

California Influenza and Other Respiratory Disease Surveillance for Week 12 (March 18 - 24, 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 12, the geographic distribution of influenza in California remained “widespread*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) was up 0.3% in week 12 (3.1%) compared to week 11 (2.8%).
- Of 2296 specimens tested during week 12,
 - 646 (28.1%) were positive for influenza; of these
 - 112 (17.3%) were influenza B and
 - 534 (82.7%) were influenza A.
 - 29 (5.4%) were subtyped as 2009 A (H1),
 - 111 (20.8%) were subtyped as seasonal A (H3), and
 - 394 (73.8%) were not subtyped.
- No resistance to neuraminidase inhibitors has been identified in 78 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 12.
- 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.

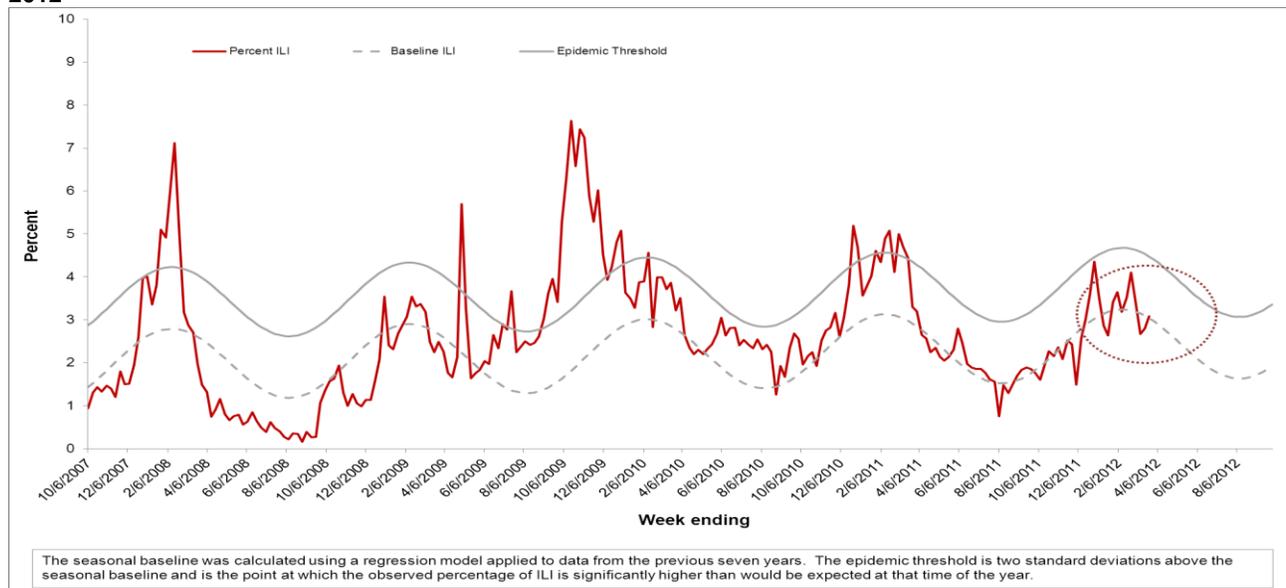
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to <http://www.cdc.gov/flu/weekly/overview.htm>.

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 86 (43.4%) out of 198 enrolled sentinel providers have reported data for week 12. Based on available data, the percentage of ILI visits for week 12 (3.1%) was just above 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 12 (5.4%) compared to week 11 (6.5%).

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 12 (28.1%) compared to week 11 (33.7%), (Figure 2). Of 2296 specimens tested by the RLN and sentinel laboratories, 112 (4.9%) were positive for influenza B and 534 (23.3%) were positive for influenza A (Figure 3). Of the 534 specimens that tested positive for influenza A, 29 (5.4%) were subtyped as 2009 A (H1), 111 (20.8%) were subtyped as seasonal A (H3), and 394 (73.8%) had no further subtyping performed. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 37,269 specimens tested, 4574 (12.3%) were positive for influenza; of these, 514 (11.2%) were influenza B and 4060 (88.8%) were influenza A. Of the 4060 specimens that tested positive for influenza A, 402 (9.9%) were subtyped as 2009 A (H1), 875 (21.6%) were subtyped as seasonal A (H3), and 2783 (68.5%) 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

