

California Influenza and Other Respiratory Disease Surveillance for Week 4 (January 22-28, 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 4, the geographic distribution of influenza in California was upgraded to “regional*.”

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) remained low in Week 4 (2.0%).
- Of 1866 specimens tested during Week 4,
 - 219 (11.7%) were positive for influenza; of these
 - 20 (9.1%) were influenza B and
 - 199 (90.9%) were influenza A.
 - 37 (18.6%) were subtyped as seasonal A (H3),
 - 27 (13.6%) were subtyped as 2009 A (H1), and
 - 135 (67.8%) were not subtyped.
- No resistance to neuraminidase inhibitors has been identified in 20 influenza isolates tested during the 2011-2012 influenza season.
- Twenty-seven specimens from California residents have been strain-typed this season; all but four influenza B strains match the 2011-12 influenza vaccine.
- No laboratory-confirmed influenza-associated deaths among persons less than 65 years were reported in week 4.
- 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.

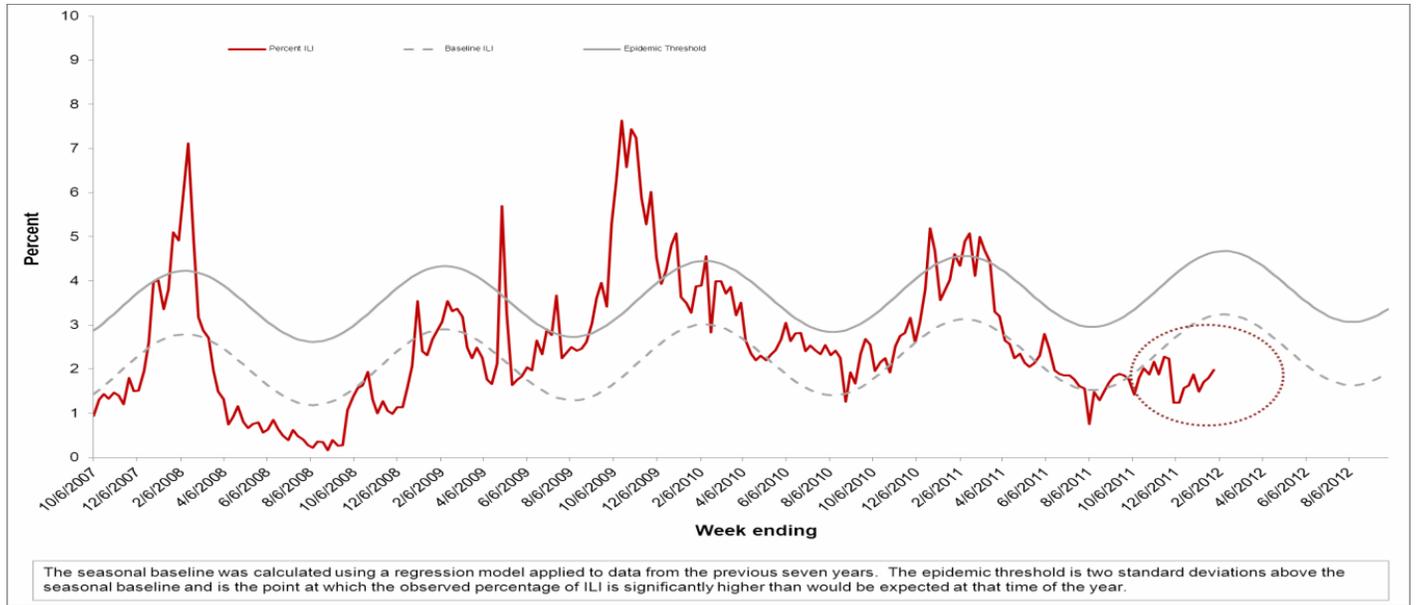
*For the Centers for Disease Control and Prevention (CDC) definitions of influenza geographic distribution, please go to the [CDC Influenza page](http://www.cdc.gov/flu/weekly/overview.htm) (<http://www.cdc.gov/flu/weekly/overview.htm>).

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

A total of 83 (41.5%) out of 200 enrolled sentinel providers have reported data for Week 4. Based on available data, the percentage of ILI visits for Week 4 (2.0%) remained 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 4 (6.0%) compared to Week 3 (6.5%).

