
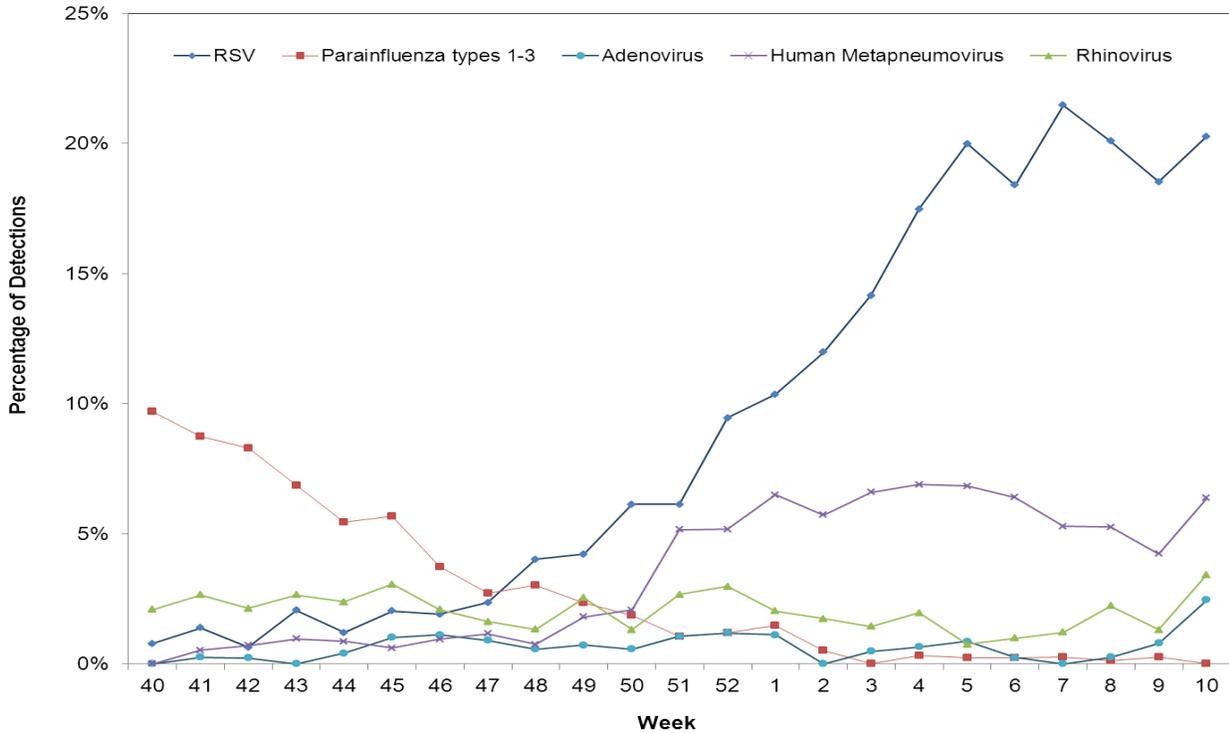


Figure 3. Percentage of Influenza Types and Subtypes in Respiratory Laboratory Network and Sentinel Laboratories, 2011–2012



The proportion of respiratory syncytial virus (RSV) detections increased in week 10 (20.3%, compared to 18.5% in week 9), (Figure 4).

Figure 4. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-10 (October 2, 2011 – March 10, 2012)



2. Antiviral Resistance Testing (AVR)

CDPH-VRDL has tested 60 influenza specimens to date during the 2011-2012 influenza season; all have been sensitive to neuraminidase inhibitors (Table 1).

Table 1. Number of Specimens Tested for Antiviral Resistance

	Neuraminidase Inhibitors Resistance
Influenza A (2009 H1N1)	0/22
Influenza A (H3N2)	0/38

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 two reports of influenza-associated deaths among persons 0-64 years in week 10; one in a child under 5 years old and one in an adult over 50 years old. To date during the 2011-2012 influenza season, CDPH has received 11 reports of influenza-associated deaths among persons less than 65 years old; three were among children 0-17 years and eight were among adults 18-64 years.

D. Influenza-associated Outbreaks

CDPH received six reports of laboratory-confirmed influenza outbreaks in week 10; all at congregate living facilities. Four were associated with influenza A (H3) and occurred in the southern and San Francisco bay area regions and two were associated with influenza A (2009 H1N1) and occurred in the San Francisco bay area region.

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).