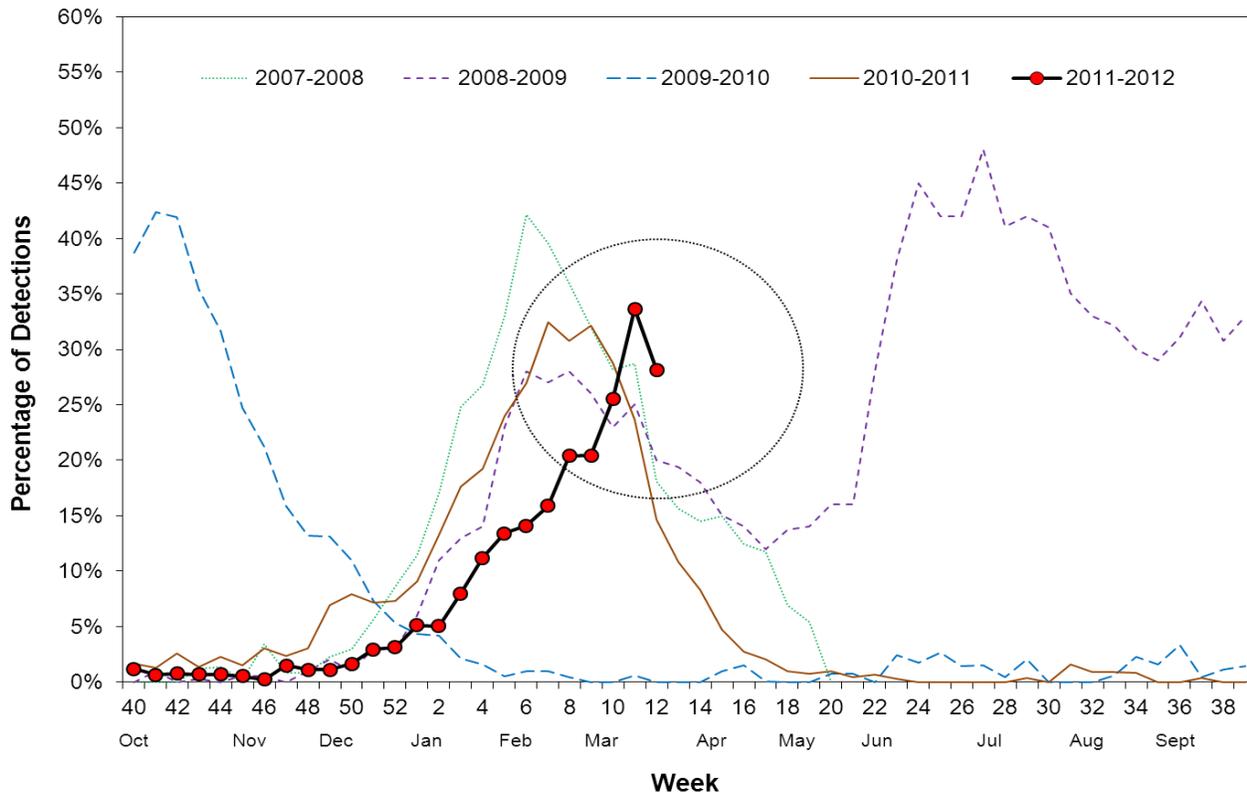
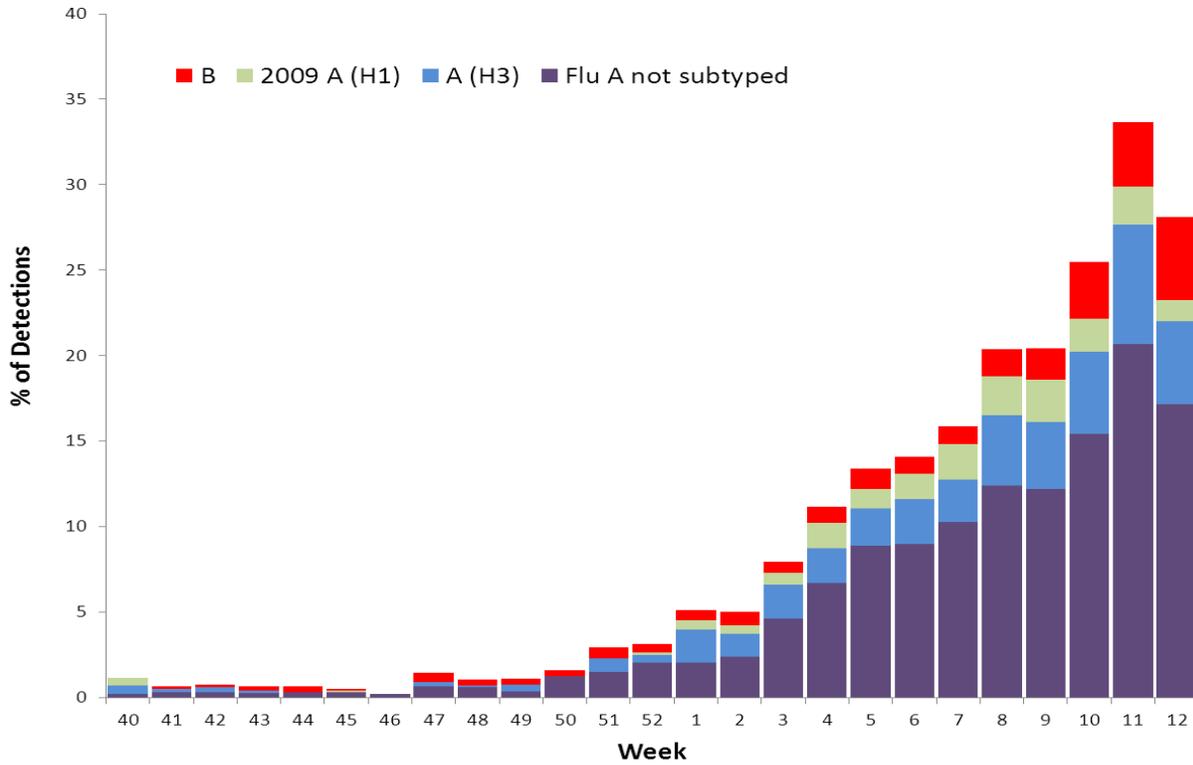
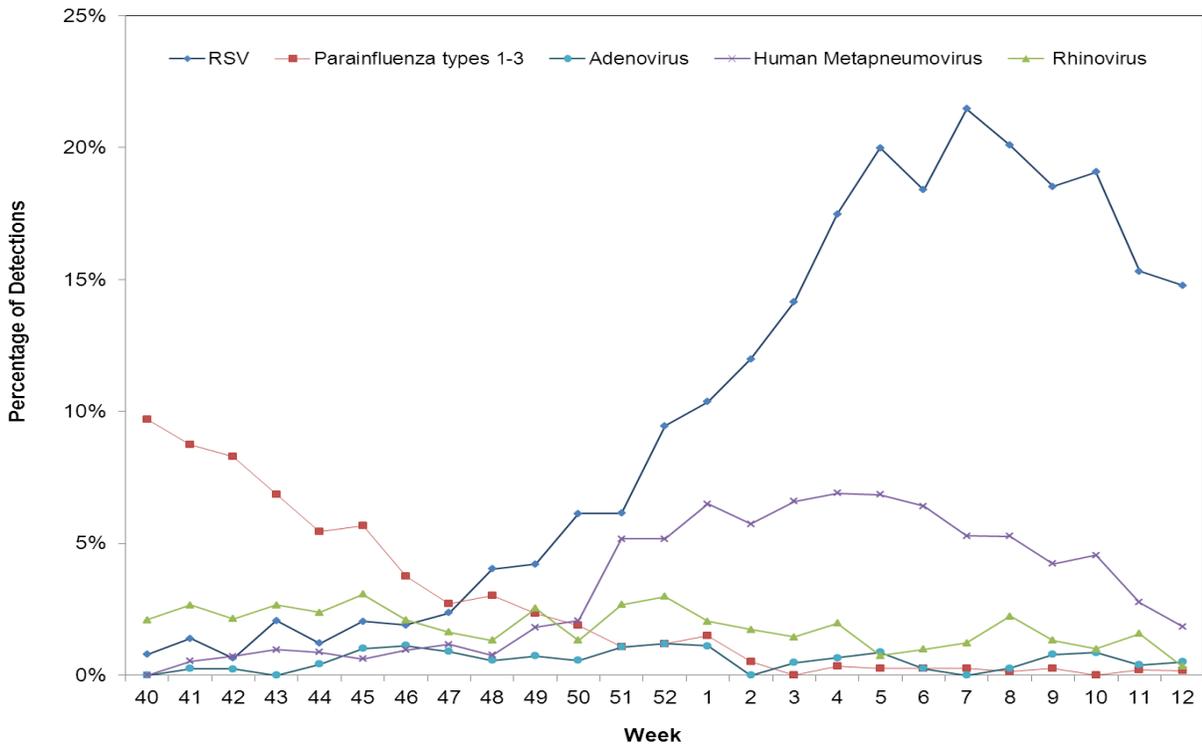


Figure 3. Percentage of Influenza Types and Subtypes in Respiratory Laboratory Network and Sentinel Laboratories, 2011–2012



The proportion of respiratory syncytial virus (RSV) detections continued to decrease in week 12 (14.8%, compared to 15.3% in week 11), (Figure 4).

Figure 4. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-12 (October 2, 2011 – March 24, 2012)



2. Antiviral Resistance Testing (AVR)

CDPH-VRDL has tested 78 influenza specimens for antiviral resistance 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)	0/26
Influenza A (H3N2)	0/52

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 in adults in the 25-49 year age group in week 12. To date during the 2011-2012 influenza season, CDPH has received 14 reports of influenza-associated deaths among persons less than 65 years old; 3 were among children 0-17 years and 11 were among adults 18-64 years.

D. Influenza-associated Outbreaks

CDPH received six reports of laboratory-confirmed influenza outbreaks in week 12; one was in a school and five were in congregate living facilities. Of the six outbreaks, 2 were associated with influenza A (H3) and 4 were associated with influenza A (subtyping 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).