B. Laboratory Update

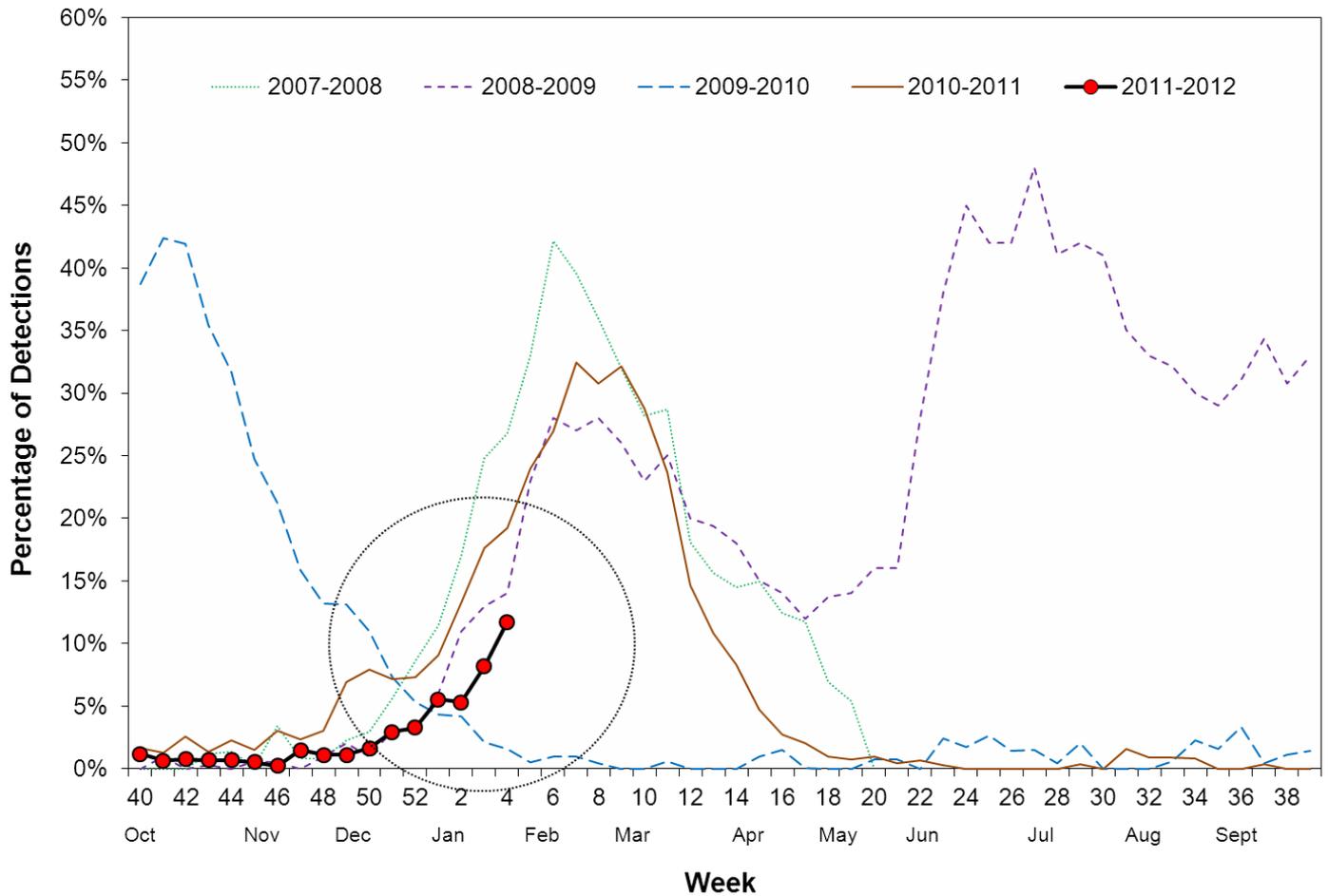
1. Respiratory Laboratory Network (RLN) and Sentinel Laboratory Surveillance Results

The percentage of influenza detections in the RLN and sentinel laboratories continued an upward trend, with an increase of 3.5% in Week 4 (11.7%) compared to Week 3 (8.2%), (Figure 2). Of 1866 specimens tested by the RLN and sentinel laboratories, 20 (1.1%) were positive for influenza B and 199 (10.7%) were positive for influenza A. Of the 199 specimens that tested positive for influenza A, 37 (18.6%) were subtyped as seasonal A (H3), 27 (13.6%) were subtyped as 2009 A (H1), and 135 (67.8%) were not subtyped. The influenza-positive specimens were reported statewide.

To date for the 2011-2012 season, of 18,314 specimens tested, 664 (3.6%) were positive for influenza; of these, 93 (14.0%) were influenza B and 571 (86.0%) were influenza A. Of the 571 specimens that tested positive for influenza A, 145 (25.4%) were subtyped as seasonal A (H3), 53 (9.3%) were subtyped as 2009 A (H1), and 373 (65.3%) had no further subtyping performed.

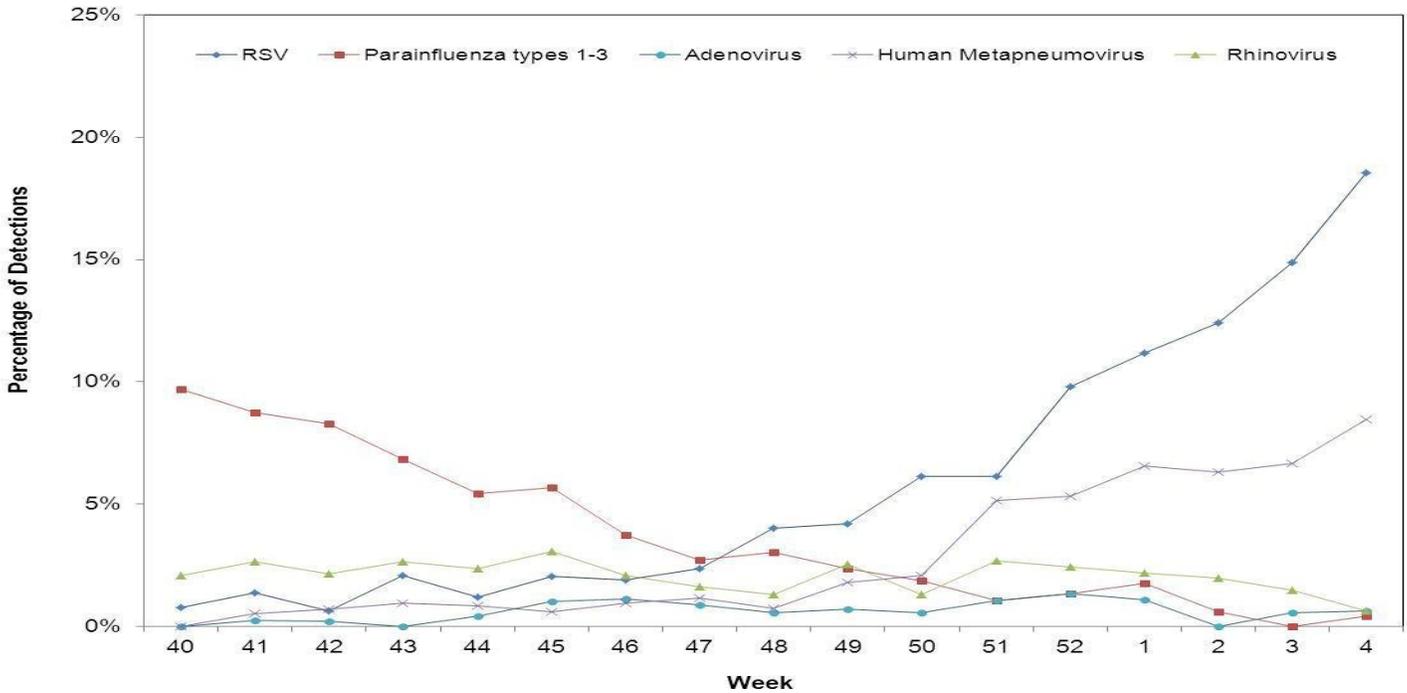
Neither the RLN nor California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH- VRDL) have identified any influenza viruses by polymerase chain reaction (PCR) typing or subtyping that are suggestive of the influenza A (H3N2)v infection.

Figure 2. Percentage of Influenza Detections in Respiratory Laboratory Network and Sentinel Laboratories, 2007– 2012



The proportion of respiratory syncytial virus (RSV) detections continued to increase in Week 4 (18.5%, compared to 14.9% in Week 3). Likewise, the proportion of human metapneumovirus (hMPV) detections increased in Week 4 (8.5%) compared to Week 3 (6.7%), (Figure 3).

Figure 3. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories, Weeks 40-4 (October 2, 2011 – January 28, 2011)



2. Antiviral Resistance Testing (AVR)

CDPH-VRDL has tested 20 influenza specimens to date during the 2011-2012 influenza season, all of which have been sensitive to neuraminidase inhibitors (Table 1).

Table 1. Number of specimens tested for antiviral resistance

Influenza Strain	Neuraminidase Inhibitors Resistance
Influenza A (2009 H1N1)	0/1
Influenza A (H3N2)	0/19

3. Influenza Virus Strain Characterization

Twenty-seven California specimens have been strain-typed to date during the 2011-2012 influenza season; all but four 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

Influenza Strain	Total (N=27)
Influenza A	18
A/Perth/16/2009-like (H3N2)*	17
A/California/07/2009-like (H1N1)*	1
Influenza B	9
B/Brisbane/60/2008-like*	5
B/Wisconsin/01/2010-like	4

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

C. Laboratory-confirmed Fatal Case Reports

CDPH did not receive report of any influenza-associated death among persons age 0-64 years. To date during the 2011-2012 influenza season, CDPH has received three reports of influenza-associated deaths, including one child in the 10-14 year age group and two adults in the 30-49 year age group with chronic medical conditions.

D. Influenza-associated Outbreaks

CDPH received two reports of laboratory-confirmed influenza outbreaks, both at skilled nursing facilities, in the San Francisco bay area region in Week 4. One was associated with influenza B and the other was associated with influenza A with pending subtyping.

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](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Flu-Reports.aspx) at <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Flu-Reports.aspx>

To obtain additional information regarding influenza, please visit the [CDPH influenza website](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.aspx) at <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.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 the [Severe Influenza Case History Form Link](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph9070.pdf) at <https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph9070.pdf>.